Structure, Function, Integration.

Continuing our theme on the Rolfing Ten Series: Session-by-session considerations based on phylogeny and on normalizing motor patterns / stability. In-depth views on the ‘superficial’ sessions, the Second Hour, and the Third Hour. Contrasting views on keeping or moving beyond the ‘Recipe’… And more!

The Rolfing® 10 Series
Part 2

Also in this issue

The Role of Nerves, Arteries, and Veins
An overview and specifics to enhance the work of Rolfing SI.

From the Archives
Dr. Rolf’s “Dynamic Process Integrity” with commentary.

Fascia Research
Hypotheses of how Rolfing SI produces its effects.

‘Homework’ for Our Clients
Why and how.
July Cover Art

The Modern Era of Rolfing® SI.

Our cover art for the March 2019 issue, which began our theme on the Ten Series of Rolfing® Structural Integration, focused on visually transporting us back to the 1960s - 1970s. This was the era in which Dr. Ida Rolf expanded the audience for her pioneering fascial work in terms of both students and clients, and also founded the Rolf Institute®.

With this issue, continuing our theme on the Ten Series, our cover art continues to explore the visual balance between color, typography, and shape through its integration of a modernized Memphis font. Historically a slab-serif font from 1929, this contemporary adaption by designer and pattern maker Cina Catteau conveys a sense of structure through its geometric patterns, while also reflecting a body-like softness and ease of movement in its more rounded letters and numbers. The bold and energetic infusion of color evokes a modern feel, transporting us from Rolfing SI's early years to the present day.
## Contents

### From the Editor-in-Chief

#### Columns

- **Ask the Faculty:** Bringing Other Modalities into Our Work  
  by Rita Geirola
- **Rolf Movement® Faculty Perspectives: ‘Homework’ – Why and How**  
  by Rita Geirola
- **Rolfing® SI and Sports:** An Interview with Joshua Malpass  
  by Joshua Malpass
- **Fascia Insights:** How Does Rolfing® SI Produce Its Effects? A Review of Hypotheses and Evidence, Part 1 by Eric Jacobson

#### The Rolfing ‘Ten Series’ – Part 2

- **The Ten Series: A Phylogenetic Approach** by Michael Boblett
- **Rolf’s Ten Series Conceived as Steps Toward Normalized Motor Patterns and Stability** by Kevin Frank and Caryn McHose
- **The Superficial Layer as Sensory Envelope** by Hiroyoshi Tahata
- **The Recipe in History and Considerations for the Future** by Jeffrey Burch
- **Keeping a Good Recipe: Deepening with the Ten-Series ‘Recipe’ Thirty-One Years Later** by Valerie Berg
- **Moving into Alignment**
  - An Interview with Author Jennifer Hayes  
  by Anne Hoff and Jennifer Hayes
  - **Book Excerpt – Session Two: Ground** by Jennifer Hayes
- **The Deeper Truth of the Ten Series** by Karl E. Humiston
- **Third-Hour Thoughts** by Ron Murray
- **Back Work Through the Ten Series** by Carol A. Agneessens

#### Nerves and Vasculature in SI

- **Nerves, Arteries, and Veins in SI** by Jeffrey Burch
- **Neural Strain Patterns Associated with Low-Back Pain and Pelvic Asymmetry** by Stephen Evanko
- **Working with Nerves and the Cold Laser: An Interview with James Schwartz** by Anne Hoff and James Schwartz
- **The Mystery of Felix Kersten and His Pioneering Work on Nerves and Arteries** by Mathias Avigdor with Anne Hoff

#### Perspectives

- **Early History – Before It Was ‘Rolfing® Structural Integration’**
  - Dynamic Process Integrity: Introducing Postural Integration  
    by Ida P. Rolf
  - Deconstructing ‘Dynamic Process Integrity’ by Szaja Charles Gottlieb

#### Institute News

#### Global Contacts
From the Editor-in-Chief

Anne Hoff

Whatever your view on the Ten Series – love it or leave it – there is no doubt that it is a monumental achievement and practice – and that most Rolfers® these days have more than that one tool in their toolboxes, whether from the beginning or as they develop as practitioners.
In this issue, our first focus is again the ‘Ten Series’ of Rolfing® Structural Integration – the ten-session ‘Recipe’ developed by Dr. Ida Rolf as a way to balance the body in gravity for greater structural and functional integration. Is the Series a teaching tool? Along with the Principles of Intervention (which are themselves distilled from the Recipe), it certainly is the core of the Basic Training at the Dr. Ida Rolf Institute®, the program through which students experience the work, learn to think about the body as a whole, learn to strategize towards goals, and learn to engage their hands in the process of SI. Yet as we see from the articles in this issue, practitioners are thinking about it, and applying it, decades into their practices and mining new insights and applications.

Michael Boblett discusses how various sessions of the Series connect us to our phylogenetic history and potential, while Kevin Frank and Caryn McHose discuss how each session contributes to normalized motor patterns and stability. Hiroyoshi Tahata, Ron Murray, and Jennifer Hayes consider parts of the Series, Tahata the ‘superficial’ sessions through the lens of cell science, Murray the Third Hour through the lens of both Rolfing SI and osteopathy, and Hayes the Second Hour in an excerpt from her book Moving Into Alignment, a movement companion to the Ten Series.

Carol Agneessens discusses nuances of the ‘back work’ we do in each session, and its integrative potential when we enhance client awareness, while Rita Geirola, in the “Rolf Movement® Faculty Perspectives” column, discusses the importance of ‘homework’ that supports the client’s somatic transformation during a Ten Series.

Karl Humiston aims high and argues that the Ten Series is a holistic tool to restore clients to a “blueprint of perfection.” Valerie Berg looks at her three decades as a Rolfer and argues for “keeping a good Recipe,” while Jeffrey Burch delves into Rolfing history and takes an opposing view that the Ten Series was meant to be a teaching tool that practitioners would transcend, arguing that non-formulistic work should be the future of Rolfing SI in both education and practice.

Whatever your view on the Ten Series – love it or leave it – there is no doubt that it is a monumental achievement and practice – and that most Rolfers™ these days have more than that one tool in their toolboxes, whether from the beginning or as they develop as practitioners. Rolf herself encouraged various of her teachers and early practitioners to look into craniosacral work. (She herself was heavily influenced by osteopathy.) In the “Ask the Faculty” column, we hear viewpoints about bringing other modalities into our work, including craniosacral and visceral work as well as other modalities.

Then, our second theme looks at some of these other modalities more closely. Jeffrey Burch discusses nerves, arteries, and veins from a wide-ranging perspective, both their ‘fascia’ components and how they affect structure and integration. Stephen Evanko looks at how neural strain patterns play a role in low back pain and pelvic asymmetry, while James Schwartz shares how bringing both nerve work and a cold laser into his Rolfing practice has enhanced his work. Last, Mathias Avigdor discusses a manual-therapy enigma – Felix Kersten, a practitioner from the early twentieth century who clearly had a methodology for working with nerves and arteries, but one that seems to be lost with only a few traces from which to consider what he might have been doing to get his remarkable results.

Rounding out this issue, we share an interview with endurance athlete and Rolfer Joshua Malpass in our “Rolfing SI and Sports” column, and Eric Jacobson considers theories of how Rolfing SI produces its effects in our “Fascia Insights” column, looking in this issue at hypothesized biomechanical mechanisms. (A future issue will review other possible mechanisms.) In the Perspectives section, we share an early essay from Ida Rolf, written as she was just beginning to teach her work, followed by Szaja Gottlieb’s exegesis.

Anne Hoff, Editor-in-Chief
Ask the Faculty

Bringing Other Modalities into Our Work

Hiroyoshi Tahata
Rolf Movement® Instructor

These questions seem to be related with the big question, “What is Rolfing SI?” Before sharing my own trajectory of development, I would like to describe the process of developing mastery. I am reminded of the words of Sen no Rikyu, the master of Japanese tea ceremony, who said: 規矩作法を尽くして破るとも離るとも本を忘るな, which I translate as “Discipline – after devoting yourself to the foundational practice, do not forget the essence, even if breaking or departing from the foundational practice.” Rikyu’s words show three stages of mastery, shu, ha, and ri (based on key Chinese characters that are bold in the quote above): shu is the fundamentals; ha is breaking with tradition; and ri is parting with traditional wisdom.

When interpreting these words in terms of our practice of Rolfing SI, the first stage, shu, is to follow and practice the Ten Series ‘Recipe’ as a formula until one is established in it. The second stage, ha, is to be able to modify it with other modalities or taxonomies to suit a particular individual client. The last stage, ri, is to have full command of the Recipe, which also makes it possible to create one’s own unique way. Two things are important: 1) whatever stage the Rolfer is in, s/he must keep in mind of the Principles of Intervention that define the foundation of Rolfing SI; 2) the process of mastery requires that one not stay fixed at any given stage along the way.

Early in the stage of ha, it is good to store various ‘new’ modalities and techniques in your ‘toolbox’. From this, you will identify your own orientation, and notice which techniques or taxonomies fit. Structure is just one taxonomy. To aim at human integration, we should be aware of the interrelationship of structure with other aspects such as function, perception, etc. – and these elements are not inherently separate from structure.

In the last stage of ri, a Rolfer is able to give creative sessions that depart from the Recipe yet are able to change the client’s structure, even if the Rolfer has not used direct structural technique. At this stage we understand that this is a nonlinear

Q: What are some of the other elements you bring into your Rolfing® Structural Integration work – such as craniosacral or visceral work, manual work for nerves and arteries, etc. – and do you use them in the context of a Ten Series or other Rolfing sessions, or as standalone work? At what stage of practice do you find a Rolfer® is ready to begin to train in and integrate such other modalities so that they serve the goals of Rolfing SI?

ABSTRACT Many Rolfers study and include other modalities in their practices, following the lead of Ida Rolf, who was deeply influenced by osteopathy and pointed some of her early students and teachers toward explorations of the cranial system. Here faculty of the Dr. Ida Rolf Institute® discuss adding other modalities to our work.

Hiroyoshi Tahata
Rolf Movement® Instructor

These questions seem to be related with the big question, “What is Rolfing SI?” Before sharing my own trajectory of development, I would like to describe the process of developing mastery. I am reminded of the words of Sen no Rikyu, the master of Japanese tea ceremony, who said: 規矩作法を尽くして破るとも離るとも本を忘るな, which I translate as “Discipline – after devoting yourself to the foundational practice, do not forget the essence, even if breaking or departing from the foundational practice.” Rikyu’s words show three stages of mastery, shu, ha, and ri (based on key Chinese characters that are bold in the quote above): shu is the fundamentals; ha is breaking with tradition; and ri is parting with traditional wisdom.

When interpreting these words in terms of our practice of Rolfing SI, the first stage, shu, is to follow and practice the Ten Series ‘Recipe’ as a formula until one is established in it. The second stage, ha, is to be able to modify it with other modalities or taxonomies to suit a particular individual client. The last stage, ri, is to have full command of the Recipe, which also makes it possible to create one’s own unique way. Two things are important: 1) whatever stage the Rolfer is in, s/he must keep in mind of the Principles of Intervention that define the foundation of Rolfing SI; 2) the process of mastery requires that one not stay fixed at any given stage along the way.

Following the first (shu) stage, curiosity may lead the practitioner to encounter a new teacher or new modalities. In the process of studying something new in the ha stage, you need to find what modality or taxonomy you are good at. This means staying away from boredom and keeping a fresh and inquisitive mind in our day-to-day practice. When you feel bored with your work, it might be time to study something new or learn from a new teacher.

Early in the stage of ha, it is good to store various ‘new’ modalities and techniques in your ‘toolbox’. From this, you will identify your own orientation, and notice which techniques or taxonomies fit. Structure is just one taxonomy. To aim at human integration, we should be aware of the interrelationship of structure with other aspects such as function, perception, etc. – and these elements are not inherently separate from structure.

In the last stage of ri, a Rolfer is able to give creative sessions that depart from the Recipe yet are able to change the client’s structure, even if the Rolfer has not used direct structural technique. At this stage we understand that this is a nonlinear
Craniosacral techniques that I have learned. I was pretty deft touch for doing the handful of therapist, but more as Rolfer who has a never promoted myself as a craniosacral years, and a five-day visceral class. I have number of craniosacral classes over the cornerstone of craniosacral work. I took a sensitive, intuitive style of touch that is the gave me the opportunity to develop that just a few minutes of craniosacral work at my first year of Rolfing practice (1988) I took my first craniosacral class during your body resonance is a good indicator that tells you which modality or teacher fits you at a particular moment.

John Schewe Anatomy Instructor I took my first craniosacral class during my first year of Rolfing practice (1988) and began to incorporate this work into my Rolfing sessions right away. Doing just a few minutes of craniosacral work at the end of each session (along with the pelvic lift I learned at the Rolf Institute®) gave me the opportunity to develop that sensitive, intuitive style of touch that is the cornerstone of craniosacral work. I took a number of craniosacral classes over the years, and a five-day visceral class. I have never promoted myself as a craniosacral therapist, but more as Rolfer who has a pretty deft touch for doing the handful of craniosacral techniques that I have learned.

Thirty-two years into my practice, I continue to do varying amounts of craniosacral work with my clients – some more, some less – but every client gets at least a little bit of this work. I have always done this in the context of and to facilitate my Rolfing sessions. I fully believe that it helps their nervous systems integrate the Rolfing work that preceded it. I had one client a number of years ago who absolutely needed this work at the end of her Rolfing sessions. She was very sensitive and the craniosacral work allowed her nervous system to settle and allowed her to feel balanced and grounded. When I start the craniosacral work at the end of a session with a new client, s/he will often ask what I’m doing, and I give a quick thumbnail explanation. Some never ask. Over the years, I have had a number of clients ask me after a couple of sessions, “Are you going to hold my head?” “Yes,” I say, “I’ll hold your head.”

Sally Klemm Basic and Advanced Rolfing Instructor Craniosacral work has been an element of my Rolfing work from the very beginning of my training. I use it in the context of the Ten Series, other Rolfing sessions, and as standalone work. My initial somatic training thirty-five years ago was a blend of Rolfing SI and craniosacral work, and to this day they remain interwoven. At my ten-year stage of practice, I began to train in a series of tutorials such that visceral considerations are now integrated into my Rolfing work. Although standalone sessions of visceral manipulation are less frequent in my current personal practice schedule, the organs and their influences on alignment, ease, and integration are certainly considered during interventions. Subsequent explorations in other modalities over the years serve to inform my touch years of his practice solely to Rolfing SI within the context of the Ten Series. Over the subsequent five years, he continued to mine the depths of the Series, without adding any other modalities. Serving the goals of SI is the relevant point here, at every stage of practice. Once the goals of SI are embodied, integration will be present in any given intervention, regardless of modality or technique employed.

Raquel Motta Rolfing and Rolf Movement Instructor I studied and started using visceral manipulation in the context of the Ten Series right after I took my Rolfing training in 1998. I did not use it with all clients, and I was not so successful at integrating it. Only five years ago I started receiving visceral sessions and I resumed my studies and practice. Nowadays I see so much the relationship between the viscera and breathing, and the viscera and the legs, that I have started talking more about general aspects of this during Basic Trainings so that students can understand more easily the work with the psoas on walking as well as how the diaphragm works. I think visceral manipulation should become a part of our curriculum in Rolfing Basic Trainings.

Carol A. Agneessens Rolfing and Rolf Movement Instructor Craniosacral therapy is the modality I began studying in 1982. From early Rolfing lectures, I learned of Dr. Rolf's
interest in craniosacral therapy and the work of an osteopath named Bidell. We were given a reprinted copy of Bidell’s small book on the cranial system. It seems that Dr. Rolf directed her students toward this exploration.

The landscape of the Seventh Hour is filled in by craniosacral study. My hands have learned the interrelationships of boney segments, membranes, neural anatomy, and the value of intra-cranial spaciousness. In cases of whiplash, traumatic impact, tinnitus, brain surgery, and more, knowledge of this system can become one of the most valued understandings in your ‘toolkit’.

Listen for a fluid continuity between the cranium and sacrum when doing sacral holds (pelvic lift) or when treating vertebral fixations. Often it is not only the vertebral ligaments that need to be addressed but fixations and rotations within the dural tube and spinal cord. The direct relationship between cranial and sacral movement is a valuable orientation to keep in mind when ending a Rolfing session.

Depending on a client’s need or desire, I may schedule standalone craniosacral sessions or integrate this knowledge into a post-ten series. Within the Ten Series, a craniosacral session may be added to the scheduled appointments depending on necessity.

**Pedro Prado**
**Basic and Advanced Rolfing Instructor**
**Rolf Movement Instructor**

I was a clinical psychologist when I became a Rolfer. I was fascinated by the somatic perspective and its entry to holism – body/mind as one entity and the organization of the fascial network in gravity as our target for the work. In my evolution as a practitioner, I studied and brought Somatic Experiencing® (SE) into my work. SE views trauma as anchored in the flesh – particularly in autonomic nervous system (ANS) dysregulation – rather than in the story of the traumatic events. Understanding how the ANS communicates with other systems – physical, emotional, spiritual – helped me bridge SE into Rolfing SI, adding resources to track SI processes. For example:

- In the initial client interview, one can track the ANS behavior of both oneself and the one client and actually monitor its behavior to a certain extent, helping create safety and a stable relationship that will favor the work of SI.

- The ability to track autonomic behavior – charge and discharge – as well as the ability to modulate the duration, depth, and other sensory information present in different types of touch, is a crucial factor for making the touch portion of our work an experience that can be assimilated and integrated into the client’s system. Touch that doesn’t take the ANS into account may be interpreted unconsciously and reflexively as a threat, generating an ANS arousal response instead of supporting tissue release. This would lead to constriction and fixation of the pattern, often retraumatizing the person.

- At the beginning of the Rolfing process, and also throughout the changes and transformation the client goes through along the way, one can connect the client to pattern recognition – the meaning of their patterns – that supports a renegotiation and eventual change of the connective-tissue web in gravity. Tracking and working with the ANS can add to psychobiological understanding and change, and this builds self-image and self-esteem, with corresponding ANS adaptation.

- Fixations in the tissue may be by their very nature correlated to unfinished defense responses that stay locked in the body. Knowledge of ANS functioning may help these defense responses complete during the Rolfing process, ultimately resolving dysregulation set up by traumatic experience.

- An understanding of ANS behavior also helps with work with the client’s orientation and with functional work. Fixations are also present in orientation and, as orientation is a big part of the structural organization and function, one needs to consider the ANS to be able to fully work with orientation in terms of both functional and structural integration. With awareness and monitoring of the reorganization of the sympathetic and parasympathetic branches of the ANS, a practitioner can more fully anchor and integrate changes in the tissue.

- The polyvagal theory, a cornerstone of the SE methodology, offers an interesting understanding of the social engagement process that is useful for closure and integration of the Rolfing work. To what extent can the client relate to others? What is his/her experience of body safety that supports staying centered and relating?

The connection that SE gave me to the nervous system helped me add this dimension to my work. This is true in whatever taxonomy of access – structural, functional, or psychobiological – we use, as well as in whatever phase of the process we’re in, be it in a session or in a process as a whole. SE with its corresponding techniques added another dimension to the work.

**Rita Geirola**
**Rolfing and Rolf Movement Instructor**

I think that most of us are familiar with this inspiring definition of Rolfing from Jeff Maitland and Jan Sultan: “Rolfing [SI] is the philosophy, science, and art of integrating the human body structure in spacetime and gravity through myofascial manipulation and movement education.”

In my experience of working with people, for forty years now, what fascinates me and is always in the foreground is the possibility of building a deep level of communication with the client that is beyond words, and beyond technique. From this communication, both the client and I can learn and develop. Or, in other words, with the Rolfing process we (Rolfers) build a safe context in which clients can experience a more economical and efficient way to use their resources for their own well-being. For that, we need to be well prepared and creative. In this sense, Rolfing has an immense value for me, because of the capacity to understand the body in gravity and honor the client’s subjective experience and sense of meaning.

Rolfing SI is a vision, and in this vision understanding of the fascia plays an important role, but fascial manipulation is not the only medium we need to work with people. With this in mind, even when I encounter a client who is not ready, for whatever reasons, to allow tissue work, I can still accompany him/her in a process, using the Rolfing Principles of Intervention, and eventually reach another level of communication and confidence where touch becomes possible.
Rolfing [SI] is the philosophy, science, and art of integrating the human body structure in spacetime and gravity through myofascial manipulation and movement education.

I was certified as a Rolfer in 1987. Before that, I used to work with the Mézières method, and this competence was a support in my Rolfing training: I was already confident in working with people through touch, and also I was used to visual body analysis, even though it was made under different criteria. It helped me, from the very beginning, to recognize, evaluate, and appreciate the changes and the general result of the intervention.

Right after my Rolfing training, I engaged in a four-year Feldenkrais Method® training (1988-1992). It was a strong and deep experience, and I could appreciate how much the two methods have in common: the genius of both Ida Rolf and Moshe Feldenkrais has surely been a gift for humanity. A side effect of this training was that it brought a deeper level of clarity in understanding the Rolfing vision and approach. I also learned to be more patient and aware of how much we engage the nervous system with our presence and intervention. It provided me a more differentiated quality of touch; that is to say, more tools to be ready to adapt to the needs of the client, in terms of pace and intensity. Then in 1998 I certified as a Pilates instructor. Again, another language to communicate with people on a different level and accompany them in their process.

I play a lot in my practice with the different competences I have acquired, under the ‘umbrella’ of the Rolfing way of understanding the body in gravity. This allows me to break the routine, for myself and for the client. I can ‘shift gears’ when I sense it is appropriate to provide a different stimulus to keep the client’s nervous system awake, curious, and participatory. The goal is to meet the client at his/her level of availability in order to get improvement; to match his/her specific language to communicate efficiently and without prejudice.

I think that a new certified Rolfer needs time to explore deeply the potential of our work, and not rush to find something to add, or something ‘better’, or a way to avoid feeling frustrated or anxious when results are not achieved the way s/he wanted. Thinking back to my own experience, I sense that my motivation to explore and learn has always been curiosity. I wasn’t unhappy or dissatisfied with Rolfing SI. I just wanted to become more refined and articulate in my work.

France Hatt-Arnold
Rolfing and Rolf Movement Instructor
Over the past thirty years I have taken numerous visceral work, craniosacral work, and other classes, thanks to Peter Schwind and Christoph Sommer who have sponsored the most amazing teachers through the years through the Münchner Gruppe in Munich. I find that these workshops have refined my Rolfing work considerably and helped me deal with difficult clinical situations. It is my belief that all Rolfers should have training to some degree in these levels of subtle intervention with all sorts of embedding fascia, in order to bring clients to a more harmonious way of moving and functioning as a whole.

I have clients at the beginning of a session feel how they align themselves in gravity as I take them through pattern recognition. The remapping that occurs, for them and for me, becomes clearer when you have investigated those areas in continuing education workshops and include the finest inner components of their organism as they walk and relate to the outside world. I then do several hands-
Rolf Movement®
Faculty Perspectives

‘Homework’: Why and How?

By Rita Geirola, Rolfing® and Rolf Movement Instructor

ABSTRACT  ‘Homework’ for clients supports and enhances the Rolfing Structural Integration (SI) process, empowering clients to hold and develop it in their everyday lives.

Introduction

As Rolfers®, we all have had the opportunity to witness how our work improves our clients’ lives, whether their physical structures or, sometimes, deeper, more all-encompassing transformations. When clients experience the benefits of the changes that have happened, they wonder how to ‘keep’ the new, pleasurable organization and often ask for advice. Of course, nothing can be ‘kept’: we cannot through effort recreate an experience. Yet there are ways we can give ‘homework’ to support the client’s ongoing process of embodiment.

Movement is an event that happens in the moment; it cannot be controlled through willpower. Ease appears when congruence between intention, meaning, and capacity allow coordination to happen, dependent on gravity and subjective resources. So while the client cannot keep an experience, what can be kept and nourished is the feeling of the experience. This memory can be a powerful bridge to recall the physical organization that was the underlying condition for what was experienced. Even more than that, what can be kept is the awareness that his/her system has the option to use – in a different, meaningful way – resources that, for many reasons, thus far had not been at the service of their well-being.

Rolfing sessions provide a safe context in which our clients can experience different and more economical ways to organize their system in gravity and increase their capacity for expression and efficiency. This is an educational and transformational process that allows clients to revisit their habits and build new ones.

Habits Have Deep Roots in Personal History

Habits involve the physical body, perception, and meaning. They bridge between our physical resources and our personal history – the context in which we have grown up. They create security and quick responses in the ‘feed-forward’ activity of everyday life. (‘Feed forward’ is in contrast to ‘feedback’; in everyday life activity happens in feed-forward mode, where we are not aware of our doing while doing, but can only evaluate later whether the movement was successful or not.)
They allow us to react without needing to be conscious. Habits of movements are, by definition, automatic and unconscious. Habits are functional for survival. They are efficient in some ways, even when not economical. In fact, there is always a reason, a secondary benefit, in keeping a dysfunctional behavior; usually it allows the individual to avoid some more threatening sensation. For example, it could be a compensatory pattern to avoid physical or psychological pain; a way to adapt to the social and cultural context in which we live, in order to be recognized and accepted; a way to shape oneself according to a body image that fits a belief system; or a way to accommodate to repetitive movement related to a work setting. There is always a meaningful reason to build and keep our habits, one that we are not even aware of most of the time.

We cannot deny or ‘cancel’ our habits, they remain as options in our ‘toolbox’ forever. But we can build new ones, closer to our current options and maturity. With the Rolfing process, clients can connect with resources not previously available and start building new ways to deal with gravity and the context of their lives. It is a process and it requires time and experience: it takes time and repetition to build new synapses and new associations and to appreciate the ease that accompanies a more organic way of moving in gravity. It means dropping the secondary benefit of being in the ‘known’ and exploring something new and unfamiliar. It’s not only about having the potential to act differently, but also about the potential to feel comfortable and safe. That means recognizing and legitimizing our power to change.

Inviting our clients to spend some time everyday recalling and nourishing what they have experienced as beneficial in the sessions has strong added value. They cannot change the way they orchestrate movement, or build new associations and patterns, unless their nervous system is available, their emotions are quiet, and curiosity is present to lead their attention toward the goal of better function in their lives. Just allowing time to create this deep connection with oneself is a powerful practice that can evoke deep change.

From this perspective, ‘homework’, or ‘a little time to reflect on yourself’, can be suggested on many levels: actual exercises to support on the physical level; self-treatment; the use of ‘keywords’ or metaphors as reminders, during the day, of something achieved in the session; images to evoke a different postural pattern; etc. The main focus is not so much what is done, but more a change in attitude, the awareness that it is important to dedicate time to oneself, to – in a broad sense – take responsibility for one’s well-being. In this way clients can develop curiosity about the ways they organize themselves and respond, and become aware that they have the potential and the power to develop autonomy and efficiency in dealing with life’s stressors.

### Homework Must Be Individualized

Homework must be tailored to the individual client’s special qualities and needs. As Rolfers we have to be creative and have a rich repertoire of suggestions. A good strategy is to offer easy practices, avoiding complex movements or settings. Offer something that can be done at any moment of the day, even in bed. Sometimes it is just to remember an image, or a little trick to trigger a particular reaction in the body. We can propose exercises to prevent the buildup of tension, or to self-treat when discomfort manifests as pain or tension. We can address part of the system or highlight connections between parts. We can influence some function – like freeing the breath, or building the capacity to rest; in other words, building support, increasing the phoric capacity to allow weight to flow. (Phoric capacity is a concept introduced by Hubert Godard. It indicates the sense of weight, how one finds support in letting gravity / weight in gravity provide support for orientation and movement in space.)

In order to meaningfully select a homework suggestion, we need to take into account certain elements:

- What is the client’s level of availability?
- What is his/her conscious motivation?
- What is the secondary benefit in keeping or changing elements of his/her organization?
- What is his/her level of adaptability?
- What is his/her level of self-perception?
- What is his/her attitude toward providing time for self-care?

From here, the question becomes “What is beneficial for our client, what do we want to achieve?” There can be many options:

- Giving tools for the client to intervene when stress or pain manifests
- Increasing mobility
- Helping differentiation and re-mapping of the body territory
- Bettering the level of coordination
- Gaining stabilization and/or capacity to orient
- Facilitating general adaptability
- Improving self-perception

### Tools Are Useful

Consider using tools, such as blankets, ‘noodles’, balls. Or have the client build an uneven surface to lay, sit, or stand on as a productive challenge for his/her system. (The presence of ‘interference’ creates an unusual situation that can facilitate the experience of new connections and responses to stress in the body.)

We can suggest the use of soft or hard support. Without making a rule, it is in general a good strategy to find balance and compensate: soft support for hard tissue and vice versa. In this way, the person can experience the ‘missing’ sensation through the medium of support. From the same perspective, we can propose stable or unstable supports: stable when the person needs to develop the capacity to rest, and unstable when he/she needs to develop the capacity to find balance and mobilize.

Active movement can be beneficial on its own, as well as working to support good habits; whether walking, swimming, dancing, etc., have the client engage in quality training that matches his/her unique needs and preferences.

Rita Geirola was certified in Rolfing in 1987 and in Rolf Movement in 1997. Her background includes studies in the field of physical education and the Mézières Method. She was certified as a practitioner of the Feldenkrais Method® in 1992 and as a Pilates Instructor in 1998. Her main curiosity is in finding different approaches and different language to attune to individual client’s needs and resources to achieve full development of their potentiality and integration. Her work and teaching are deeply impacted by the points of view of Hubert Godard, Peter Levine, and Moshe Feldenkrais.
Rolfing® SI and Sports

An Interview with Joshua Malpass

By Russell Stolzoff, Basic and Advanced Rolfing Instructor and Joshua Malpass, Certified Advanced Rolfer®

ABSTRACT Russell Stolzoff talks with Joshua Malpass, Rolfer and endurance athlete, about his sports, his Rolfing Structural Integration (SI) journey, and his practice.

Russell Stolzoff:
Thanks for taking the time to do this. To start I’d like to ask you to talk about your background and how you got into Rolfing Structural Integration.

Joshua Malpass:
I started out getting a kinesiology and exercise-science degree. I had a personal-training business and was actually training for an Ironman when one day a car ran a stop sign and hit me on my bike. A guy that saw me get hit said I flew about sixty or seventy feet before I hit the ground. When the car hit me the frame of the bicycle wrapped around my leg and broke on my leg. I ruptured several discs, got a spondylolisthesis, all types of things like that. Doctors all said if I didn’t get surgery right away, I’d be paralyzed, but none of them would agree on the surgery procedure I needed, so I tried everything else – chiropractic, acupuncture, physical therapy, massage . . . Nothing worked. And then I met Scott Pyeatt, a Rolfer down here in Orange County, and within three or four sessions I could breathe again, and I could walk again. I basically hadn’t been breathing for several months . . . just what happens when you get fifteen-millimeter ruptures in several discs at the same time. After the Ten Series with him, he told me I’d probably do really well as a Rolfer. So, I looked up the Rolf Institute® program and went into it. That was probably twelve or thirteen years ago. I never did have to get the surgery, and now I’m back to doing Ironmans and all those other types of things. I’m doing an Ironman in another three weeks.

RS: That’s a very powerful story. I know you mostly as a runner. I didn’t know that you are a triathlete, but I did know you do ultra-distance marathons. Tell us about your athletic endeavors.

JM: Well, I guess it starts in high school. I did swimming and water polo. Later I got really into mountain biking, and then I started doing triathlon and worked my way up to Ironman. With the running part of triathlon, I preferred running on the dirt (Figure 1). And as soon as you start trail running you meet ultrarunners. I just wanted something else challenging. So far, I’ve done several fifty-mile ultra events and several 100-mile events. Last year I did my first 200 miler – that was seventy-nine hours straight of running all up through the area where you live, in the Cascades from around Mount St. Helens all the way up to Mount Ranier. It was 209 miles and it took me seventy-nine hours.

RS: Did you sleep?

JM: Yeah, you sleep. Some people don’t but they hallucinate pretty badly. I slept about an hour and a half each night. I read something about how the average human has sleep
cycle of ninety minutes, so I figured if I got one sleep cycle in each night it would
keep the hallucinations down a bit. I have
another one of those coming up around
Lake Tahoe in September. It’s another 200
miler. It’ll be fun.

RS: I’m curious how you approach
training. What is your typical workout like?

JM: Well, the funny thing is most people
that do the kinds of events that I do run
anywhere from sixty to 100 miles a week.
They’re getting in several ten-mile runs
during the week and then a twenty- and
a thirty-mile run in on the weekend. But
I don’t do anything like that. I run maybe
twice a week tops, four to six miles on
Monday and then again on Wednesday,
enjoy being there. I’ll run maybe fifteen or twenty miles
max on Saturday or Sunday. I actually just
looked at my average for this year and it
was two runs a week and thirteen miles
per week. So, two six-and-a-half-mile
runs per week.

The only way I can explain that it works
comes from when I was in the Rolfing
training. During Units 1 and 2 we talked
about Rolfing SI and biomechanics and
about appropriate movement patterns in
the context of the Ten Series. You know
the Twin Lakes right next to the Institute?
Well, we had the hour-and-a-half lunch
break and I didn’t need ninety minutes
to eat, so I just changed really quick and
I’d go out and I’d run around those lakes,
and the whole time I was running I would
focus on what we talked about in class
that day. So, I like to say that I ran the
Ten Series into me. Because of my back
injuries, even though I’m pain free, I’m
extremely careful with my form, and I
really do believe that if you can move your
body appropriately you should be able to
do it without breaking it down. So far I’ve
been successful at it. It’s an interesting
kind of long-term experiment with my
own body.

RS: It sounds like embodiment is an
important part of your training. I know
that when some people think about long-
distance endurance athletics, they think
about dissociation – how you would have
to, in a sense, leave your body in order
to be able to deal with the discomfort or
the fatigue.

JM: People say, “What are you running
away from?” or “You’re just out there
running away from your problems”, but it’s
the exact opposite. When I go out for a six-
or seven-hour long run by myself on the
weekends, I don’t take any music, I don’t
take my phone. The moment you hit the
trail, your problems, all of them, are staring
you right in the face, and you have to deal
with every single one of them. The amount
of self-reflection and intense picking apart
of every decision you’ve made in your life
and how you could have done it better . . .
you can’t get away. You’re just out there,
and it’s awesome, because you can really
push away all the distractions and figure
out the person that you want to be.

RS: That’s an amazing approach.

JM: It’s a celebration of life, right?

RS: Talk a bit about who your clients are
and how your athleticism informs your work.

JM: I work on a lot of triathletes, cyclists,
runners, CrossFit® practitioners, and a lot
of people that do way too much yoga.

RS: Too much yoga?

JM: Yeah, way too much. I mean folks out
there that, you know, their friends are at
the yoga studio, their job is at the yoga studio,
their spiritual life is at the yoga studio. They
do two classes of yoga a day, six days a
week, and they’re totally unstable because
they’re so loose. They don’t have anything
holding them together anymore. I think
yoga is great once or twice [a week] at the
most. I don’t claim to be right in that, but
it’s just my opinion.

So, I get a lot of business from people
hurting themselves doing yoga. And I
meet people running. Everybody has
something that hurts. It’s either their foot,
or their back . . . same thing on the bike
rides. Something always hurts. So I’ll talk
to them and they can tell that I know what
I’m talking about. It’s a small community
of people that do long-distance running
events and Ironman events, and your
name gets around pretty quickly. I’ve
been fortunate enough to work on a few
people that win races, and if the guy that
wins then goes out and tells everybody
that I fixed his hip, and that’s why he won,
then pretty quickly you get a lot of people
calling you. It gives you a huge amount
of credibility when somebody comes in and
their injury is from some sort of exercise
and they know you do the same exercise.
They know they can trust you, and you’re
not going to tell them, “Well, if it hurts to
run, just stop running.”

RS: What is your opinion about having
pain or injury and continuing to train?

JM: I’ve kind of decided, or maybe it’s
something I heard at the Rolf Institute, that
movement is the healer, motion is lotion.
You know, we put the body in its correct
range and plane of motion, and then you
move it correctly. That’s what brings the
healing – the blood flow, the oxygen. So,
if something hurts, it’s my opinion that it’s
probably being used incorrectly. When
some people say, “I have an overuse
injury,” I think that’s impossible. There
are people out there that run 200 miles a week
and they don’t have an overuse injury. So,
I believe people have an incorrect-use injury.

If someone has truly injured something –
torn a muscle or a tendon – then, yes,
you have to stop, you have to rest. But if
there’s just an ache or a tightness or some
kind of chronic nerve [issue], then I ask,
“What is it in your body mechanics that’s
continuing to perpetuate the injury that we
can change, and then through appropriate
body mechanics how can we actually
speed up the recovery process?” If I’m out
doing a run or a bike ride or swimming
and something starts to hurt, I change my
body mechanics to make it feel better, rather
than stopping. That’s what I try to teach
the people that I work on. If something
hurts, change your body mechanics to
actually speed up the healing process,
instead of sitting on the couch and waiting
for it to get better.

RS: Do you typically begin your work with
people through the Ten Series?

JM: It’s been a while since the majority
of my clients were Ten-Series clients.
It seems like I’ve always got at least a
couple that are going through it, but it’s
more often like fix-it work, or it’s first-aid
work. But I still do it. In fact, I just finished
up a Ten Series last week. If someone
requests it, I’m happy to do it, but it’s
generally not my go-to anymore.

RS: Why is that?
**JM:** Everyone’s in a hurry in Orange County. They want to get better now. They want to get back to working on whatever their max is in CrossFit, or back into whatever pose they can’t get into in yoga, or they’ve got a race coming up in a month. They don’t want to wait until the sixth session for me to free the sacrum. They want me to free it right now.

**RS:** Do you think your training as an Advanced Rolfer better enables you to work like you do?

**JM:** Yes. The Advanced Training definitely changed my work. It slowly changed it – it took a while to really kind of marinate and sink in, but the way that Jan [Sultan] taught that class gave me a clearer view on how to focus on specific areas and get a more global effect in the whole body.

**RS:** Do you also work with non-athlete clients?

**JM:** Yes, I’d say my typical client is a mid-fifties executive, and I work with a lot of business owners, business people, and lawyers. There are a lot of lawyers in Orange County, and they’re so stressed out. You know how it is, nine out of ten clients come in and they’re focused on the massive knots in their shoulders, so then you have to educate them on posture and how to sit. Several of my clients are in their late eighties and a couple are in their early nineties, I’ve got a handful of really young teenagers with scoliosis, and then everybody in between. I prefer athletes. I would rather work on getting somebody’s back feeling better so they can go out and crush a hundred-miler than so they could go out and crush eighteen hours at their desk, but I’m happy to work on anybody.

**RS:** What other types of sports are your athlete clients doing?

**JM:** I met a chiropractor down here several years back who works on professional athletes of all types. He referred a bunch of pro surfers to me, so I’ve been working on them. Then I got a handful of other people in that line, like pro skateboarders, pro snowboarders, some high-level golfers, things like that – a lot of varying types of athletes. It’s been a lot of fun.

**RS:** When you’re working with action-sports athletes, is your approach any different?

**JM:** Yes. They have a different purpose behind their sport and they have a different drive behind their sport, so you have to meet them from a different place. You just have to meet them where they’re at. With people who are into endurance sports, there’s a much more emotional/spiritual component. Like what I was talking about before: you get out there and your problems are right there staring you in the face. Basically, it’s movement meditation; even if people don’t use that language, they all understand that’s what it is.

Whereas with the action-sports guys, most of the ones I work on are doing it for a job. It’s their bread and butter, it’s their income. So they’re coming at it from a very different place of high level intensity, and they have to be able to stick this trick, and it can’t hurt when they’re out there in their heat because they don’t want to lose focus. So then I am approaching it in a very different way. It’s much more of really trying to get in and free up the tethered nerve or calm down the inflamed tendon. Whereas with the endurance-sports person, it’s a lot more of getting into the body mechanics and trying to find a way to teach them how to heal themselves better.

**RS:** Those are great distinctions. What role do you see Rolfing SI has in recovery for performance sports?

**JM:** The biggest thing I find is the educational aspect. I have a line I tell people. I tell them how silly it is that we’re trying to put people on the moon when we don’t even know how to breathe. Most people that come into my office don’t know how to breathe. They don’t know how to sit. They don’t know how to walk. They don’t know where their head is supposed to be. We’ve completely forgotten how to be humans and how to exist on this planet, but we’re trying to put 12,000 satellites into the solar system to blanket the earth and Wi-Fi right now. Why don’t we work on just teaching people how to breathe correctly again? So to get back to your question, I’m just trying to teach people how to get back into their bodies, how to move correctly, breathe correctly. I think if someone is moving correctly and eating correctly, then they can go really strong and really hard for several decades without having the degeneration and breakdown. I’m trying to teach people that so they can they can feel good and have fun for as many years in their life as they want to continue pushing for that.

**RS:** Do you have any advice for Rolfers who want to focus on working with athletes?

**JM:** Yes. Make sure you do the athletics yourself. You’ve got to have some credibility with these people. Athletes look at their sport the same way that a business professional looks at their trade. They take it very seriously. If I try to talk to somebody about the mechanics of throwing a football, they’re going to know that I don’t know what I’m talking about because that’s not my thing. So you have to prove that you’re the expert by actually living it out.

**RS:** Is there anything else you want to touch on?

**JM:** There’s so much. You know, you do this a few years and you get pretty passionate about trying to teach people how to live their best life. One of the interesting things I’ve learned is that the more I focus on the finances of the practice the more my business slows down, and the more I focus on just truly trying to help people and love people through my work, the more my practice gets busier and busier.

**RS:** That’s a great message, Josh. I really appreciate you taking the time for this.

Joshua Malpass, Certified Advanced Rolfer, earned his BA in kinesiology and fitness at California State University, Long Beach. After operating a personal-training business for several years, a “fortunate” bike accident caused him to encounter Rolfing SI. He has been in practice for twelve years. He lives with his wife and son in a small canyon town in Southern California and loves the lifestyle that his Rolfing practice provides them. A large part of his practice is working on high-level action-adventure and endurance athletes. Josh also participates in Ironman and ultramarathon events. You can learn more about Josh at http://www.ocrolfing.com.

Russell Stolzoff is a lifelong athlete whose understanding of Rolfing’s impact on embodiment and performance dates back to the dramatic improvements in balance and quickness he experienced from his first Ten Series in 1983. For the past thirty years he has devoted his professional life to elevating his skills as a practitioner and instructor. In 2010, Russell founded Stolzoff Sportworks to bring the benefits of Rolfing SI to professional athletes. He was instrumental in helping members of the NFL’s Seattle Seahawks stay in the game and perform at the highest level en route to two consecutive Super Bowl appearances and the 2013 Super Bowl NFL Championship. Russell’s diverse background includes scientific research and studies in Somatic Experiencing® trauma resolution and Bodily Analysis (a developmental approach to body psychotherapy). Russell is a member of the Dr. Ida Rolf Institute® (DIRI) Advanced Faculty and chairs the DIRI Education Executive Committee. He lives and practices in Bellingham, Washington.

Russell Stolzoff, the Journal’s Sports Editor, is interested in talking with you about your sports Rolfing stories. He can be reached at rstolzoff@rolf.org.

By Eric Jacobson, PhD, MPH, Certified Advanced Rolfer®

ABSTRACT
There are numerous theories that attempt to explain how Rolfing Structural Integration (SI) works, but little evidence or research backing any of them. In this first of a series of columns reviewing these theories, Eric Jacobson discusses hypothesized mechanisms for Rolfing SI that are biomechanical. A future column will consider other possible mechanisms.

Investigations of the extent to which a particular therapy is effective against a specific disease or disability, known as ‘clinical studies’, have long been distinguished from mechanistic studies of how those therapies produce their benefits by altering behavior, structure, physiology, biochemistry, and/or psychology. The mechanism of a therapy may be described at different levels, for instance as changes in posture or movement, changes in the function of organs or tissues including nerves, changes in cellular biology, and/or changes at the molecular level. In contemporary biomedical science the latter is favored as the ultimate mechanistic explanation. In addition, it is possible for a therapy to have its effect through more than one mechanism at any given level, and those can be active simultaneously or sequentially. A final important point is that confirmation that a therapy is clinically effective for a condition does not prove any particular theory as to the mechanism through which that benefit is produced. To assume that the first proves the latter is a very common mistake in reasoning. This is the first of a series of columns that will briefly review the most common theories about how Rolfing SI has its therapeutic effects, and what the evidence is, if any, for them. We restrict our discussion of such evidence to reports published in peer-reviewed scientific journals, which is the prevailing standard. Part 1 summarizes hypothesized mechanisms that are essentially biomechanical at either gross, cellular, or interstitial levels.

Dr. Rolf's (1977) original claim was that skillful manipulation of the soft tissues and movement education can alter the alignment and motility of the human structure toward specific ideals of whole-body biomechanical functioning, and that this confers long-term benefits in energy expenditure, stress, health, and personal psychology. On her account, the improvements in biomechanics were consequences of more local increases in motility and elasticity of the myofascia, which often spread spontaneously to anatomical regions that are broader than that which is directly manipulated. Rolf hypothesized that the greater elasticity that is clinically observed was due to an increase in the ratio of elastin to collagen content in the fibrous component of
myofascia (Mithieux and Weiss 2005). However we currently have no evidence as to what changes, if any, occur in the biological composition of fascia in response to SI manipulation.

Rolf also claimed that her techniques reduced adhesions between adjacent fascial planes, thus allowing freer gliding of such planes past each other during movement, and consequently of the muscles that they enveloped. In this respect it is noteworthy that a small n=10 pilot study found that a single session of Rolfing SI tended to increase the extent to which the myofascia enveloping the lumbar erector spinae were able to glide relative to the immediately overlaying connective tissue. However, the p value, a measure of the likelihood that an experimentally observed effect is due to random variation rather than to a systematic effect, was insufficient to regard this outcome as evidentiary (p=0.14) (Langevin et al. 2010). Recent work with mice has demonstrated that fascial adhesions can be created in the intestines of laboratory mice and subsequently released by gentle manipulation of their abdomens, but a similar effect has not been investigated for myofascia (Bove et al. 2017). There is no current evidence as to how the changes in the fascial elasticity or motility that are clinically observed to result from Rolfing SI come about.

As a way of accounting for the effects of her manipulation, Rolf very tentatively invoked the ‘thixotropic’ property of the colloidal ground substance that makes up most of the mass of fascial tissues. A colloid is a substance that has properties of both solid and liquid. Common examples are butter and glass, both of which will begin to flow very slowly in response to an input of energy, including mechanical pressure. Rolf was doubtless thoroughly familiar with this phenomenon from her biochemical training. The problem, as Robert Schleip (2003) has pointed out, is that thixotropic flow of a colloid ceases as soon as the input of energy ceases, i.e. it is not a permanent change in the elasticity nor in the extensibility of the colloidal substance, so it cannot account for fascial changes that persist after the manual force is removed. It is entirely possible that thixotropic phenomena that occur during manipulation are part of a larger constellation of biological changes that do result in longer term changes in the properties of fascia, but this would be a different, far more complex hypothesis, and one that has not yet been articulated.

Another mechanisms that was hypothesized by Rolf at the level of local tissue change was an increase in interstitial fluid flow. In

Rolf taught practitioners to approach joint pain and dysfunction by comparing the tone and motility of all soft-tissue structures that are called upon to lengthen and contract as the joint flexes and extends.

Schleip and colleagues (2006, 2019) hypothesized and then demonstrated that fascial stiffness can be altered by increases or decreases in the contractile activation of myofibroblasts to various stimuli including stretching, and that such alterations in stiffness could influence biomechanical performance at least minimally. This finding has also been reported by other research groups, including Langevin’s (2013). Schleip has built on this by theorizing that changes in autonomic activation might account for longer term changes in fascial biomechanics. That theory will be discussed in Part 2 of this column.

Whatever the mechanism producing them, the immediate increase in elasticity, motility, and glide that Rolfing practitioners observe clinically has been regarded since Rolf as in the service of larger improvements in...
It is already clear that we have a large number of theories that are plausible in view of what is known about the relevant properties of connective tissues and their components, but very little evidence to confirm any of them. This presents a wealth of opportunities for fundamental research.

whole-body biomechanics. As hallmarks of that ideal she emphasized increased vertical alignment of the major body masses, increased bilateral symmetry, and ‘grace’ of movement, and taught her students to strategize their manual interventions toward the achievement of those goals. Given the importance what Rolf and subsequent generations have given to those hallmarks, which most practitioners observe, it is surprising that we have almost no quantitative evidence that they are predictable consequences of Rolfing SI.

In Part 2 of this column we will review some other hypothesized therapeutic mechanisms that are psychological and neurophysiological in nature, and what, if any, evidence there is in their favor. At this point, however, it is already clear that we have a large number of theories that are plausible in view of what is known about the relevant properties of connective tissues and their components, but very little evidence to confirm any of them. This presents a wealth of opportunities for fundamental research.

Eric Jacobson, PhD, MPH was trained by Ida Rolf in 1974 and completed advanced Rolfing training with the Rolf Institute® in 2005. He has a private practice of Rolfing Structural Integration in Boston. He also teaches medical anthropology and investigates alternative medicines at Harvard Medical School. In 2009 he completed an NIH-funded, randomized clinical trial of structural integration for chronic low back pain; the study is available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4405211/pdf/ECAM2015-813418. Eric can be contacted by email at eric_jacobson@hms.harvard.edu.

References


The Ten Series: A Phylogenetic Approach

By Michael Boblett, Certified Advanced Rolfer®

ABSTRACT Author Michael Boblett draws on his background in anthropology to examine the Ten Series and the work of each session in terms of phylogeny and regaining aspects of our evolution that have become ‘lost’ to us.

There was a time when you were not a slave, remember that. You walked alone, full of laughter, and you bathed bare-bellied. You say you have lost all recollection of it, remember. The wild roses flower in the woods. Your hand is torn on the bushes gathering the mulberries and strawberries you refresh yourself with . . . You know how to avoid a bear on the track. You know the winter fear when you hear the wolves gathering. But you can remain seated for hours in the treetops to await morning. You say there are no words to describe this time, you say it does not exist. But remember. Make an effort to remember. Or failing that, invent.

Monique Wittig (2007, 117-118)

I don’t know a soul who’s not been battered, I don’t have a friend who feels at ease, I don’t know a dream that’s not been shattered, or driven to its knees. But it’s all right, it’s all right. For we lived so well so long. Still, when I see the road we’re traveling on, I wonder what went wrong, yes, I wonder what went wrong.

Paul Simon, “American Tune”

Introduction

Rolfing® Structural Integration (SI) is political. It is sharply topical. It is inherently subversive. It evokes ancient freedoms. We take literal chains off people – chains embedded in flesh and soul. We show people what lies within them, their own tools for calling forth their own deepest strengths, hidden behind socially constructed personae. Rolfers are archeologists. We teach the skill of digging up forgotten patterns, remembering the steps of forgotten dances, echoing silenced voices back into song and speech.

Rolfing SI as archaeology uses the living body as the site for profound and sometimes painful digging. We are addressing the buried memories of individuals, but also the lost narratives of assimilated tribes, even of our entire species. This digging hurts at times, because the underlying traumas are so often terrible. We humans are constantly recovering from amnesia. What’s lost includes a host of stolen opportunities, pieces of our bodies and souls traded away for survival in inhuman situations,
tools set aside and never picked up again. But what's found is joy.

Digging, we find treasure: strength, resilience, compassion, truth. In this sense, Rolfing SI is yet another form of resistance, a kind of 'guerilla medicine', a school of heretical and forbidden knowledge. What have we lost, we humans? What have some of us lost that others have not? How do we reclaim this heritage?

But let's start with this: What has all this to do with my basic subject? This article is about the Ten Series as a tool for exploring our human phylogeny. I shall draw on physical and cultural anthropology. I hope to find specific turning points in history and prehistory. The loss of self, the memory of violence, the scars of slavery – these things are inherent in us all, no matter how privileged our recent ancestry. Helen Keller (1903, 74) remarked, “There is no king who has not had a slave among his ancestors, and no slave who has not had a king among his.”

But I shall also present patterns of movement that are older than humanity itself, as our non-human ancestors have reinvented themselves again again, incorporating older patterns into new activities. Even here, however, I want to show specifically how the neurological memories of very ancient movements can make more newly invented movements more graceful in living, human bodies. What appear to be trade-offs in evolution (the loss of the tail comes to mind) are often subtle compromises.

For each hour (session) in the Ten Series, I can only address a single ‘phylogenetic forgetting’ in human development. I shall do this fairly arbitrarily, knowing that I am leaving a lot out. One pattern per session cannot possibly provide a full understanding of any particular session’s phylogenetic implications. (This list is evocative, not comprehensive. Extrapolate!)

But that's precisely why the Ten Series works so well for addressing phylogenetic amnesia. Every meeting with a client presents a host of awakening memories, personal and transpersonal, clamoring to be seen and felt. I often feel like a triage nurse at a train wreck: I can’t do everything. The Series helps me in the painful job of prioritizing. For this bigger picture, a phylogenetic approach to the Ten Series is the perfect framework for discussing the loss – and recovery – of human possibilities.

Nor will my list of lost memories be at all chronological. I shall skip around in our family tree, leapfrogging across epochs like a monkey. But then, jumping and climbing is a lot of what makes us human! We never entirely came down from the trees, did we?

Also, I shall address some sessions at far greater length than others. This article will not be balanced in that way. Also, this article will be much less technical than any of my previous submissions to this Journal. Hence my rather mythopoetic language. Some of you will find this approach helpful. Others will not.

Finally, I am dimly aware that various SI colleagues have undertaken similar analyses over the years. Kevin Frank presents a host of awakening memories, personal and transpersonal, clamoring to be seen and felt. I often feel like a triage nurse at a train wreck: I can’t do everything. The Series helps me in the painful job of prioritizing. For this bigger picture, a phylogenetic approach to the Ten Series is the perfect framework for discussing the loss – and recovery – of human possibilities.

I like coining words. Here’s one: pre-appendicular. Looking at the axial complex, I am interested in how it once supported and still supports rapid movements below or above water – without limbs. Pre-appendicular movement is essential to smooth appendicular movement, which is not only secondary phylogenetically, but ought to be secondary in initiating movements. Graceful movements come from within, not from outside. (More on that later.) When this hierarchy of movement is reversed, we humans jerk around like marionettes. But ideally, the Homo sapiens spine reuses very old abilities in order to make our unusual bipedalism not only possible but agile and efficient. The transition from walking to running involved the increased separation and distancing of ribs from hips. This supported contralateral movement above and below through the complex recruitment of many smaller spinal movements that once moved limbless vertebrates through water.

I’ve said all this before, but in appendicular terms. Until now, my focus was always on feet and, by extension, legs and hip joints. In this article, I can now follow more freely the more ancient theme of axial movement, which again I will call ‘pre-appendicular’ movement.

Rolfing SI is political. It is sharply topical. It is inherently subversive. It evokes ancient freedoms. We take literal chains off people – chains embedded in flesh and soul. We show people what lies within them, their own tools for calling forth their own deepest strengths, hidden behind socially constructed personae. Rolfers are archeologists. We teach the skill of digging up forgotten patterns, remembering the steps of forgotten dances, echoing silenced voices back into song and speech.
How do I get there? Well, the paradox of the First Hour is that in touching the ‘sleeve’ we already address pre-appendicular levels of evolution at the ‘core’. The rib cage is the key to this. To soften and expand the rib cage, we manually touch the sleeve, but we are already sending off ancient questions to much deeper structures. This is because sessions one to three address the sleeve, but the core can’t possibly sit idly by. Inevitably, the core reacts. And the quality of that reaction, whether it leads to chaos or integration, depends on the quality of my deeper touch, the touch beyond my fingers. Inevitably, this touch begins in the First Hour, whether I pay attention to the data or not. But what I may ignore cannot ignore me.

More accurately, when I lay my hands on people, I am aware of a large continuum between my direct movement of tissues and what Ed Maupin and others have called the ‘questioning touch’. My physical fingers explore the surface, but the antennae of my fingers are already reaching deeper. The core is not ready for direct contact. But it wants to be consulted. This courtship must be slow, courteous, even ceremonious. Think of old-fashioned marriage negotiations through elderly intermediaries – with the core as the shy and careful virgin, and the sleeve acting the part of duenna or entreretteuse. (Cue the Spanish guitars in something by Bizet.) Why is this? Because sessions one to three are primarily – though not exclusively – about breathing. The First Hour’s contribution to breathing requires the recollection that ribs are older than the ability to breathe air. This is truly pre-appendicular.

So, what is the movement-application of this? That we are walking fish. More to the point, we are walking worms. The acts of breathing, wriggling, swimming with fins, and eventually walking contralaterally with arms are all connected. So, when my fingers touch the client’s sleeve, my antennae must already address both the posterior and the anterior spine through the breath.

In other words, free breathing is not the only goal of the First Hour. Rather, free breathing (along with other deep processes) will begin to support – and redirect – movements both closer to and further from the center. With a questioning touch, the entire chain of movement moves out from the axial line, so that older and deeper movements come into right relationship with newer and shallower ones. Each system can then assume its proper order of initiation and completion.

But can we go back even further? Is there something in us even older than pre-appendicular movement? Can we address what I call a pre-axial level? Ready or not, here it comes.

Second Hour – The Breathing Foot

All the world is just a narrow bridge,
Just a narrow bridge,
All the world is just a narrow bridge,
Just a narrow bridge,

And above all, and above all
Is not to fear, not to fear at all,
And above all, and above all
Is not to fear at all.

Ha-olam kulo gesher tsar me’od,
gesher tsar me’od,
V’ha-ikar, v’ha ikar,
Lo l’phached, lo l’phached k’lal
V’ha-ikar, v’ha ikar,
Lo l’phached k’lal

Chasidic chant, Reb Nachman of Bretzlav

“Narrow Bridge” is a chant against fear. This Chasidic song came to me through oral tradition. I learned it from the poetess Eliyah de Nur, who learned it from her husband Rabbi Yechiel de Nur, who learned it at the Yeshivah Cachmei Lublin in pre-Holocaust Poland. The rabbi himself survived Auschwitz.

Dancing with Chasidism has been a privilege for me. When we separate too much from dancing, songs start to die. Maybe dancing begins to die when we separate dancing too much from song. In any case, to sing “Narrow Bridge” brings courage, but to sing it and dance it brings even more. What I’m trying to evoke in an experiential though vicarious way is how a ‘dancey-singy’ way of moving can give a client deep confidence in everyday situations. We are all walking the knife’s edge. We are all poised above the abyss of fear.

So here I am back at my old obsession, the foot. Like breathing, the foot is not the sole focus in any one of sessions one to three. But what happens if we connect feet and lungs phylogenetically, which is a way to connect them as systems? This brings me to my promise of a ‘pre-axial’ level of evolution addressed in the Second Hour. A dancing foot is a bouncy foot. It is a playful foot, a childlike foot, a juicy foot. It is a resonant foot. In other words, it is a breathing foot.

How do we get to this breathing foot? In keeping with my theme of recovering ancient patterns, we remind the feet that they are echoes of things far older than feet. This is how I get to address what I call pre-axial structures and movements.

For me, the solution to this problem lies in asking questions directly through the dome (or diaphragm) of the foot to the main diaphragm at the bottom of the rib cage, as earlier I listened through the ribs to the posterior and anterior spine. Here, the level of evolution is not just pre-vertebrate, but pre-bone. We are not descended from jellyfish, but we are certainly descended from squishy things that moved through water in much the same diaphragmatic way. Indeed, there is something quite visceral about a properly functioning foot. I’ve said this before in terms of feet. But now feet are secondary, which is where they belong.

The breath of the main diaphragm can literally resonate in the breathing foot, though usually not in a simple beat-for-beat synch. (By the way, the craniosacral rhythm is an even more primal example of domes resonating with each other. It’s just not something I’ll address in this article.) Literally, it is possible to teach all the diaphragms to imitate the plasticity and three-dimensionality of the main diaphragm. In the Second Hour, the diaphragm I address most directly is the living, breathing dome of the foot. Like breathing, the foot is not the sole focus in any one of sessions one to three. But what happens if we connect feet and lungs phylogenetically, which is a way to connect them as systems? This brings me to my promise of a ‘pre-axial’ level of evolution addressed in the Second Hour. A dancing foot is a bouncy foot. It is a playful foot, a childlike foot, a juicy foot. It is a resonant foot. In other words, it is a breathing foot.
We are deconstructing patterns deeply incised into the bodies and spirits of our clients. They are often finding pieces of themselves they once suppressed in order to fit in.

Among others, there is a narrow understanding or rather application of gender. Specifically, I refer to how we construct gender in our modern world. Was it always this way? Without subscribing to theories of a primal matriarchy, I will say, “No.” But on the practical level, what can I do to allow clients a more flexible expression of their genders in gravity and in space? Read them a lecture on the history and prehistory of family systems? Gait work is easier and a lot more appropriate. Third-Hour gait work is especially revealing and especially helpful. Men freeze their hips. Women freeze their shoulders. Truth or stereotype? Fair or unfair? Of course, both genders freeze both girdles. They freeze their patterns depending on personality, subculture, etc. But the imbalances of our society show starkly in this particular imbalance: that most women make themselves unnaturally narrow in social space, while most men seem reluctant to admit that our pelvises exist. Gait work can help address this. But a more comprehensive use of space—arising from a more comprehensive understanding of self—is also why my clients often experience interesting dreams—and interesting interpersonal changes. We are deconstructing patterns deeply incised into the bodies and spirits of our clients. They are often finding pieces of themselves they once suppressed in order to fit in.

Women who begin to take up space as they walk often report dramatic changes in their lives at home and at work. Men who allow their ilia and rib cages to move independently often have similar—though not identical—experiences. Taking that literal first step into a different use of space—this requires but also reinforces deep changes in our sense of who we are. The awkwardness is strong. Humor is important, so long as it does not become too welcome a distraction, an excuse to avoid the tough stuff.

Dancing a different dance is a function of rhythm, of muscle memory, of creating a new template in the neural network. But I submit that for the human body, very few possible dances (real or metaphorical) are entirely new. Memory is the heart of physical learning. I am speaking of deep memory, which transcends the biography of any specific person but is deeply personal. In this case, some memories need not be older than our humanity itself. But the archaeology of digging them up is no less challenging.

Now we move into sessions four through seven. At this point, we may directly palpate core structures, but the groundwork was laid by three sessions of negotiations with the core.

Fourth Hour – An Ape’s Abs

Have you ever looked at an ape’s abs? They’re disappointing. This is true even on young and hairless animals. These disappointing abs are in sharp contrast to the other wonderful muscles I see on hairless chimps and gorillas (individual animals suffering from alopecia, which renders their skins hairless). In particular, the shoulders and arms of these creatures remind me of the equivalent muscles on acrobats, whose bodies are truly marvelous. The back muscles of apes are also well-formed. Especially striking are the sharply defined front edges of the lats. Again, I am reminded of acrobats—and of some swimmers. But human bipedalism—not just occasional shuffling but actual running—requires an entirely different use of abdominal muscles. And, the abdominal muscles must express not only themselves but muscles reaching posteriorly to and also including the front of the spine.

The ‘amnesia’ I choose to mention here is even newer than our social construction of gender: it is our culture’s obsession with
Taking that literal first step into a different use of space – this requires but also reinforces deep changes in our sense of who we are. The awkwardness is strong. Humor is important, so long as it does not become too welcome a distraction, an excuse to avoid the tough stuff.

Sixth Hour – A Universe in Itself

Guess what? As I examined the Sixth Hour from a phylogenetic viewpoint, I found myself unable to choose a single incidence of evolutionary amnesia. Rather than keep struggling, I have decided to skip the Sixth Hour precisely because it is so important and therefore so complex. Who knows? My extensive meanderings of this subject might turn into an entire article on its own. Something like, “The Sixth Hour and the Whole $%^& Ancestral Tree.”

Seventh Hour – Shattering the Mask

Man is least himself when he talks in his own person. Give him a mask, and he will tell you the truth.

Oscar Wilde (2007, 96)

But even as we wake up the individual cells, there are a few other barriers to throw down. As Wilde understood, covering the social mask with something made of leather or wood or papier mâché is powerfully liberating. This is because masks are temporary. We can put them on and take them off. With masks, a whole diversity of personae can replace the face by which society defines us, and by which we define ourselves.
It is more difficult to release the neurological restrictions of the social mask itself. This is because we are unleashing an even larger library of possible masks, as the illusion of a monolithic self begins to dissolve into a host of other suppressed possibilities. My most successful clients often combine Rolfing SI with Jungian work, precisely so that previously unexpressed archetypes can literally show their faces.

What evolutionary forgetting lies at the root of the social mask? I might call it more general primate impulse toward the enslavement or domestication of a root of the social mask? I might call it what we cannot touch.

So here’s Michael's Crazy Theory #1003: as the cranium and its surrounding structures experience more freedom and expansion, I firmly believe that this extra spaciousness transmits directly to deep structures we don’t usually consider malleable. So, in the Seventh Hour, my ultimate goal is 'taking the girdle off the limbic system'. For one thing, this greater spaciousness allows the sense of smell to be more powerful, both in terms of detecting different smells, but also in connecting those smells to deep memories. In turn, the sense of self becomes even more expansive.

That's about it. My treatment here of the Seventh Hour is shorter than for the others. This is not because it is unimportant. Rather, it is because so much of the Seventh Hour is about things I can't really put into words.

Eighth Hour – Flip a Coin?

Upper or lower girdle for the Eighth Hour? – If only we could flip a coin! But the truth is, I often know – or suspect – fairly early in a Ten Series whether the Eighth Hour will be an upper or lower session. Whether the initial or most profound dislocation of the body is in the upper or lower girdle, this imbalance is often apparent from the beginning of the Series.

Of course, clients surprise me. Nothing is certain until the beginning of Eight Hour. Also, the primary or more profound dislocation may actually be more amenable to release. This can happen for a variety of reasons. One cause might simply be greater attention on my part. A stubborn pattern calls forth my own stubbornness!

The choice at the Eighth Hour brings me back to what I addressed for the Third Hour – the deeply different roles played by the upper and lower girdles in our cultural and physical evolution (and our ancient amnesias) – only now my focus is no longer on gender. As I already admitted, gender is only one determining factor in upper versus lower girdle restriction. Women are not always more restricted in the upper girdle, nor men in the lower.

For this reason, I shall now pretend that I have a client who is male and is more restricted in the upper girdle. For reasons that will become clear, he's also a strong external in the internal/external body typology developed by Jan Sultan. So what other factors besides gender might contribute to this man's pattern? Here I will focus on gaze, especially as it relates back to breathing. My imaginary male client is a sedentary office worker with a severely anterior head coming from a first rib jammed up where it crosses the clavicle in front. I would have determined this when I first examined the client and began the Series with him by noting that I could not see the lower clavicle in front. I would have determined the location of the client's pain would certainly not be the determining clue, as discomfort would most likely be posterior, at the C7-T1 juncture, radiating from a giant dowager's hump. But I would have started in front. I'd have begun by asking about the client's lungs: "Did either of your parents smoke when you were growing up, either tobacco or cannabis?"
The Tenth Hour, along with the physical integration and horizontalization of structures, is the culmination of a process of teaching clients to live in their bodies. More specifically, we don’t just teach movement. We teach perception as it precedes and enlightens movement.

Did you ever smoke anything on a regular basis? Any history of asthma? Any history of chronic pneumonia or bronchitis? Any history of chronic sinus infections? Befitting his first-rib restriction, the man I’m imagining had a childhood exposure to secondhand smoke and an adolescent fondness for cannabis. He also has a resulting tendency toward hoarding air, which expresses in a history of asthma.

I would also ask about the client’s exercise routine. In keeping with his overall postural and psychological type, he is what I call a ‘chronic bulker’. He lifts weights, but never more than eight to twelve reps per set. He’s been doing this for decades. The concept of defining as well as bulking was never presented to him, or he rejected it. His idea of aerobic exercise is a few minutes on a stationary bicycle, though he usually skips this. Stretching is a foreign concept to him. He rarely spends time outdoors.

What has all this to do with gaze? What has gaze to do with this man’s breathing? What have gaze and breath to do with his choices of exercise? What form of cultural amnesia do these things express? As I see it, the timing of this cultural forgetting is quite recent. It starts in late prehistory and even early history. It has to do with the transition from hunting and gathering to agriculture. It also has to do with the dramatic increase in class differences supported by agricultural societies.

My client’s gaze in almost always down. He is no longer a hunter. He no longer scans the horizon for his next meal. He is no longer a gatherer. He maintains no 180˚ awareness of what surrounds him in the forest. Overall, he is less alert. He is more accustomed to routine. His world is safer. But the cost is his domestication – and human beings are really not designed for domestication. Sooner or later, the heavy yoke takes its toll. And his breathing? His concept of strength no longer includes the alternation of fast and slow movements, heavy lifting but also jumping, agility, and the kind of long-term stamina that requires more than eight to twelve repetitions. He can afford to ignore his lungs. He can encase them in a shell of showy muscle. He can afford to tuck his chin down. He can be strong, but only as a beast of burden.

The result is not the same as the cosmetic body of the ‘gym rat’ I mentioned above. My client’s muscles are closer to functionality. He may even do tasks around the house. No, his problem is somewhat older. The disjuncture from the past is an unconscious acceptance of a subservient role, the self-identification as a solid and reliable tool of the State. My clients plods, probably because his parents plodded and their parents plodded. But the separation and mutual freeing of first ribs and clavicles can be the first step toward throwing off that yoke, lifting his submissive head, looking around, sniffing the air, and finding a possibly more dangerous but certainly more joyful way of living. But he may actually be safer in such a shift: he is less likely to die of a heart attack – or get mugged by a wild bull. His tail, once meekly tucked down, starts to lift aggressively. Watch out, he’s pawning the ground!

What do I mean? Is this pawning of the ground just a metaphor? No, his stride is actually becoming more balanced, front and back. Previously, he just kicked his legs out in front when he moved forward. Even when he ran (which was rarely), he just goose-stepped very quickly. (And we wonder why the marathon is ruled by sub-Saharan Africans? Genetics or culture? Nature or nurture?)

In terms of upper and lower girdles, my client’s back-stride was restricted by his C-curve posture, with anterior shoulders and posterior ilia attached to a slumped spine. He might work his glutes in the gym with the help of weights, but having little anterior range of motion to activate them, his glutes haven’t atrophied but – worse – have developed in an artificial way having nothing to do with their true function. He may have a big butt, but his butt is as fake as his biceps. The physical forgetting is exactly the same as the one that fixed his head too far front: generations of safe, steady, humble plodding have produced a strong but submissive body. But once he remembers how to run, jump, and dance from awakened hips, he is even more likely to throw off his inherited harness and make a dash for freedom. No fence can hold him back. No rider can cling to his back. No matador can confuse him. This ox has his testicles back! (For female clients, choose whatever metaphor you like to express freedom versus domesticity!)
Rolfing SI is not something we do to people. It is something people do to themselves. This is why it is education, not healing. The client does the healing.

Tenth Hour – The Gift That Keeps on Giving

Rolfing SI is not something we do to people. It is something people do to themselves. This is why it is education, not healing. The client does the healing. Self-healing requires proprioception. The Tenth Hour, along with the physical integration and horizontalization of structures, is the culmination of a process of teaching clients to live in their bodies. More specifically, we don’t just teach movement. We teach perception as it precedes and enlightens movement.

This is hardly groundbreaking. But once more, a phylogenetic referent may help in actually doing this. At this stage, I want to revisit the notion of a hierarchy of movement, which again is a hierarchy based on viscosity, but now the hierarchy takes an unexpected turn. Yes, liquid stuff still guides squishy stuff. Squishy stuff guides chewy stuff. Chewy stuff guides stiff stuff. But guiding everything is a set of patterns existing on the cusp between energy and matter. We may try to reduce this to electrical impulses, but I think it’s better to think of these patterns as prana, chi, ruach, etc. What we are looking at is energetic awareness, what some writers have called the light body.

Even if I define the light body as just the brain and its various layers – or the brain and its network of peripheral nerves – the hierarchy of movement becomes slightly more complex, albeit in a simple way. In matter, the hierarchy goes only one direction between the different degrees of viscosity: soft things rule hard things. But awareness goes both ways. It is reciprocal. It is mutual. Between ‘high’ and ‘low’ levels of consciousness, even between ‘subtle’ and ‘gross’ levels of physicality, there is no question of the hierarchy being anything but an echo back and forth, neither side entirely controlling the process.

Here, the phylogenetic amnesia involves the evolution of the brain itself. There is no single time when the different layers of the brain began to lose track of each other. I do not believe that our very young human consciousness is solely responsible for this disconnect. But as the human brain more fully integrates its different layers – ancient and modern – how does this work?

The brain-stem and the amygdala don’t just take over. They don’t just tell the neocortex what to do. This only happens when we go on automatic pilot. We may be very efficient in this blackout state, but it can never be how we live our lives. But neither should the neocortex issue unilateral commands down the line. We’ve all seen movements that were too ‘cortically driven’, too self-conscious. We’ve all seen this in gait work, with the client frantically trying to integrate a long and undigested list of movement imperatives instead of dancing gracefully in an integrated way. With reciprocal influence, the different layers of awareness resonate with each other, much as the domes or diaphragms of the body echo each other’s full three-dimensionality.

Now we see a client with true autonomy. Gravity not only continues to heal, but gravity continues to be the teacher. The client’s further evolution is epistemological as well as structural – if indeed these are different things. This is the true meaning of the Tenth Hour.

What Now?

As I admitted in my Introduction, the sections of this article are not meant to be comprehensive. Again, no single phylogenetic forgetting can dominate any single session of the Ten Series. What I have given are just examples. As I said before – extrapolate!

References


Michael Boblett lives and works in San Diego, California, not far from where he grew up. He says, “Living close to my hometown means that I know the names of the local wildflowers, recognize most bird calls, and can hike trails I first walked over sixty years ago.” In addition to writing about Rolfing SI, Michael has published a short book of poems and is working on a book about nutrition.
Rolf’s Ten Series
Conceived as Steps
Towards Normalized
Motor Patterns and Stability

ABSTRACT Kevin Frank and Caryn McHose, both Rolfers® and Rolf Movement® practitioners, explore the Ten Series from the perspective of normalized motor patterns and stability in both an overall discussion and a session-by-session analysis.

What Is Integration and How Does It Happen?

Caryn McHose:
Kevin, where do you see us starting in this wonderful topic of the Ten Series as steps in the evocation of normalized motor patterns and stability?

Kevin Frank:
Let’s start with some context. I think we all come to appreciate Rolf’s gift – how the ‘Recipe’ of the Ten Series supports our practice. Through our years and decades, it’s there for us; it remains a remarkably reliable, and effective, set of interventions.
The goals for the session emphasize anatomy – one learns to ‘open it up’, to differentiate layers, and use what Michael Salveson calls ‘vectorized fascial touch’ – pressing on fascia with an intention, with a direction. That’s been the main approach for Basic Trainings – and, teaching just these foundational skills, skillfully, is a challenge. Differentiation is, on its own, a profound event for many systems.

However, less defined, we might say, is the ‘integration’ part of the equation. It’s been more in the background. There are the ‘integration sessions’ of course, but what do we have to refer to on this topic? Monica Caspari’s article, “The “Functional Rationale of the Recipe” (Caspari 2005), is a window to Godard’s views, some clues about integration. Ray McCall and I wrote an article (Frank and McCall 2016) exploring, among other things, how do we define integration? And then, how do we measure it and where does it belong in the Ten Series? But the integration question persists. In this current discussion, we want
to talk about integration but also about the goals of the Recipe in practical terms.

**CM:** I had a different way into the Recipe. I was teaching movement with other Rolfers, before I met you, and started to hear about the Recipe and see demos. In observing sessions, I was seeing the relationship to fundamental movement patterns, particularly developmental and evolutionary movement that I’d been exploring with people. Reading Ida Rolf in my twenties and liking her proposals (although not having experienced Rolfing® Structural Integration), I pursued these ideas in teaching movement, and saw people change. Becoming a Roler and collaborating with you, there’s a deeper appreciation of Rolf’s recipe and the change in people’s movement, change for the better.

**KF:** I like that you say people’s movement changes for the better. It’s part of the tradition, and everyone’s practice, to one degree or another – that people’s movement gets better. And, we want to take this idea further, to suggest a different lens through which to look at what the Recipe is about.

**CM:** I wonder also, what do I mean by movement getting better, what does “better” mean?

**KF:** Rolf posited that when people express ‘Normal’, as opposed to typical movement, that in the execution of daily tasks, movements, walking, lifting, holding, reaching – in all those things, you’d see elongation. Instead of bodies getting shorter, more contracted, bodies would express something we like looking at – it’s a quality of decompression, of becoming, as Jeff Maitland put it, ‘more spacious’. There are characteristics I think everyone can agree on as being ‘better’.

It helps to define this ‘better’ even more specifically. An element that we want to bring out in this conversation is: What are specific ways of speaking about the ‘better’? And why does it get better in terms of normalized motor patterns?

**CM:** Right, naming elongation – what came to me is, the mover is not doing the moving, that there is a moment-to-moment sense that the body is easy, supported, cradled in a flow of movement expression, there’s just no effort or less effort.

**KF:** I like that you name these qualities. Movement education asks us to embody these qualities so, as practitioners, we can show people what before and after looks like. It’s helpful for students and clients to get a visual as to what we’re up to.

**CM:** Then they can begin to have an experience.

**KF:** Right. Now, let’s back up and ask, “What do we imagine as the mechanism behind the structural integration Ten Series?” Rolf claimed the body is ‘plastic’ because the fascia is plastic in nature when you press on it; that you reshape the body because you reshape the fascia. I think we both agree that this model is now a little out of date. We aren’t the only ones who have wrestled with the mechanism question. It’s a big one. Fortunately, evidence points to a more grounded model that serves to move the profession forward. Yes, the fascia is indisputably important, and ultimately, we’ll find out more about the physiology of its mobilization. But, we know for sure that when we mobilize fascia, we send fresh information to the body, information the body responds to quickly – consciously and subcortically. This kind of information helps bodies make better choices; choices in coordination, in motor control.

**CM:** When I’m doing Rolfing sessions, I’m holding a question. It’s curiosity about what information does this body need? When I have that thought in my mind, there’s a change in my touch that isn’t about doing; rather, it’s a circulation of awareness that includes my own gravity orientation and the possibility of communication back and forth with the client. It’s the relation of the parts and the whole being; but, also, the bigger relational interval with the context, to the ground and to the space.

**KF:** Yes, curiosity prompts, “What information is this system asking for?” An informational model, rather than a strictly biomechanical model – whether we’re touching the fascia with a specific intention to open or differentiate, or if we’re addressing other forms of information the system might be eager for, such as having a person pause and notice things at a conscious level that the deeper brain is responsive to. We invite, for example, awareness of gravity orientation, a sense of weight, a sense of distance, the space around one, feeling the sensory experience in hands or feet or skull or tail or knee and imagining, for example, vectors of directionality. In all cases, we’re looking for what and how the client’s system might be hungry for better information, at a subcortical level, at the level at which motor control gets informed. How would this system, we ask, best find information that replaces the dominance of old habits?

**CM:** This approach invites some responsibility from the client to begin to develop conscious awareness for their experience and to acknowledge shifts that take place in perception and the awareness of how their own body is moving or receiving the information.

Rolf posited that when people express ‘Normal’, as opposed to typical movement, that in the execution of daily tasks, movements, walking, lifting, holding, reaching – in all those things, you’d see elongation. Instead of bodies getting shorter, more contracted, bodies would express something we like looking at – it’s a quality of decompression, of becoming, as Jeff Maitland put it, ‘more spacious’. 
KF: Yes, good to point to the value of inviting the client to feel their own power in the process, and good to acknowledge also that not everyone is interested, or able, at first, to find words for those shifts. It might be, at first, very vague . . .

CM: . . . Yes, there are times for verbal exchange and then there are times for the nonverbal, communication that happens not with words.

KF: Yeah. Sometimes we provoke a shift in awareness with our touch or just with what we’re doing in our own body or what we’re saying in our words as we do it in our body, and not necessarily putting a verbal demand on clients who are less verbal to describe what they’re experiencing.

CM: Right. A silent potency.

KF: So, there’s one thing: the Ten Series can be reframed as a shift from a body-as-‘stuff’ model – a biomechanical model – to an informational model, a system model. Another biggie is to look at what specific motor-pattern improvements can be associated with each step in the Recipe.

CM: Yes. Within the Series, there is guidance offered to support the building of many capacities to elongate. That’s a wonder of the Recipe.

KF: Before going further with the topic, it’s important to note some acknowledgements. We’re drawing on many people’s contributions here. This perspective didn’t occur spontaneously, out of the blue. We stand on the shoulders of Hubert Godard, certainly, but he stands on the shoulders of other folks. And, good to point out, historically, Rolf Movement instructors taught an eight-step series (without facial work). Hans Flury prompted an in-depth look at ‘Normal’ in his radical system. And we all stand on the shoulders of many other twentieth-century movement pioneers, as well as systems theorists.

CM: Yeah, and I feel compelled to add, in terms of standing on shoulders – there’s also the different cultures through the centuries that have understood fundamental ways of supporting the body to restore normalized coordination or this ease of movement.

KF: Yes, yes. Maybe society has to kind of ‘reinvent’ this stuff over and over . . .

CM: Right, and appropriately update the words for cultural relevance for today.

KF: It’s also good to mention Mabel Todd. Rolf and Todd’s time at Columbia University overlapped. Todd taught people how to change motor patterns with perception, what became Ideokinesis. Something in the water in that part of New York maybe? You see influence. When I came to the Rolf Institute®, Todd’s The Thinking Body was at the top of the reading list. I don’t think it was accidental.

CM: Yes, it was a wonderful resource for me also, way before I knew anything about Rolfing SI. It was the first awakening to how perception changed my movement; as a dancer playing with some of these ideokinetic explorations, it was like magic. I didn’t understand how it was happening. Many decades later, there’s more understanding of how this works from a scientific perspective.

KF: It’s great to now have research that supports why when you employ ‘somatic imagination’, the body gratefully innovates its motor pattern.

The Steps of the Ten Series

KF: Let’s get to specifics and look at some ideas for how it looks when you’ve been successful with Rolf’s Ten Series, some examples of how the Recipe can be expressed to students, or clients, that rest on a notion of motor-pattern improvements for each step.

Session One

KF: For session one, what occurs to me first is orientation. It’s a good first opportunity to engage with a foundational source of plasticity for all the structures (physical, perceptual, coordinative and so on) – introducing gravity orientation as a gateway to change. Gravity orientation, helping a client to dip into a fundamental sense of weight and the felt potency of spatial relationships, it’s so important to introduce this experience right away.

CM: Yes. I must say the First Hour is challenging from the enormity of that subject. How do you touch into that the first time, and every time? Starting that communication with the client is like taking a sip of water from an endless well.

KF: To take someone who’s just walked in off the street and to suddenly delve into, “Guess what? Your body does gravity orientation – whether you try to or not. If it didn’t, you wouldn’t be here, thinking and walking.” So, somehow, we’d like to find an appropriate introduction to this big topic and to this big bag of experience.

CM: . . . And then actually initiate and evoke experience.

KF: Initiate experience and suggest in the first session that each step is finding some element of improved coordination, of improved motor pattern. Each session
CM: What do you start with, Kevin?

KF: Just to state the obvious – we can’t, in this conversation, do the ‘catalog’ – we’ll pick some examples. For the first session, an easy choice for me is adaptive mobility / freedom to adapt in what we call G’ (G prime), the upper center of gravity, a spot near the center of the chest at T4. If we can get the body to find some buy-in, to respond in different ways with its upper center of gravity, that serves the Series and will serve normal stability and allow for new coordination.

CM: Just name a couple ways you’d facilitate that.

KF: Let’s mention first that we use a foot board (or wall) at one end of the table for almost every session of the Series, and its use starts in session one. So, in sidelying (as shown in Figure 1), I invite the client to begin to let his upper center of gravity respond to the pressure of his foot against the board, and with shifts in (eye) gaze opposite to foot press – elongation occurs in the front of the spine with a reduction or absence of effort. The exploration is supported by easy reach of the tail bone. G’ movement and breath revives; ‘Normal’ capacity restores. When the client sits up, and then stands up, he’s already rehearsed whole-body adaptive movement of G’ while on the table, so integration is more possible, more available.

CM: I do something even before that that feels so fundamental for me: when someone is first walking, I walk/move with them. I want to be with the person moving first so that I am not thinking – our bodies are speaking. And then inviting a pause for a minute and feeling or noticing where ‘down’ or the ground is . . . then to indicate or notice where is ‘up’ or out the window and towards the sky. I am fortunate – in my studio you can see ground and sky. Evoking a journey from ground to up and out, or sky back to feet and ground, is an experience in orientation. That demonstrates a lot about the front line and our goal, to elongate the body and open space for easier breath from the context of ground and space. And, second, we awaken capacity for dual attention in two directions. Of course, people may or may not understand that yet, but I like the dedication and challenge of that possibility first off. It can be a playful moment, too. It doesn’t take long. It doesn’t have to be a big deal but just . . . there’s a gesture that happens that goes from down to up. There is movement. The client doing this gesture, from down to up and up to down, not only does it introduce the idea, but I get a reflection of where they are with that – how that gesture is expressed and where the person might need attention to that awareness as we’re going through this Series, I want to support their process of that opening to space in front of the spine and the orientation to space in general.

KF: An important point – and it shifts the emphasis from the body as ‘stuff’ to the body as a movement system, to the body as . . .

CM: . . . As an orienting being. Every moment.

KF: The orientation process, the gravity orientation process, is so woven into movement changes at a subcortical level.

CM: Yes, and we want a client to have the range of orientation capacity, not only to support them where they’re resourced, but to have added options of orientation, to innovate more of up or more down.

KF: . . . Capacity to consciously notice gravity orientation as a coordination, as a perceptual coordination, but also a fundamental coordination.

CM: A state of being.

KF: A state of being, foundational to everything that is structural integration. For a practitioner, beginning to build empathic awareness for what’s going on at that level in the client would seem to be, and we have certainly found it to be, essential in terms of supporting their process.

CM: Right, their stance. Yes.

KF: And you also describe a vital practitioner skill – to be able to read the orientation and perceptual structure of another person. It’s not something we necessarily learned in the manual therapy part of training. It’s ‘somatic movement education’ and belongs sweetly in the SI offer, but it may not always get the airtime.

CM: Starting this long journey in the First Hour and growing it through the Series is a challenge I want for myself and the client to initiate.

Session Two

KF: Let’s go on to session two. We think about support, and we think about how the system might build what we call ‘peripheral stability’. We’re making a point now, if we haven’t already, that the history of stabilizing theory and its popularized modes often emphasize building stability from the sense of ‘core’ or ‘from the center’. What we’ve discovered, and what we teach, is that if you want to develop healthy, functioning stability, you really need to do something different from focusing on the center. Rather we want to link extremities, hands and feet and head and tail, and vitalize the sense of the space around you – and link all this to the articular integrity of the spine. Session two we see as a consideration of “How do the differentiated feet and lower legs (and the hands) relate to a segmental articulation of the spine?” So, differentiation – yes – but also linking, which is part of integration.

Unpacking the notion of integration, Daniel Siegel (neuroscientist, psychiatrist, author) states, “Defined as the linkage of differentiated components of a system, integration is viewed as the core mechanism in the cultivation of well-being.” Concise, and conveniently relevant to what we do. For our work, you differentiate, you kind of blow it all up – structural integrators tend

**Defined as the linkage of differentiated components of a system, integration is viewed as the core mechanism in the cultivation of well-being.**

- Daniel Siegel
The Rolfing ‘Ten Series’ – Part 2

Figure 2: In session two, hands and feet support opening of the front line (A) and the back line (B).

to be good at that – but then your job is to find all the ways that you can teach the system to link the differentiated elements to each other, and to engage the ‘action space’. And linking is possible pretty much in every moment.

Back to session two: You’ve to some degree liberated the movement of G’ in session one, and probably opened up the arms and hands. In two, you open the feet and lower legs. Now you have an opportunity to link the differentiated hands and feet with segmental movement of the spine in a seated situation. You begin to build an integration that becomes the basis for stability, is already an improvement in stability; even a few seconds of that type of work and we lay the basis for more complex and more deepening of stability response in later sessions.

CM: What I start off with in the Second Hour is the question: “How do you feel support now? How are you specifically supported with your feet standing, or sitting on the stool?” The person’s self-referential experience of support begins to blossom. And then working with the map of the foot and the map of the ‘feet of the pelvis’ – the rami – and beginning to get that operating and functional, and having the client start to experiment with sitting as an ‘eventing’ (feeling anatomy as an ‘event’ rather than an object); that movement on the long walk of the rami along with the activity awareness of skin of the feet and the support from the ramus on the chair builds the perception of ground within. Then adding the perception of the four legs of the chair supporting them might lead to another question, “Can I allow myself to be supported by that?” and the way they might begin to notice, “Oh, I don’t have to work as hard sitting.”

And that can lead to the next question and project. What’s happening in the front of the body, is their spine moving? Are they tightening in the belly? And so on and so forth. So that’s a dip in, and then moving to the table to begin to work with the mobilization or the articulation in the bones of the foot.

KF: You’re mentioning the feet of the pelvis and the feet of the feet and linking those two things. And I love that you’re bringing in another key element, which is framing the work of the session in an activity at the beginning of the session. Not just having clients stand there and do some form of diagnostic for our eyes, but framing coordinative outcomes right away with simple elements that offer the client a sense of what we’re up to today, in tangible form.

CM: Yes. It’s both a diagnostic tool and an educational tool, that they are beginning the mapping process and they are beginning to be empowered to notice. If I ask myself how I notice my support and to begin to track those changes and the reduction of effort and where they feel the effect of that, or do feel the effect of that and where we might support them in that process.

KF: Coordination as diagnostic, coordination as education, and coordination as gaining a sense for the availability of the client, from the beginning, so we have a sense of needs to be prioritized. Also reminding him or her of the relevance of each session’s goals.

CM: And that this is an activity that they can ask themselves about every day. This is building self-care awareness of something that’s profoundly simple and profoundly linked to what the gravity response is about. That this awareness is available to tune into at any time. I can check into how I don’t have to work as hard for my support in my feet and for support of the feet of the pelvis and then begin to notice the results in my body.

KF: Yes, self-care woven in, because, certainly, when you try to ‘tack on’ self-care at the end, enrollment or buy-in is going to be less than if they have iterative experiences during the session – ingredients to what they’ll receive as self-care at the end.

KF: So just to fill in the details about linking the spine and the hands and feet – peripheral stability, peripheral support – let’s mention that although we do what would be considered ‘traditional back work’ in the second session, connecting feet to spine, there’s a significant variation. Meaning – we set up the work so there’s an ergonomic support for the client’s hands in the seated position (see Figure 2). Then we might do fascial work on the back, the work one expects to see at the end of a Second Hour, but then we often do some anterior/posterior shifting of the spine using the hands and feet. We start to build that sense of, “Okay, the spine has friends at the ends.”

CM: I think it’s important to get specific about what a pre-movement is: that before we move, there’s a preparation in the body that is automatic, and we need a lot of that to survive. That preparation activity offers opportunity for us to note that preparation and consider – well, do I need all the activity that I’ve learned how to do or am I over-stabilizing? Is the voice of an intrinsic response available to me in feeling the support of the ground in this space or the periphery of my body engaging to allow that lengthening or mobilization of the spine?
That takes some practice for some people: What does it mean, hands and feet? Or what does it mean to activate at the feet? What's that activity? Is it effort? Is it pushing? Is it engaging a lot [fill in the blank], or is it a quiet feeling of the impression and linking one's awareness to the context? And that's a twofold process of slowing down impression and then allowing the sense of that engagement to be initiated in the peripheral exchange and expression with the world.

**KF:** Pre-movement is another ongoing project. So much about pre-movement seems to be about slowing down to the degree that your client is available to catch the moment in which the pre-movement swerves into the habit. As Daniel Coyle points out in *The Talent Code,* there's something about catching the error/the old pattern in real time, so the client gets the benefit of waking up to it. The learning process is supported by that identification of “Oops, ok, let's try that again and let's slow it down even more.” And then how might we support the negotiation of the moment that is turning out to be critical in the pre-movement: a little tensioning someplace, a little loss of awareness of the space, a little bit of holding the breath, whatever.

**CM:** Or where is the map of the feet ‘offline’ – not available or not articulated? That's where it's confused in terms of an opportunity for articulation. That's a place for fascial mobilization – the process of offering guidance for the tissue to remember that it can move and re-establish that clarity of articulation.

**KF:** We've identified some of integrative and stabilizing and motor-pattern dimensions of the second hour – hinting at why and how we feel those elements fit in.

**CM:** Yes. And use of the footboard. The footboard is just a foot plate, a rectangular piece of wood that you can use for work when the client is lying down; especially to work with the tibial bone and movement of the fibula and tibia in relation to that capacity to have the calcaneus-to-toes line be able to move and articulate as it's used in gait.

**KF:** Yes. Give people ‘floor time’ before they stand up.

**Session Three**

**KF:** There are many things to consider for session three. The ‘lateral line’ is an idea Rolf grounded in terms of where and how we look and put our hands. I find, people take a while to make relationship to it. It's a way to look at what's happening in front and back of the lateral line – sagittal considerations – but it is also a look at a dimension of spinal movement and gait. Lateral flexion in the spine, with two contrasting phases in the upper and lower part of spine and rib cage. It's a lot right there to think about.

For ‘before’ coordinative diagnostics at the start of session three, we can look at the flexion/extension of the hip, knee, ankle, and trunk in sit to stand and stand to sit. In that movement, is there harmonious reciprocal movement à la “When flexors flex, do extensors extend?” Is there a ‘no-one-doing-the-movement’ look with sit to stand and stand to sit? They've got their hands and feet. They've started to feel that the spine can elongate. Can we do this in sit to stand in a manner that's ‘reversible’, in a manner that's quietly stable?

And what's it like to explore lateral flexion of the spine? The client, supported via two poles (see Figure 3), shifts his hips side to side; we see how the lower spine works in lateral flexion. Or we look at how the client flexes laterally, seated, arcing to the left and to the right. The point being that from a stability viewpoint and with gait in mind, lateral flexion is, if we agree with Gracovetsky, fundamental fish-body movement – it's what drives locomotion.

**CM:** So, Kevin, why don’t you explain the setup that you've been developing for three in the sidelying position.

**KF:** So the process starts in session one, and it's the classical process of articulating axial body from appendicular, but adding that now propulsion of that differentiation process comes from one foot against the footboard (see Figure 4), so that the toes help elongate the front line and the whole foot, including the heel, helps elongate the back line. When we use the whole foot and we, for example, capture the superior border of shoulder with our hands and then have the client press their foot against the board, we're helping them feel that the shoulder girdle is with the ground, and the spine and the head elongate through the girdle, emerge through the girdle. They can feel that. They can feel their head moving on the table or the pillow, and the body ‘updates its files’ as it recognizes “Oh, the axis and the girdles are two things! They're separate things; linked but independent.”

Everything being described can be done with or without the fascial mobilization.

In terms of lateral flexion, it's definitely possible, supine on the table, to begin to do the side-to-side hip sway, with the knees bent and the feet on the table, or with the feet up on a board with the knees at a 90˚ angle, or just lying supine with bent knees. The feet support lateral flexion – it's what happens when we walk.

Side-to-side hip swing shows us lateral flexion of the tail and lumbar part of the spine. Standing, holding poles or holding onto something so it's not about balance, the knee bends as the hip shifts to the opposite side. We get to see how free the lower spine is from the pelvis, and how clear the relationship is between the feet and the lower spine.

In the sidelying work, it's a chance to work with these relationships – the foot pressed against the board, the tailbone leading anterior and posterior with the sacrum and the lumbar spine. Can the spine move and the motor units around the pelvis take a break? It's sagittal movement to improve coordination in lateral movement, and it works. The body makes the translation.
girdle and axis de-confuse. It involves refining the pre-movement so that the sensory experience of the foot, the connecting of dots between the foot and the spine, can lead to quieting down of motor activity around the pelvis – the places where people brace, bracing being what interrupts normal stability.

At the end of session three, side-to-side hip swing gives a chance to see how the movement has evolved. How has the motor activity changed? Is there less noise, less interference from bracing around the pelvis? As with other diagnostics, simple side-to-side hip swing with poles is easy to learn and effective self-care to take home.

**CM:** Here’s more ways the work can be carried on. Standing with two poles gives the sense of support in the periphery, in the hands and feet, and can then allow this mapping of head-to-tail and lateral flexion or side-to-side movement in the hips. It can also differentiate the axis from the motion of the two halves of the pelvis – the axis functioning as the initiator, free to torsion and elongate. So the ‘fish body’, if you will – which translates to the volume in the head, the volume in the rib basket, the volume in the sacrum, connected via the spine and the gut tube – this whole thing begins to be noticed and experienced in the primacy of elongating, the continued offloading of extra work happening in the girdles. The client is finding connection and support from the ground through the feet, or the support of the spine, and through the work of the hands connected to the poles. Lateral flexion, felt as fish body / axial body, can also be done lying down supine on the floor or on the table – a process that begins with bidirectional elongation along one side of the body, starting with the directionality through the head and tail, and then continuing that exploration along the lateral line of the leg towards the lateral malleolus and lateral aspect of the foot.

**KF:** As we said before, many dimensions to three. Lot of considerations for this central component of spinal movement, lateral flexion, which translates into torsion – rotation around the longitudinal axis – which allows us to walk around, walking around differently from other mammals.

**CM:** For a client to be able to take on the project of differentiating or ‘disappearing the girdles’, and feeling what we call the fish body, or the bidirectional axis in the spine, there’s no time like the beginning to start that. The girdles are there to help make a translation of support to the axis, that then can function more freely. The client then can begin to make this differentiated perception in movement and apply it when they take their practical movements out into the world, like walking.

**KF:** How would you describe, or translate to someone who hasn’t heard it before, the phrase, ‘disappearing the girdles’?

**CM:** Because of my background in dance, movement practice happened on all levels, meaning using the floor, moving on all fours, and moving dynamically through space. So, it’s second nature to me to view movement through an evolutionary lens. There was a lot of evolutionary time in which lifeforms expressed their movement just as an axis, or as a fish body, and there was even more time spent as a volumetric fluid body, floating around in the ocean. So, in three, there’s this possibility of beginning to consider the quality of volume in the gut tube, and de-evolving, if you will, to a place that life had a lot more ‘practice time’, functioning as a whole. So, ‘disappearing the girdles’ means using your imagination to begin to feel that part of yourself – the axial body – as more primary, in terms of its capacity to express movement.

**KF:** What does it look like?

**CM:** Well, it looks like the shoulders and the hips are just coming along for the ride, they’re not driving the show, and the power of the Line is expressed clearly, without interruption or noise in the system.

**KF:** Great. I like that description, that the girdles are just going along for the ride. I once heard Emmett Hutchins say something very similar. As we start to shift the focus from biomechanics to motor patterns and stability, it helps to add appropriate descriptors, new descriptors that do justice to what’s observed as motor-pattern change, so that students and clients can have words. At first, maybe it’s a wordless experience, and, at some point, having words connected to the actual experience helps to clarify.

**CM:** In the natural world, in the movements of the creatures we see around us, or that we know have been around, this quality of movement that unfolds has so much intelligence, longevity of existence. These archetypes have served me as metaphors of practice, supporting my imagination being able to join with these patterns that are a part of us.

**KF:** In terms of the potentialities of movement experience.

**CM:** Yes, and the way we’ve participated in that.
Session Four

KF: And as we go into four, we’re beginning what has traditionally been called, in our trade, the ‘core hours’. Godard brought to our attention, and we’ve had fun running with it, this idea that the core hours can be reframed as phases of gait: the Fourth Hour is about the landing/stance phase, the Fifth Hour is the swing phase, and the Sixth Hour is the push-off phase. (We have, among others, videos of the self-care/diagnostic movements associated with these three phases of gait available at https://resourcesinmovement.com/videos/).

To begin this progression, in four we lean (literally) on a movement we call one-legged stance to embody the stance phase, and we go from emphasis on abductive lengthening of the lateral line in three to this adductive lengthening of the inner line and connecting that to supporting the spine. The one-legged stance is, to me, a potent representation of what palintonicity/eccentricity/stability looks like (see Figure 5).

The eccentralizing or decentralizing – being in the part, so to speak – has so much to do with how the extremities relate to the spine, and the segmental support, the segmental articulation from the support of the extremities, which we see in pretty much every table session when we have the foot board and things for the hands to press against or to hold. We’re teaching people peripheral stability, support for the axis in action, while on the table, so that when they stand up they’ve already been doing it.

CM: As the inherent architecture of the foot can better navigate the topography and begins to feel the impression of a surface (whether a footboard or the ground or the changing landscape) moving through phases of gait, the inner line awakens to enliven the bidirectional space, from the inner malleoli all the way up to the ramus. This is what we work with in this one-legged stance, to allow the client to have a sense of how that’s a dynamic expression, an elongation.

KF: Exactly. So, we introduce people to sensing a ramus, if not before, in the beginning of four – we have them use their fingers to trace each of their own rami, with a foot on the bench. They become familiar with each ramus, comparing it to what they see on the model, and then the feeling of the ramus and the feeling of the foot combine to do a one-legged stance at the beginning of the session. Then during the table work, we work on the one-legged stance lying down, and then we bring it back in the end of the session when standing.

CM: The rami need attention to embody, or become, a dynamic expression of directionality. So many times, clients think that they’re supposed to sit on their sit bones, and then they park there, they make it a spot that’s fixed.

KF: A spot that’s a rather posterior aspect of the ramus.

CM: Yes, and so we first of all identify where their sit bone is, and then to allow the branch to express itself towards the pubic bone.

KF: The ‘branch’ because that’s the meaning of the word ramus, yeah.

CM: Right, that’s the meaning of the word. So first of all feeling that shape of their particular rami, and what is its diagonal expression? What is its direction? Getting someone to actually be able to mirror the dimensionality in a gesture with their hands. Is it very wide? Is it very narrow? You can see bodies begin to change as they reimagine the shape of their rami. And then, to feel the ‘feet’ of the pelvis resting on the bench and maintain that dynamic spatial expression through the ramus; it’s a long journey, or what I call a ‘long walk’.

KF: From the tuberosity to the pubic bone.

CM: Yes, and to begin to sustain that perception in the skin of the feet, its movement, and then to take that into the one-legged stance. There’s a lot of territory that someone can begin to really understand in making the one-legged stance, and mapping that, and refreshing that as part of a program that empowers them to then take it out into their other movement practices.

KF: And they get to clarify this every time they go from sit to stand, stand to sit, and ultimately every time they take a walk.

CM: Right, having the experience through time, of the session and the Series, clients just begin to see and notice little things about being self-aware, and the play and the practice of this that can change how they feel in their body, towards the changes that they’re making.

We’re teaching people peripheral stability, support for the axis in action, while on the table, so that when they stand up they’ve already been doing it.

Session Five

KF: Session five we’re calling, among other things, the swing phase of gait, meaning the leg that’s been behind swings forward to catch the falling-forward motion of a body in motion. Historically there’s been a lot of emphasis on ‘healthy functioning of the psoas’. We propose a reframe – don’t blame the psoas. How is the body finding peripheral support, axial support, such that the psoas does what it’s supposed to do as a phasic muscle (which it is), as a set of motor units that give a quick flick of the

Figure 5: In session four, use a one-legged stance as both diagnostic and self-care.
leg forward, rather than as something that’s supposed to hold the body up. We teach Leg Raise Supine (https://resourcesinmovement.com/videos/) as a diagnostic, either with a bent knee and feet on table, or with a calf on a bench, or a straight leg (a few people can do that); two of these variations are shown in Figure 6. This is both a self-care approach and a diagnostic for session five; how is the body learning/relearning appropriate differentiation of the layers of the abdomen, again to quiet down the noise that interrupts stability?

CM: Yes, this is an optimum place, again, to feel the quieting that can happen in that passage of leg along rami to the deep front of the sacrum and the lumbar vertebra. I also feel that it’s a time to step up the sense of gut body, and give opportunity for people, standing or on all fours, to begin to experience the sense of the volume/weight of the gut hanging off the spine from the top of the palate to the tail. The bidirectional orientation of the spine allows the gut body to have its wiggle room, rather than the familiar tightening up we see in the belly or front body which diminishes the freedom of easeful motion. This brings us into the bigger realm of body story and body image. This primal place, our gut body, is woven into autonomic function. This session’s an opportunity for people to consider, first of all, that they have a gut body, and then to begin to feel what it’s like to have weight orientation in their gut body, and have it be supported by the spine, which leads to the “What does it mean to me?” part of the process. Are you holding your belly in? Is there unnecessary tension in the gut and the fascia that supports the gut? This work offers people a form of body security that involves gravity orientation, which supports and provide resource for working with psychobiological issues.

KF: It takes time to educate people on the phasic nature of the superficial abdominal muscles – how common usage patterns make impediments to spinal health and a lot of shortening in the front.

CM: Right, there is a ‘micromanaging’ that people learn, culturally, and from challenging experiences. To now begin to meet that situation in the belly wall (or what I call the ‘bellital’ surface) gently, just feeling the orientation of head to tail, or feet to head, bidirectionally, and considering being able to tune into or map their gut body is a process. It’s worth offering little moments of finding differentiation and considering what it feels like with peripheral support – that they don’t have to hold that way.

Session Six

KF: Let’s move on to session six, which we’re calling, among other things, the push-off phase of gait. In the push-off phase there’s elongation first in the front line followed by the back line of the body; one illustration is the exercise we entitle Shot Put with Heel Reach (https://resourcesinmovement.com/videos/), where we do a contralateral movement with a handle attached to a resistance band (see Figure 8). It’s reminiscent of things people handle attached to a resistance band (see Figure 8). To have the client first clarify the map of the hand and the foot and the sensory impression to wall and floor surface. Then to notice that support and feel its effects to reduce effort in the contralateral stance with the hand against the wall. Can they feel their body taking in the information of this gesture but with less effort? It also clarifies where fascial touch will help things along.

KF: So, we’re clarifying the map, and it’s a good moment to remind the reader that we’re not throwing fascia out the window! We do teach Ten-Series courses that leave out the fascial part – it works, and for some people it’s just the right thing – but we’re not out to discourage fascia work. Fascial mobilization is powerful and we both use it in our practices. We’re just saying, let’s think of fascia work as but one of the avenues for informing the motor and autonomic systems. Other benefits to working on the fascia will get discovered, but the one that’s easiest to prove currently is that it’s an efficient organ of communication – helping the
body almost instantly update the maps from which it makes motor choices.

So that’s a look at six. There’s a before-and-after diagnostic. We’re using the table (Figure 9), footboard, resistance band, bench, wall, poles... Some props, and a lot of opportunities.

**Session Seven**

**KF:** Let’s go on to seven. Let’s start by indicating that seven offers a chance to make more specific consideration of what’s going on with the eyes, what’s going on with all the sense organs connected to the world – ears, nose, mouth. How is the upper pole, the skull, belonging to the space around it? How is the space around it belonging to the upper pole? I hope everyone has seen the videos, of the chicken (http://bit.ly/2X8NQu9) and of the kingfisher (http://bit.ly/2Rbj9iJ), in which those birds’ heads are just unperturbed – gyroscopically located in space – while their bodies move about all over the place. Potent images for seven!

**KF:** And self-care opportunities: ideokinesis for the atlanto-occipital joint that liberates an over-managed neck, and very slowly rolling one’s head surface on a wall, awakening head volume and spatial projection of the ‘cranio-sphere’.

**CM:** The function of all the senses. The sense of being able to reach out into the world and then also to be able to receive.

**KF:** And for us humans – where are the places in the perceptual field – the perceptual structure – that prevent full expression of the axis in action? How are missing places in upper-pole orientation acting as impediments to ease with upper girdle activity? Absent a fully anchored upper pole, it’s just not possible to express clarity in the hands/arms/shoulders-to-spine relationship. The head captures it.

**CM:** Not to forget the jaw as a limb, and the expression and the possibilities that come from easing that journey for finding openness of expression.

**KF:** Yes, to ground mandible as limb, and use feet (supine or sidelying) to evoke elongation of the axial body and independence of the mandible as limb. Also, supporting subtle gaze shift from the feet.

**CM:** The function of all the senses. The sense of being able to reach out into the world and then also to be able to receive.

**KF:** And self-care opportunities: ideokinesis for the atlanto-occipital joint that liberates an over-managed neck, and very slowly rolling one’s head surface on a wall, awakening head volume and spatial projection of the ‘cranio-sphere’.

**CM:** Being able to imagine a vector, like at the top of the head, and extending. For some people, going out far into space is a big challenge. Finding out where the comfort zone is, to actually just feel a quarter of an inch or an inch or two inches, and how that can build the sense of self into the spatial dimension as support, as belonging to.

**KF:** For some people, it’s a stretch that reaching out into space could mean support. So we start with what’s possible.

**CM:** And then find out where that strength is in someone – to initiate head movements or to begin to gesture with the top of their head, and how that changes differentiated perception through the cervical vertebrae, or through the whole spine all the way down into the bottom of the feet, combined with having that sense of a vector through the top of the head and out.

**KF:** It’s very helpful to be able to demonstrate these things to clients, to give them visuals for what a pattern looks like that isn’t so free, and then to show a freer possibility so they can empathize with what’s demonstrated.

**CM:** Right. There’s resonance – their motor neurons pick it up and give them an opportunity to have that articulation.

**Integration: Sessions Eight, Nine, and Ten**

**KF:** So that’s a nod to seven. Then in eight, we have a fondness for what has come to be known as the Wall Test (Figure 10; also illustrated and discussed in Frank and McCall 2016), which is such a step forward on the pathway to including motor-pattern diagnostics as essential to an SI series. Here we’ve got the client sitting on a bench, pressing the wall with their hands and toes while the practitioner has a hand on the clients’ back at the LDH. We get to see/feel if the spine can lengthen under the demand of pressing the wall, first with the hands, then with the feet, or vice versa. We’ve come to appreciate how this allows a practitioner to learn/feel what else one might want to focus on in eight, nine, and ten.

**CM:** It’s also a recapitulation for the client in all that we’ve been inviting them to practice and learn about in terms of disappearing the girdles, feeling peripheral

![Figure 7: Shot-put exercise for session six, two variations.](https://resourcesinmovement.com/videos/).
support, feeling a fascial body or an axis that can elongate; we get information about where to work next, they get information about where they need more support. From the very beginning, I’m also teaching people the Flight of the Eagle (see http://resourcesinmovement.com/videos/) for example, which is basically the Wall Test or the One-Legged Stance or the Shot Put with Heel Reach put into a motion sequence, to learn to embody these possibilities and begin to sense what ‘flow’ feels like.

Early, starting with session one, there has been some mention of the peripheral support in the hands and feet, and so the possibility of bidirectionality in the axis. Just having the client walk, and then walk to the wall and begin to differentiate sensory impressions in the hands, and then have them begin to wiggle their spine, if you will, or move, or find their tail and find the sense of space out through the top of the head . . . that starts in session one and grows all the way through.

KF: You are not just adding techniques. It’s awakening inherent capacities. Learning certainly happens best when creativity is encouraged.

What we’re determining in the Wall Test, as explained in the article on integration that Ray and I produced (Frank and McCall 2016), is: Do you feel more elongation in the spine (and body in general) when the client presses with the hands or with the feet, and where do you feel less elongation and more ‘mastering’ – that feeling of the body trying to make sure it does a good job, which translates into efforted motor activity. As you use this diagnostic of the Wall Test, you probably want to work first, in eight, with the girdle/limb/spine relationship that feels less resourced. You test again at the end of the session, and then maybe do it again for nine, and again for a post-ten session.

CM: At this point, because of the work we’ve already done with pre-movement and self-care, we get to ask: Is the spine free to function from the support of the ground and the space? Where are the places that need more clarification in terms of how pre-movement is functioning? and Where might there be some additional support possible through a particular segment in the body, using fascia mobilization or going back over some of the places where self-care has shown to be helpful for the client?

KF: We might also develop or deepen a skill such as bidirectionality of the forearm (the perception that the radius and the ulna have vectors in opposite directions), or eccentricity in the spine, or support of the rami and so on.

CM: With hands and feet there is a seemingly endless need for refreshment – we live in shoes and are attached to our devices, so there is an endless dumbing down of the system. Spatial orientation and sensory receptivity to the world diminishes and with it the capacity to respond normally.

KF: With eight and nine, and ten for that matter, we’re probably going to at least do some portion of the session upright, either seated or standing, and engaging one or both of the girdles in expressive movement. And we continue with what we call AP Back Work, or anterior-posterior translation of the segments of the spine, which we touched on in session two. Here, one of the challenges is to see where one or more spinal segments don’t look as free to participate in the flow of elongation. There’s surprising benefit to teaching a client to simply move a single segment anterior, with a general lengthening of the front line, and then posterior with a general lengthening of the back line (see Figure 11). One learns to move one segment from the periphery, with hands and feet and vectors of head and tail. It’s a seated setup, on a bench with hands on handles (or on the wall or on the side of the table), hands and feet connected to the spinal-movement challenge.

CM: The AP Back Work is a collaboration between practitioner and client. We could say it’s all about sensory impression gained from peripheral stability, through the hands and feet, the orientation of the axis bidirectionally. Then, when the client
gets up and walks to integrate, what we often see is a sense of being able to move the spine in any direction as an opening movement; whether you’re in the back of the spine, the front of the spine, the side of the spine, finding that deep front line and allowing it to move easily, the core expressing a stable presence to adapt to all different types of movements from the connection to the peripheral.

**KF:** We have seen, over the years, no matter what version of AP Back Work – whether it’s on all fours, seated at a bench, or for that matter, Flight of the Eagle – is how clarification of AP movement of the spine coming through support of the extremities and orientation evokes improved torsion and counter-torsion of the spine and gait. More contralateral movement.

**CM:** We see little movements that a client spontaneously expresses – what their body is longing to do – in terms of integrating movement. While they’re taking their walk, they’ll start to stretch or do something. I’ve encouraged that right from the beginning so clients don’t inhibit this and instead notice and continue the exploration of how their body moves in ways that they didn’t know they could, that just in simple stretching their body is speaking to them. Some people have not been allowed to move freely, and have only learned physical education in a very disciplined way.

**KF:** Giving permission to explore what’s in the body, allowing that to come into expression. And this could also be about closure – whether it’s moments within a session or at the end of a session or as we reach the end of the Series. As we think about closure and the integration in eight, nine, and ten what else might we consider?

**CM:** Respecting that the client has been in a process, receiving a lot of information through the sessions. There needs to be empty space and time with the client in which we are holding the container for the unseen and the unknow, what might be occurring silently. Looking for how the body needs to take over the process and allowing space for what might want to emerge or just be felt.

**KF:** And what about the client taking the learnings that have occurred in the Series into their life?

**CM:** All their experiences are in their body – some conscious and some not. It’s often the silence or the pausing that allows for the body to integrate and prioritize and then go out and have it emerge in the right moments of their life.

Also on integration: I’ve noticed that there’s the integration that happens through the learning or receiving of new information, and that’s like an inhale; and then there’s the integration that happens when there’s a letting go of learning and practice, surrendering to trusting or feeling organismic intelligence, that’s like exhaling. Maybe there’s an understanding or a feeling of, “Oh yes, there’s something going on, and I don’t have to manage it anymore.” Then maybe in daily life when I return to something like going grocery...
shopping, or cooking, or driving, or taking a walk, there’s an emergence of, “Oh yeah, where are my hands and feet? Where’s the sky? How do I notice support?” And when I notice, I notice there’s a reduction of effort. I know integration is happening through this cycling, the body knows how to continue to change, adapt, integrate, and harvest what one wants to learn about.

KF: Digesting and witnessing?

CM: Digestion and witnessing and in some ways a conscious acknowledgement. That’s why I think closure needs to be a co-process, with the practitioner and client having that as a part of a session, naming that “We’re gonna pause here.” That’s important, having a period is important. There’s an ‘eventing’ that’s happening. I think Continuum Movement® names it ‘harvesting’ – another version of acknowledging, creating space for this eventing that’s going on in the body, and that which is around us.

Conclusion

KF: So, we’re at the end of a conversation about evoking normal stability and improved motor patterns via the Ten Series. We’ve spoken a lot about self-care, about a Ten-Series viewpoint, about motor patterns and stability. We’ve looked at different sessions, how to demonstrate before and after coordination, and how to frame each session as how bodies express integration. Any concluding remarks?

CM: An end is a good place to rest into.

KF: Is that always the mood at the end of a Series? What if you have a frisky client with a lot of enthusiasm and they’re all charged up and hungry for more? What do you do with that?

CM: I join them in that wonder, because it is wonderful, and appreciate that. It’s surrender to a bigger process – or processor of – the body, the movement brain, the organismic intelligence. So I am holding that place for that resting or that exhalation, and brightly and joyous, and pretty sure there is a next step somewhere.

KF: I think many people feel intimidated about the end if they’ve been pushing the Series along, like the Little Engine That Could, and now they’ve gotta leave the person. Instead you are building a faith that everybody has this inherent intelligence and creativity, and everyone will produce their particular Series by having airtime to express that.

CM: I’ve learned this through being a creative movement artist, I’ve learned it through honoring that process of creativity. It’s in all activities. Whether you’re a carpenter, a painter, a dancer, a designer, or programmer . . . you know there’s a dynamic activity, and part of it is the going out, and part of it is the pausing, the hibernation or incubation or harvesting.

KF: Great. Thanks for the conversation.

CM: Thank you.

Kevin Frank is a Certified Advanced Rolfer, Rolf Movement Practitioner, and Rolf Movement Instructor. He has worked with the Godard-derived Tonic Function Model since 1991 and has written on this topic from 1995 to the present. Kevin advocates for an ‘information-system’ view of SI to help bring this field into congruence with modern understanding of motor control and perceptive/coordinative processes.

Caryn McHose is a Certified Advanced Rolfer and Rolf Movement Practitioner, as well as a Somatic Experiencing® Practitioner and Certified Biodynamic Cranial Practitioner. She is the collaborator for Andrea Olsen on Bodystories: A Guide to Experiential Anatomy and The Place of Dance, and coauthor with Kevin Frank of How Life Moves: Explorations in Meaning and Body Awareness. Caryn has taught perceptual approaches to movement education for over forty-five years.

References


Frank, K. and C. McHose, video resources at https://resourcesinmovement.com/videos/.
The Superficial Layer as Sensory Envelope

New Perspectives from the Art of Yield About the ‘Superficial’ Sessions of the Rolfing® Series

By Hiroyoshi Tahata, Certified Advanced Rolfer®, Rolf Movement® instructor

ABSTRACT The author continues to develop his body of work with the Art of Yield (Tahata and Agneesens 2012) and the role of ma (Tahata 2018), bringing in cell science to understand at a deeper level the impact of tension in the superficial layer, the role of yielding and ma in the ‘superficial’ sessions of the Ten Series, and the elements that support the receptivity of the client’s body to our interventions.

Go around the problem; get the system sufficiently resilient so that it is able to change, and it will change. It doesn't have to be forced. It's that forcing that you have to avoid at all costs.

Ida P. Rolf (1990, 83)

The first three sessions of the Ten Series are viewed as the ‘sleeve’ or ‘superficial’ sessions. This module plays an important role in preparing the body for the subsequent ‘core’ sessions. It is a great opportunity to enhance the responsiveness of the body, as well as to establish rapport with the client, which makes it easy to set a ‘safe matrix’ for the overall series.

This article references earlier works on the ‘Art of Yield’ (Agneesens and Tahata 2012), which can be further refined with awareness of ma through time, space, and intersubjectivity as described before (Tahata 2018). (‘Ma’ is a Japanese word that relates to both time and space, specifically pauses and empty space. ‘Good ma’ would be similar in concept to ‘good feng shui’ – an appropriate recognition of space and pattern that is felt phenomenologically.) Working with ma is particularly beneficial for clients who are perceptive to when something is forced, whether an intention to set something right, intense pressure of touch, over-focused vision, or a one-way intervention to satisfy the practitioner’s agenda, not matched to what the client’s body needs. As is commonly said, ‘perception is everything’. The practitioner’s perception and ma combined can create a high level of ‘safe matrix’ (or ‘scaffolding’ for the body to yield to) and a safe ‘field’ as a greater resource for self-regulatory systems of the body.
Cell Science Gives a New Perspective on the Superficial Layer

First we will look at the superficial layer from the perspective of cell science, seeing various factors that account for its sensitivity to both stimuli and ‘presence’.

Keratinocytes: A Key Player for Perceiving the Environment

The skin is the first line of defense, and keratinocytes (the cells predominant in the epidermis) serve as a barrier between an organism and its environment. Denda (2015) suggest that the epidermis has the capability to act as an interface between the body and the environment, as keratinocytes in the epidermis have their own sensory systems to detect temperature, atmospheric pressure, color, light, and sound. Keratinocytes covering the body surface can thus catch environmental information first, prior to detection through the nerves. Keratinocytes transmit information to the nerves by means of intercellular messenger molecules like ATP. The means of communication may be slow (lacking instant access to the central nervous system), yet as keratinocytes occupy 95% of the epidermal layer and connect to each other through tight junctions, the sensory information detected from the environment could be shared through a cell-mediated transmission beneath our conscious level of awareness. In this way I believe that there must be vast amounts of information that keratinocytes detect and collect without involvement of the cortex.

Hair as a Sensor for Presence

Takiguchi et al. (2007) reveal that the human body is wrapped in a very weak electric field like static electricity called a ‘quasi-electrostatic field’. The size of the electric field and the electrical charge, positive or negative, are always fluctuating. This could be a partial scientific underpinning for what we call the ‘kinesphere’ in Rolf Movement Integration. Just as cats sometimes show great skill at sensing the approaching presence of their guardians even at a great distance, the kinesphere or quasi-electrostatic field could be mechanisms of human sensing. When we have an emotional response or a strong hunch or take in a piece of art with all of our soul, we sometimes experience goose bumps or a sense of our skin ‘crawling’ as instinctive responses. Takiguchi thinks that presence is sensed through the cochlear hair cells of the inner ear and by hair on the skin. We know that mechanoreceptors connected to hair on the skin can detect airflow as well as equilibrium, so there is a close relation to the sensing of gravity.

The Primordial Antenna

Every single cell has one hair-like antenna called a primary cilium. The primary cilium is a sensory organelle that responds to mechanical and chemical stimuli in the environment and communicates those external signals to the cell’s interior. In addition, there are examples of primary cilia detecting chemicals, light, osmolarity, temperature, and gravity (Satir, Pedersen, and Christensen 2010).

The genome of primary cilia is highly conserved from mammals to eukaryotic unicellular organism like an green algae, Chlamydomonas, which means the function of primary cilia is essential for life activity. In chondrocytes, integrins (αβ) and NG2 chondroitin sulfate proteoglycan interact with ECM at the ciliary membrane (Seeger-Nukpezah and Golemis 2012).

Mutation on the genome of primary cilia causes a variety of diseases known as ciliopathies, such as Situs inversus, skeletal abnormalities, polydactyly, dementia, etc, all relating to ‘structure’.

In my view, primary cilia as a nonsynaptic primordial communication device may be the evolutionary root of skin hair, as both primary cilia on the cellular level. Since our touch can transmit various frequencies of physical vibration to the body, intervention through touch may have some impact on the behavior of primary cilia.

My Conclusions from This

Some researchers think that all cells making up the body are subject to mechanostress and maintaining homeostasis by appropriate mechanosensing (Humphrey et al. 2014; Sawada et al. 2016). They postulate that many diseases are potentially caused by a breakdown in this balance.

My conclusion from the research cited above is that we have to be aware in a new way that all stimuli in the environment are perceived by the superficial layer of the body through sensory cells prior to neural or visual registration. Working with the superficial layer as a sensory envelope therefore holds great potential for integrating the body, more than just our traditional view of the sleeve sessions being preparatory work for the core sessions. Interventions affecting cells through these mechanisms might affect the non-synaptic primordial communication of the cell, although the communication would be slower than nerve synapses.
All stimuli in the environment are perceived by the superficial layer of the body through sensory cells prior to neural or visual registration. Working with the superficial layer as a sensory envelope therefore holds great potential for integrating the body, more than just our traditional view of the sleeve sessions being preparatory work for the core sessions.

Impact of Damage to the Superficial Layer

Dental research reveals that superficial gingival inflammation is the trigger for alveolar bone resorption in the late stage of periodontal disease. Thus, reducing chronic gingival inflammation is the remedy; that is, approaching the superficial layer rather than addressing the major presenting problem.

Keizo Sakamoto (2007) examined fibrotic responses to injection, comparing intramuscular (IM) and subcutaneous (SC) administration of a non-immunogenic Ringer’s solution to the quadriceps of domestic rabbits. (In contrast to Ringer’s solution, administration of antibiotics or adjuvant solution using vaccination could damage the tissue, as discussed below.)

As illustrated in Figure 1, damage in the muscle layer from the IM injection progressed through a healing process. On the other hand, damage in the subcutaneous layer from SC injection induced fasciculation leading to muscle contracture. Noting that the muscle contracture derived from a lesion at the superficial layer, we can extrapolate that in somatic practice it may not be efficient to try to mobilize fibrotic muscle without first working with the superficial primary restrictions.

In the case of SC injection, the primary restriction stayed in the skin layer, not in the muscle layer. It is known that injection solutions containing an adjuvant (a substance that enhances the body’s immune response to an antigen) or antibiotics (like chloramphenicol), whether IM or SC administration or repeated injection, can promote a fibrotic response or necrosis around the injection site.

Benias et al. (2018), discovered a new ‘organ’, the interstitium. They found that the interstitium consists of fluid-filled spaces supported by a network of collagen bundles, lined on one side with undifferentiated multi-potent cells. As it exists in connective tissue throughout the body, the interstitium could be broadly recognized as ‘fascia’ in manual medicine. The SC layer contains abundant fluid-filled interstitial spaces.

Benias et al. suggest that the interstitium plays an important role in the transportation of water, nutrients, and communication molecules between cells. When a part of the interstitium is damaged subdermally, the transportation would be disturbed, followed by waste buildup, which might induce inflammation. The sensory system in the skin cannot act properly without support of functional interstitium. I propose that the fibrosis caused by SC injection illustrated in Figure 1 may be caused by dysfunction in the interstitial transportation of the subcutaneous layer.

Figure 1: The effect of injecting Ringer’s solution (an artificial interstitial fluid without components that would induce fibrotic response) on the layers. The upper diagram shows that IM injection caused diffuse fibroplasia and contracture of the muscle, but after thirty weeks, damaged tissues were almost recovered. In contrast, the lower diagram shows that the same solution administered through SC injection caused a fibrotic response in the SC space then also started fasciculation of muscle fiber about ten weeks after injection, followed by local fibrosis in the superficial muscle layer and, in some cases, diffuse fibrosis of overall muscle layers, with lesions still present even after thirty weeks. Diagram by H. Tahata referencing data in the Showa University Journal of Medical Sciences 67(1): 43-50 (2007).
such as ultraviolet or mechanical stimuli. The protective cell response is inflammation, and the keratinocytes secrete inflammatory mediators as alarm signals to inform immunocompetent cells of the emergency. The keratinocytes secrete NGF (nerve growth factor), which augments sensitivity to pain. In the case of sustained pain or chronic inflammation, this leads to a vicious circle of pain and hypersensitivity to pain, akin to a trauma vortex. Until the ‘false alarm’ is deactivated by resetting the keratinocytes, the inflammation will continue even through it has no object to attack.

However, keratinocytes also can secrete brain neurotransmitters like dopamine with pleasurable sensations and β-endorphins with analgesic properties. This is not strange when you consider that both the brain and skin originate from the ectodermal layer embryologically. For this reason, I propose that it could be beneficial to ‘input’ to the epidermal layer the opposite of nociceptive stimuli, to break free from this vicious cycle. The way I see it, traumatized tissues could then ‘remember’ a time and space without alarm, or ‘remember’ their relationship with other cells of communicating through pleasurable signal molecules, such as dopamine - related to comfortable feelings, the opposite extreme of a defensive reaction. Chronic inflammation is a current topic in medicine as it seems to lie at the foundation of a variety of disorders. I think that soothing the epidermal layer may be a means to reduce unnecessary inflammation.

Yielding Allows the Body to Rest Deeply

The Art of Yield is based on the body surrendering to support. ‘Yielding’ of the body into the table is facilitated by touch, as shown in Figure 2. This movement starts at the surface engaged by touch. When the body rests in contact, the cells in contact with the supporting surface – e.g., the massage table – start interacting with that ‘non-self’, and then sensing tension in adjacent cells, as suggested in Figure 2 and the process of ‘fitting’ and ‘spreading’. As cells allow a yielding to gravity, there is likely an increase in fluidity with a soothing effect on internal tension. Polyrhythmic vibration in accord with calming breath may help a resting into contact. I speculate that the superficial keratinocytes in contact with the table may be influenced directly, with...
rarearrangement of the cytoskeleton as there is increased affinity to the environment through the contact area.

One possible interpretation of why sessions that use the yielding approach and/or ma have a sustainable effect on the body is that they may enhance the body’s restorative capacity in sleep. If the body has truly experienced ‘yielding’, that response may return again and again during nightly sleep, allowing the body to settle and decompress with regularity, giving a daily release and reset to stored internal tension. This is supported by anecdotal reports from some of my clients, who report being able to sleep well without carrying over the day’s tension. This suggests that the Art of Yield can calm the nervous system.

In contrast, when I used to give a standard First Hour with myofascial-release methodology, some clients told me that they experienced more arousal even during sleep. Since adopting the yielding approach, I have not heard such feedback of arousal during sleep, even as I continue to do work with the goals of the First Hour, just without myofascial techniques.

After experiencing a state of yielding on the massage table, the body can feel a sense of the space (kinesphere) in the direction it had settled down into. Therefore, having the client change position during the table work is meaningful so that different surfaces can yield into the contact, covering the whole envelope.

Expanding Our Understanding of Yielding

Putting these newest pieces together with the conditioning of Yielding described previously (Agneessens and Tahata 2012), and with the role of ma described previously (Tahata 2018), it is my proposition that yielding and ma enhance the responsiveness of the body, soothe the epidermal layer, and support the client to be more receptive for intervention. As noted in my article on ma (Tahata 2018), it behooves the practitioner to be highly attuned to his/her own sensations. For example, if you sense a reluctance to approach the client, you could be resonating with the client’s state. Stay comfortable, as relaxed as possible, and wait until the client’s system feels open for change without any resistance. I believe this is the foundation and safe matrix for the session.

Here’s a practicum for experiential understanding, drawing on the elements we have discussed.

Working with the Superficial Sensory Envelope

1. ‘Condition’ the client for work each session using ma and yielding (refer to the previous articles, Tahata and Agneessens 2012 and Tahata 2018). You are interacting with the quasi-electrostatic field, that part of the body that is sensitive to presence through the primary cilia.

2. Touch the body to support yielding into the massage table. Imagine that you can find the interstitial space in the subcutaneous layer, a fluid space that is continuous all over the surface of the body.

3. When you touch the subcutaneous interstitial space, find the fluidity and follow the flow gently.

4. Whenever we touch, the superficial layer always responds. Touch the place you are addressing, considering the sensory epithelium, the keratinocytes, and also Merkel cells (embedded in between the keratinocyte layer and dermis, these have been found to respond to light touch).

5. Intervene with awareness of titration so that your touch is not perceived as nociceptive stimuli. (If the keratinocytes perceive an intervention as a violation, they will be sensitized and secrete inflammatory cytokines, which move the experience away from safety.

Appendix: Health and Order in Life

For survival and normal growth, cells need to adhere to the extracellular matrix or other cells. If there is instead ‘anchorage-independence’, a breaking away from the relationship to other cells or the extracellular matrix (ECM), that is canceration. So, it should be meaningful for the body if cells in the collective ‘rebuild’ appropriate relationships to their surroundings. Interaction with others under safe circumstances – whether on the micro level of cells or the macro level of the body – might be the key to regain health.

To look at this further, let’s consider the naked mole-rat (NMR; Heterocephalus glaber), an animal that survives based on bio-mimicry. Its unusual features include: 1) tolerance of low-oxygen conditions; 2) pain tolerance; 3) longevity; 4) no aging; 5) cancer resistance; and 6) sensitivity of contact inhibition. Let’s use “contact inhibition” as a reference.

Normal cells have contact inhibition that helps regulate proper tissue growth: they know when to stop proliferation (to keep order) by contact with adjacent cells. It is well-known that the cancer cells have lost their natural contact inhibition, so they continue dividing in the monolayer culture when neighboring cells touch each other. Seluanov et al. (2009) show that NMR fibroblasts become contact inhibited at a very low cell density; thus, the fibroblasts of these long-lived rodents need more space around them than those of other short-lived rodents. Further, NMR fibroblasts can perceive other fibroblasts at a distance and stop growth before being confluent or overcrowding. To put it into the terminology used in the Art of Yield, the NMR fibroblasts have good notion of ‘ma’.

Normal cells have ‘anchorage dependence’ – the need for ‘scaffolding’ surfaces for survival and growth. They also have contact inhibition, which effectively means getting along with other cells for there to be order. This might suggest that sensitivity to ‘contact’ is related to order in life. I presume that the primary cilium may play an important role in sensing adjacent cells. In contrast with normal cells, most cancer cells have lost their relationship with the ECM and other cells, and it is interesting to note that cancer cells in most cases have lost primary cilia. You can see a matrix of these relationships in Figure 3.

<table>
<thead>
<tr>
<th>NMR</th>
<th>normal cell</th>
<th>cancer cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>++</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
</tbody>
</table>

Figure 3: A comparison of normal cells, cancer cells, and the reference of the naked mole-rat (NMR).

1) anchorage dependency indicates the relationship with the ECM; 2) contact inhibition indicates the relationship with adjacent cells; 3) primary cilium suggest responsiveness to the environment.
Cancer cell are in disorder; they have generally lost their relationship with the ECM, other cells, and the environment. Following from this, it might be meaningful for order in life to reconstruct the relationship with the ECM, other cells, and the environment.

‘Conditioning’ as done in the Art of Yield (Agneessens and Tahata 2012; Tahata 2018) is a repeated ‘educational’ process for the cells to remember their environment in the condition of a safe matrix. These processes are subtle and slow, ‘pre-nerve’ – a negation of the quick pathways of the myelinated nervous system. To speak to this metaphorically, I’ll quote Mahatma Gandhi: “Good travels at a snail’s pace. Those who want to do good are not selfish, they are not in a hurry, they know that to impregnate people with good requires a long time.” This is good guidance for those of us working in manual therapy and wishing to address these deep underpinnings of cellular life.

Mahatma Gandhi: “Good travels at a snail’s pace. Those who want to do good are not selfish, they are not in a hurry, they know that to impregnate people with good requires a long time.” This is good guidance for those of us working in manual therapy and wishing to address these deep underpinnings of cellular life.

References


The ‘Recipe’ in History and Considerations for the Future

By Jeffery Burch, Certified Advanced Roler

ABSTRACT The author shares his understanding of the history of the ‘Recipe’ (Ten Series) as a teaching tool; his own professional development using the Recipe and then moving in new directions with the incorporation of osteopathic assessment; and his own view of the best future course for teaching and practice.

Introduction

In the Rolfing® Structural Integration (SI) community the place of the ‘Recipe” in Dr. Rolf’s vision of her work is a long-standing and frequently heated controversy. Some practitioners learned in their Basic Training that Rolf intended the Ten Series as a central guiding principle in her work, something for each practitioner to use and hone throughout their career. Others were taught in their Basic Training that Rolf intended the Recipe only as a guide for beginning practitioners in the early years of their practice, giving them enough experience to be able to really see what would serve each client best. Different teachers taught differently. Some teachers taught differently at different phases of their careers. Rolf has been described as teaching differently to different students even in the same class. The fidelity of each practitioner to what they were taught in the diversity of their Basic Training ensures that the controversy will continue.

I respect both paths. On the one hand the Recipe is an elegant and effective guide to organizing sessions, a path which a practitioner can continue to grow throughout a long career. On the other hand, it is possible to move beyond the Recipe to serve clients very well, addressing their uniqueness in the moment. While this article focuses more on the later path, I invite the reader to respect the beauty and strength of both paths.

In this article I recount my developmental history with the SI series starting with my Basic Training in 1977, through the intervening decades of work and study, and concluding with what I consider to be the best future for the Recipe. Intertwoven with my history are aspects of the origins and early development Rolfing SI in general and the Recipe in particular, as I learned them along the way. As salient elements of this history I recount my interactions with Peter Melchior, Emmett Hutchins, Richard Demmerle, DC, and Jean-Pierre Barral, DO, particularly as they relate to the Recipe.

I do not always write positively of Rolf and of the Recipe, rather I present in a balanced way the truth as I know it. As stories representing life will, this one depicts areas lit with sunshine, darker valleys, and areas half in shadow. It concludes with a direction for the future.
In my Practitioning class in 1977, our teacher Peter Melchior clearly and repeatedly stated Rolf’s intent for the Recipe. This was no passing remark: it was repeated, with emphasis, and illustrated with teaching stories. Melchior also described elements of the origin and early development of the Recipe. Melchior told us that in the beginning, in the 1940s, Rolf’s work was non-formulaic – that is, it did not follow a recipe, rather she did what she perceived would best improve the structure of each person. She worked in isolation for four to five years and then began to teach her work. Melchior repeated told us that Rolf developed the Recipe as a teaching tool. Her idea was that it takes time and experience to develop the vision to see what would be most useful for each person at each moment. The Recipe was intended to allow people to do good enough work until they developed that vision, to be able to stay in the game so they could develop the necessary vision. She anticipated that this development of ability to see and to reason out what needed to be done would take a practitioner about five years – roughly the length of time she worked before beginning to teach.

Melchior taught us that during every session we must constantly ask the question, “In this moment where can I work on this client that will make the most positive change for the whole person?” This question was to be our constant companion as we worked. Discussing the Recipe, Melchior told us to become chefs who can improvise in the moment rather than cooks who use recipes.

Melchior stated that the Recipe is not the best way to work. He described it instead as a good beginner’s tool. Student chefs use recipes in the beginning. As another metaphor he told the story of a remote Pacific island where there were fine wood carvers, traditionally working with stone tools. When the carvers got their first metal tools, use of the new tools led to a great flowering of the carvers’ art. But that flowering withered as the next generation of carvers came up, because that new generation started with metal tools rather than fragile stone tools and did not develop the finesse required with stone tools. Starting with metal tools, the quality of their work remained mediocre.

In my Practitioning class in 1977, our teacher Peter Melchior clearly and repeatedly stated Rolf’s intent for the Recipe. This was no passing remark: it was repeated, with emphasis, and illustrated with teaching stories. Melchior also described elements of the origin and early development of the Recipe. Melchior told us that in the beginning, in the 1940s, Rolf’s work was non-formulaic – that is, it did not follow a recipe, rather she did what she perceived would best improve the structure of each person. She worked in isolation for four to five years and then began to teach her work. Melchior repeatedly told us that Rolf developed the Recipe as a teaching tool. Her idea was that it takes time and experience to develop the vision to see what would be most useful for each person at each moment. The Recipe was intended to allow people to do good enough work until they developed that vision, to be able to stay in the game so they could develop the necessary vision. She anticipated that this development of ability to see and to reason out what needed to be done would take a practitioner about five years – roughly the length of time she worked before beginning to teach.

Melchior taught us that during every session we must constantly ask the question, “In this moment where can I work on this client that will make the most positive change for the whole person?” This question was to be our constant companion as we worked. Discussing the Recipe, Melchior told us to become chefs who can improvise in the moment rather than cooks who use recipes.

Melchior stated that the Recipe is not the best way to work. He described it instead as a good beginner’s tool. Student chefs use recipes in the beginning. As another metaphor he told the story of a remote Pacific island where there were fine wood carvers, traditionally working with stone tools. When the carvers got their first metal tools, use of the new tools led to a great flowering of the carvers’ art. But that flowering withered as the next generation of carvers came up, because that new generation started with metal tools rather than fragile stone tools and did not develop the finesse required with stone tools. Starting with metal tools, the quality of their work remained mediocre.

In my Practitioning class in 1977, our teacher Peter Melchior clearly and repeatedly stated Rolf’s intent for the Recipe. This was no passing remark: it was repeated, with emphasis, and illustrated with teaching stories. Melchior also described elements of the origin and early development of the Recipe. Melchior told us that in the beginning, in the 1940s, Rolf’s work was non-formulaic – that is, it did not follow a recipe, rather she did what she perceived would best improve the structure of each person. She worked in isolation for four to five years and then began to teach her work. Melchior repeatedly told us that Rolf developed the Recipe as a teaching tool. Her idea was that it takes time and experience to develop the vision to see what would be most useful for each person at each moment. The Recipe was intended to allow people to do good enough work until they developed that vision, to be able to stay in the game so they could develop the necessary vision. She anticipated that this development of ability to see and to reason out what needed to be done would take a practitioner about five years – roughly the length of time she worked before beginning to teach.

Melchior taught us that during every session we must constantly ask the question, “In this moment where can I work on this client that will make the most positive change for the whole person?” This question was to be our constant companion as we worked. Discussing the Recipe, Melchior told us to become chefs who can improvise in the moment rather than cooks who use recipes.

Melchior stated that the Recipe is not the best way to work. He described it instead as a good beginner’s tool. Student chefs use recipes in the beginning. As another metaphor he told the story of a remote Pacific island where there were fine wood carvers, traditionally working with stone tools. When the carvers got their first metal tools, use of the new tools led to a great flowering of the carvers’ art. But that flowering withered as the next generation of carvers came up, because that new generation started with metal tools rather than fragile stone tools and did not develop the finesse required with stone tools. Starting with metal tools, the quality of their work remained mediocre.
On the one hand the Recipe is an elegant and effective guide to organizing sessions, a path with which a practitioner can continue to grow throughout a long career. On the other hand, it is possible to move beyond the Recipe to serve clients very well, addressing their uniqueness in the moment.

In response to my question, Demmerle confirmed that Rolf had intended the Recipe as a teaching tool, and that she did not in fact regularly use the Recipe in her practice unless working with students.

Demmerle described Rolf studying with several osteopaths during the early 1940s, including Kenneth Little and Amy Cochrane. Demmerle told a story of the road trip with his mother and younger brother in 1944 to attend a course of study with Cochrane in Los Angeles; he, as a preteen, several times grabbed the steering wheel to prevent a crash when Rolf had fallen asleep at the wheel on the long days of driving from New York to Los Angeles. He stated that it was immediately after her return to New York that Rolf began to practice her work.

(Related to Cochrane, decades later Cochrane’s lineage holder, Ida Thomas, published books on Cochrane’s work, which is called Physio-synthesis. Reading Thomas’ book, I saw the strong resemblance to Rolfing SI and suspected Thomas had plagiarized Rolf’s previously published book. I talked with Thomas on the phone several times. She asserted the shoe was on the other foot, that Rolf had fallen asleep at the wheel and still drove, and that Cochrane plagiarized Rolf’s work. I did not see a similar resemblance.)

On the one hand the Recipe is an elegant and effective guide to organizing sessions, a path with which a practitioner can continue to grow throughout a long career. On the other hand, it is possible to move beyond the Recipe to serve clients very well, addressing their uniqueness in the moment.

In response to my question, Demmerle confirmed that Rolf had intended the Recipe as a teaching tool, and that she did not in fact regularly use the Recipe in her practice unless working with students.

Demmerle described Rolf studying with several osteopaths during the early 1940s, including Kenneth Little and Amy Cochrane. Demmerle told a story of the road trip with his mother and younger brother in 1944 to attend a course of study with Cochrane in Los Angeles; he, as a preteen, several times grabbed the steering wheel to prevent a crash when Rolf had fallen asleep at the wheel on the long days of driving from New York to Los Angeles. He stated that it was immediately after her return to New York that Rolf began to practice her work.

(Related to Cochrane, decades later Cochrane’s lineage holder, Ida Thomas, published books on Cochrane’s work, which is called Physio-synthesis. Reading Thomas’ book, I saw the strong resemblance to Rolfing SI and suspected Thomas had plagiarized Rolf’s previously published book. I talked with Thomas on the phone several times. She asserted the shoe was on the other foot, that Rolf had fallen asleep at the wheel and still drove, and that Cochrane plagiarized Rolf’s work. I did not see a similar resemblance.)
Melchior taught us that during every session we must constantly ask the question “In this moment where can I work on this client that will make the most positive change for the whole person?”

busy practice, taking over where another Rolfing practitioner had departed. For the next many years, I used the Recipe consistently in my practice, making only modest adaptations to best serve clients with particular situations. Examples of adaptations were 1) recognizing that a client had serious base-of-support problems, so during two Second Hours before moving on to the Third Hour; or 2) seeing that there was little to do in the Fourth Hour so merging sessions four and five.

The version of the Recipe I learned from Melchior was largely defined by goals, much less by anatomic territory, and unlike Gentry’s notes, certainly not by specific moves. In fact, Melchior ridiculed versions of the Recipe that specified specific moves.

During these early years of using the Recipe I continued to cultivate my ability to see what would best serve each client in each moment. Melchior had taught us that after five years of such discipline, we should be skilled enough to be able to serve each client best without the Recipe, having become chefs instead of cooks. My ability to see did continue to improve, yet after five years I was nowhere near being able to move beyond the Recipe. I felt like a dunce. I had failed Melchior’s mandate. Talking with colleagues who had been working as long or longer than I, I learned that not one of them had been able to see beyond the Recipe. Heartened, I continued my busy practice working with a wide diversity of clients and trying daily to improve my ability to see what I could best do for each person. Five years turned into ten, then fifteen, and twenty. I continued to seek the grail of vision beyond the Recipe that Melchior had mandated.

In 1998 I began to take classes in visceral manipulation with Jean-Pierre Barral and his team of teachers. These classes offered assessment methods that were new to me. In the classes Barral said, “In each moment we want to find what we can work on that will make the most positive change for the whole person.” I was struck by the similarity of this statement to what Melchior had told us we must seek in each moment. Barral offered assessment methods that quickly and reliably found the best place to work. He had a name for that best place of the moment – the ‘primary restriction’. This location in the body was ephemeral, since out bodies are ever and rapidly changing, yet for each moment it is easy to find.

Barral and Melchior’s statements of where we should work were nearly identical, but sometimes two people using the same words don’t quite mean the same thing. I wondered – if I were to use Barral’s assessment methods to find a succession of primary restrictions to work on, to what extent would this process produce the goals of Rolfing SI? As an experiment I tried this out in my practice. During a session I would find a succession of primary restrictions using Barral’s assessment methods, and one at a time release them. The hallmarks of SI nicely appeared; not in the same sequence as when using the Recipe, but keeping the end goals in mind, they did appear, and in good time. Achieving the end goals by this method required a lot less physical effort than following the Recipe, which I attribute to the following. In working on Barral’s primary restrictions, the effect of the intervention is more likely to spread out beneficially to many areas of the body, compared to working on areas found by visual inspection of body alignment. In effect, working on primary restrictions gives better leverage on the whole system. Over about a three-year period I gradually developed more skill with Barral’s assessment and treatment methods. The hallmarks of SI appeared in my clients well – most of the time. Occasionally some change occurred but did not go as far as I might like, and in response I made an adaptation to the assessment method that allowed me to fully achieve any residual SI goals with ease.

What Makes It Rolfing SI?

Barral also taught treatment methods to change tissue which I found to be efficient and effective. I gradually incorporated these methods and set aside the high-force use of knuckles and elbows that I had learned in my Basic Training. In the decades before I met Barral I had always tried to use the least force that would get the job done, and I had made good progress in this efficiency. I was always dedicated to getting the job done, but wanted to do it in the way that was most comfortable for the client, and least effortful for me. Incorporation of Barral’s treatment methods improved my efficiency a quantum level. As I worked in this way clients would comment on my having moved on from Rolfing SI, to which I would reply – quoting Melchior – “Rolfing is defined only by its goals, not by any particular method.” I would relate a story told by Melchior (and later confirmed with Hutchins) that once when Rolf was at Hutchins’ home in Boulder for dinner, Hutchins asked her, “If we saw a particular situation at a client’s hip and if we knew that this situation could be solved by releasing the periosteum at the hip, then if we could get the periosteum to release by saying a few magic words or by whistling Yankee Doodle, would that be Rolfing?” Rolf replied, “What do you think?” Hutchins said, “I think it would.” Rolf then said, “I think so too.” As I see it, Rolf’s agreement with Hutchin’s proposition leaves wide open the field of what methods can be used to create the change we associate with Rolfing SI, and still call it ‘Rolfing’.

Today the diversity of methods used by Rolfing practitioners is wide. Over the years I developed several more assessment methods that integrated nicely with Barral’s methods. The additional data from these allowed verification and extension of what Barral’s methods showed so that I could achieve results even more easily. During these transitional years I would use the new methods until I encountered a situation where I could not get it done that way, at which point I would revert to what I knew from my Rolfing training. Over time I phased out both the Recipe and the forceful use of knuckles and elbows, replacing them with the new assessment methods and new treatment methods.
After I had been doing the work entirely with the new methods for about a year and a half, I tried another experiment. Now that I had at long last moved beyond the Recipe, as Melchior had directed, what would it be like to use the Recipe again? With the next two new clients who came in, I worked following the Recipe, but this experiment lasted a very short time. The clients did not like it as well, experiencing more discomfort during the sessions and poorer results. I myself was dissatisfied with the results and did not enjoy having to work harder.

After a few more years of practice I began to teach what I had learned and developed. Initially I taught ten assessment methods and ten treatment methods. In the years since then this has incrementally increased to nineteen assessment methods and twenty treatment methods as I continued to learn and to innovate. It takes a little time to learn the component skills, but from these basics, skills can continue to grow with practice for a long time. I have taught this set of skills to many structural integrators, as well as to other practitioners.

**Conclusion: My Assessment of the Recipe**

After the experiences described here, and more, over the past forty-two years, my considered opinions about the Recipe are:

1. The Recipe has high success in allowing beginning practitioners to do good work after the relatively brief initial training offered for structural integrators. [Here I refer to the current Dr. Ida Rolf Institute® (DIRI) training comprising 731 hours of classroom instruction, contrasted with 1,260 hours for a dental hygienist or 3,390 hours for a physical therapist.]

2. The Recipe has substantially less success in its intended purpose of leading practitioners to see what each person really needs. Most practitioners using the Recipe alone do not learn to see the path beyond the Recipe. I believe one reason for poor performance in this second dimension is success in #1. The Recipe lets people do decent work, so they feel less need to move beyond it. Lack of practitioner motivation to move beyond the Recipe is also provided by some teachers having ceased to tell students that the Recipe is only a teaching tool. (It is my understanding that the Rolf Institute’s current Advanced Training teaches nonformulaic work to help practitioners make this leap. However, I cannot comment on it firsthand, as my own Advanced Training in 1990 was when a recipe model was still in use.)

3. It is easy to teach the skills to determine the best thing to do in each moment (i.e., to find the primary restriction). In my teaching, I observe that some students who do not have knowledge the Recipe seem to learn these new assessment skills more easily than some who do have training in the Recipe. Among these lines, I have also taught some of the component skills to children as young as nine. Sample size is small, but so far children have all learned more quickly than adults, I believe because their cups are less full.

4. The Recipe has much strength. A practitioner can continue to grow with the Recipe for a whole career. It is a good path. At the same time, in my opinion, it is not the best path. It is not the quickest, surest way to be able to see what is the best thing a practitioner can do for each client at each moment.

5. If I were running an SI school, I would replace teaching the Recipe with teaching the set of assessment methods taught by Barral, with some additions I have developed. With this assessment skill set, practitioners would develop greater skill sooner in their practices. The profession would soon enjoy more esteem due to practitioners doing even better work. The profession would be recognized for continuing to move forward.

6. DIRI recently began to refer to the Recipe as its signature feature. I see this as problematic in a number of ways. First, the Recipe is not distinctive to DIRI, as all other SI schools teach similar recipes. Second, improving people’s relationship to gravity is more central to what we as Rolfers do than is the Recipe. As described in the DIRI Standards of Practice, Rolfing SI is described by its goals, not by any particular method.

7. The best place for the Recipe in the future is in history books. It should be well documented and recorded for posterity. In their time steam power and flint knapping served humankind very well, but both are little used today. We have moved on to other technologies that serve us even better. So it is with the Recipe, an excellent process that is on the cusp of being superseded.

When I have spoken and written these opinions elsewhere, some colleagues have considered them to represent hubris and/or other folly on my part. I know them rather as the fruits of a lifelong search for truth, and I share them out of a desire to contribute to the profession.

Jeffrey Burch was born in Eugene, Oregon in 1949 and grew up there except for part of his teen years in Munich, Germany. He was educated at the University of Oregon, Portland State University, and the University of Pavia, Italy, earning bachelor's degrees in biology and psychology and a master's degree in counseling. Jeffrey received his Rolfing certification in 1977 and his advanced Rolfing certification in 1990. He trained extensively in cranial manipulation with French etiopath Alain Gehin, and in craniosacral therapy with the Upledger Institute. Jeffrey trained to the instructor level in visceral manipulation under Jean-Pierre Barral and his associates. He has made substantial innovations in visceral manipulation, particularly for the thorax. Jeffrey has also developed groundbreaking new joint-mobilization techniques. He practices in Eugene, Oregon and offers continuing education classes in Eugene and other locations. For more details see www.jeffreyburch.com/biography.
Keeping a Good Recipe

Deepening with the Ten-Series ‘Recipe’
Thirty-One Years Later

By Valerie Berg, Rolfing® Instructor, Rolfing Movement® Practitioner

ABSTRACT Dr. Rolf gave us the Ten-Series ‘Recipe’ to guide us through an understanding of the structural organization, disorganization, and integration of the human body that we call Rolfing Structural Integration (SI). This article describes and expounds on the richness and endless interest and variety there is in continuing to do the Ten Series with our clients long after we think it has taught us all there is to learn.

Rolfing is a ten hour cycle.

Rosemary Feitis

Watching Peter Melchior demonstrate the Ten Series was like watching someone pray. Something unspoken seemed to be happening that we were not privy to but were required to watch and absorb in the hope we would emulate this ‘magic’ on our own.

Lectures were given on the meaning, the history, and the order of the Recipe. We heard two versions, one from the instructor and the other from the assistant. One thing was very clear from both – we were to follow the steps of each session no matter if we understood what was going on or not. The Recipe was the only security in the completely new and unknown world we were all entering. We stumbled and fumbled with our hands and verbalized what we pretended to know. In between the auditing and practitionering phases of training, we were told not to do the work on anyone, but we all did anyway, chomping at the bit to ‘do’ the Recipe.

Everyone comes to the training with his or her own talents, enthusiastic passions and interests. So accordingly, they leave and begin to insert, take out, and add their personal flavors to the learned progression of ordering the Series that Ida Rolf taught her teachers and they taught us.

Over the years, I have heard various comments that the Recipe was only a ‘teaching tool’ and that once you were ‘advanced’ – whatever perception one has of that – you would do client-based non-formulistic and non-Recipe Rolfing sessions. I have other thoughts on that assumption. The Recipe continues to this day to deepen and teach me more about structure and organizing it than any other system I have learned. The ‘teaching tool’ continues to teach me, and I challenge those who say they have ‘moved on’ to return to the beauty and genius of the Ten Series territory and explore it more deeply. I have still found depth, interest, and infinite teachings in this process of ten sessions.
with gravity’. Seeing these mystical realities did not come quickly. Seeing and hearing from the client about the changes that repeatedly occurred at the end of the first three sessions, or even after the first session alone, were constant aha moments of “Oh, that is what she meant.” Inquiring nonstop into why one session comes before the next keeps us honest to how the human being organizes or disorganizes itself, and it even helps my ego and my desire to be the one who ‘cures’ to get out of the way.

**Tenth Hour and Layers**

In deepening the Ten Series, one has to go backwards to remember the point of doing all this in a particular order. Ideally, what does a person who has received the Ten Series manifest? The Tenth Hour is about the hinges, the horizontals. There is that uniform brilliance again. We are told to work with larger fascial sheets after spending seven solid hours digging into specific structures, joint membranes, and layers of fascia. This has to imply that I did something before in order to even understand what horizontals and verticals have to do with fascial sheets. Each session is laying down the possibilities of the Tenth Hour. Ideas such as ‘dynamic horizontals’ that are not necessarily symmetrical and yet essential for the vertical can keep my mind, my eyes, and my hands working for a long, long time.

In the Tenth Hour the ‘middle layer’ is spoken of. Teaching how to touch and work this middle layer is challenging to the new student of Rolfing SI. This requires that layers are taught before getting to the Tenth Hour. Giving the Ten Series means knowing what layer of fascia to work with, and when to move in and when to move out, and what ‘middle’ actually means. That command of “Don’t start anything new in the Tenth Hour” is important. Closure and coming to terms with what has been done directs our hands to a layer and a very intentional integration. Sessions leading up to the Tenth Hour speak of superficial and deep layers. With each new client, these layers reveal new requirements of our touch.

The Tenth Hour is where we really have to own up to the relationship of the vertical to the horizontal in standing and moving so that the planes of motion and spirals are free to express themselves without inhibition or structural obstacles. Quite a lofty goal! But it is there in every session. It can be the guiding light of every session. Integration brings horizontal and vertical into possible expression. Local interventions are moved out to the edges of the being and the structure of the client.

**Front/Back Balance and Positions**

Shapes, volume, space, fullness, or lack thereof can show up in any session as a theme. But there it is in the Third Hour, placed strategically after the first two sessions that can be seen as the x-axis and y-axis, the up/down, the space/ground, the one- to two-dimensional work. And then, there we are with the client in sidelying position, repeating the position from the First Hour. But what is different here? How is a Third-Hour position different from a First-Hour position? Positions mean something. They determine my focus and the movement that I ask of the client.

How is one thinking differently of the territory in the Third Hour vis-à-vis that of the First Hour? And what can keep you from doing a Third Hour in a first session? These are questions that are all worth asking and thinking about. Every session has questions to ponder. During a Ten Series we approach the rib cage numerous times, the trochanter and pelvis numerous times, in different positions and in a particular order. Are the arms worked differently in a Third Hour than a First Hour? Why or why not?

The territories overlap over and over again but something is different in each session. We may do a first session that is similar in territory to the fifth session, but we do that first session way before the fifth. What is this teaching us about order, about integration, about holism? What is it that develops by working with this human structure in such an orderly fashion?

Infinite questions are created from thinking and learning to see over and over with each new client, to see the sessions via a new story, the new structural challenges and a new integrating puzzle to solve. The Ten Series keeps us honest to the maxim of ‘don’t chase the symptoms’. It takes courage not to be lured by the need to please the client’s demand for relief by focusing on the pain.Ordering the structural elements within the principles and taxonomies has enough variables to keep us interested for
The Recipe continues to this day to deepen and teach me more about structure and organizing it than any other system I have learned. The ‘teaching tool’ continues to teach me, and I challenge those who say they have ‘moved on’ to return to the beauty and genius of the Ten Series territory and explore it more deeply. I have still found depth, interest, and infinite teachings in this process of ten sessions.

many years in reorganizing the structural disorganizations that develop over a lifetime lived in gravity.

Looking at the descriptions of the Ten Series as ‘sleeve sessions’ and ‘core sessions’ reveals how our particular language is a unique and fascinating setup to create the construct and format for reordering someone’s way of being no matter the reason for his or her coming in for work. Even if the client is returning after the tenth session, the Recipe gives us a way to complete a process. It forcefully takes us out of differentiating and on to connecting bigger areas through function and ways of touching. It asks the client to cop to what has happened for them in a bigger way and to feel the totality of the work in that moment. Even the body reading, if one is using the Recipe, takes me out of the detailed focus of ‘what is still left’ to ‘what is there in that moment’ and ‘how to leave it as it is’.

The Recipe is a structural, permeable boundary giving beginnings and endings; but more than that, it distinguishes our work as an integrating landscape rather than piecemeal rearrangement of unrelated segments. Relationship is never absent. It continues to teach us what can reliably happen when working in relationship to the entire constellation of function and structure, keeping our focus from being on only one part of the body. Each session has order that connects back and front and includes integration.

I have seen many Rolfers abandon integrative work in certain sessions. The Recipe teaches and demands integration in every session. The goals and the territory require relationship. Change without balance can be destructive.

Integration Sessions Eight and Nine

*We are integrating not restoring.*

Ida P. Rolf

Think for a moment of all the sessions that get you to eight and nine. If eight is a lower, two, four, and six have given you time and detail to understand how the leg and foot impact all the other segments of the body in their ability to respond to gravity in gait and movement. Then one, three, and five create the possibility for an upper Ninth Hour.

Positions for each session are specific and demand our seeing and working to relate differently from one position to another. They force the focus on relationship to spirals in the body and to all the planes of motion. They methodically lead us from the ground up across the pelvis to the spine. Knowing we need horizontals and verticals to appear by the Tenth Hour, and that the legs and pelvic girdle need to be free of the spine by eight, connects me in the Second, Fourth, and Sixth Hours to something greater and more expansive than the little joint I may be working on in these sessions. There is always relationship to the whole and the Recipe teaches the client to begin to understand that in his or her own body.

A Courageous First Session for Everyone

I have always said it takes courage to be a Rolfer and to receive a Rolfing session. Why? It is a radical act to ask for deep change in all ways. However, our clients don’t always know what they are about to receive. It takes courage to give the Ten Series and commit to our work as a ten-session process when the person is asking for quick pain relief. It takes doing the Recipe over and over to predictably say what changes are possible with various sessions, but more than that, with partaking in the entire process. It is a treatment protocol we learn and we practice differently than any other therapy or system. We have to know how to talk about it and educate our clients as to the rationale and beauty of what we do.

When I was working in the jungles of Guatemala in the early 1990s, in the beginning unable to speak the language, a person would come to me with various pains, etc. Being a new Rolfer of five years, I did the first session (which I would still do). The first session can address every issue. Yes, it is about the breath. It is about first contact. It is about clients feeling themselves from the inside, maybe for the first time. It changes the rib cage position and resiliency, and it can affect the way a person stands on his/her legs. It changes the way a person occupies space in general. It creates lift or ease. It is truly a ‘first’ for many people to be touched in the way we touch. What a spectacular place in the territory to begin. Not speaking the language, I couldn’t use any ‘psychobabble’ with them. I just did the work and they got the benefits that a client today still gets from a first session.

Time-Tested Wisdom

I have spoken with practitioners who are new Rolfers, those five years out, and those thirty to thirty-two years out, and have collected their words about the Ten Series.

A new practitioner of two years shared the following insights into the value of the Ten Series:
The Ten Series, a map to guide my work. Following the Recipe has given me a structure. I always feel that if I stick to the Recipe, something good comes out of it.

My own touch comes in the assessment. There, I feel I have the power to add to the session. If I detect a rotation, a shrinking or shortening, I can start making a notable difference for the client.

Thanks to the Recipe, I feel confident when I work. The more sessions I do, the easier the interpretation. I start noticing patterns, patterns related to age group, to gender, to mental disorders, slowly the map has more information for my interpretation.

Practitioners who are five years out, who say they will keep using the ten-session series, have shared the following:

I also often use the Ten Series as a framework for clients who have received a lot of Rolfing in the past, but from another practitioner. It always gives me context and grounds my work, makes me stay tuned in to what I'm trying to do for the person in front of me.

I believe it's the most systematic and logical way to both open and organize any body in gravity, and to educate those who are new to Rolfing about the interconnectivity of their bodies.

The Ten Series keeps me from being redundant, and encourages me to always view the body in front of me through the lens of relationships, not parts that hurt.

A thirty-year Rolfer shared why she still uses the Recipe:

The Ten Series is ‘practice’ as an ongoing meditation of relationship.

The Ten Series provides places to begin this inquiry and a way to speak in present time with our clients about their physical body.

I like that we don’t always get what we want out of the Ten Series. Again, just like life.

Integration, our clients, ourselves – it only goes as far as the relationship allows/sees/believes.

Good Rolfing has to take place in present time, especially when dealing with patterns that have become emmeshed in our client’s day-to-day movement through the world.

Each session focusing on breath and support and then touching in and naming various physical relationships – lateral line, mid-line, head on top, motion through space, naming where, when, how we are in this moment or this week, or as a child – we speak and move all of these things in present time. The Ten Series demands present time, what is going on right now right here.

Finally, a Rolfer of thirty-two years had the following to share:

I continue to do the Ten Series because it’s f***ing fabulous! It’s a permanent change in the structure. That person could go away with the Ten Series in them and never get any more Rolfing and have benefits that would last them a lifetime. Back work is essential to balancing the structure especially towards the end of a session. Everything runs through the spine. I’m not sure it would be Rolfing without back work.

The Advanced Training and Final Thoughts

The Advanced Training teaches analysis of our work through the Principles of Intervention, order of events, and structural elements as ways to construct a session. Jan Sultan, Michael Salveson, and Jeff Maitland spent many hours analyzing our Ten Series and creating the Principles that we now teach in the Basic Training and the ‘five structural elements’, along with the beautiful ‘order of events’ that Jan wrote up. All of these are part of the Ten Series. It is not just a connect-the-dots mechanical way of working. Each session can be seen through many themes of a principle, of flexion/extension, of planes of motion, of functional and kinesthetic awareness and segmental relationship in gravity to relieve the pain of being in gravity. When one is really working at all these levels in each session, one is a chef.

In learning to cook one utilizes recipes and comes up with variations in the different ingredients and their quantities. The recipe is not thrown out as one gains proficiency. The chef begins to really understand the ingredients and how to use them creatively within the recipe.

Understanding the relationships of the elements of each session and the genius of the order allows the ‘chef Rolfer’ to continue being inspired by each client's response to the systematically ordered Ten Series that is our gift to the world. Don’t throw it out. Be inspired once again.

Valerie Berg has been a Certified Rolfer since 1988, Certified Advanced Rolfer since 2000, and a member of the Dr. Ida Rolf Institute® faculty since 2003. She is also a Rolf Movement practitioner and has been influenced by her history as a modern dancer, by Hubert Godard, and by yoga. She worked in Guatemala for five years doing Rolfing sessions during that country’s civil war and, thus, pursued Peter Levine's Somatic Experiencing® trauma training afterward.

She has been practicing in New Mexico for thirty-one years and alternates that with working in San Diego, California. Tango, kayaking, sculling, and yoga keep her moving and interested in the vitality of our bodies continuing through the years. The joy of movement for the human body is what brought her to be a Rolfer and now continues to be what can be brought to anyone of any age through Rolfing SI. Valerie thinks the Ten Series is a profound life-changing process and she still uses it with new clients.
Moving into Alignment

An Interview with Author Jennifer Hayes and Book Excerpt (Session Two: Ground)

By Jennifer Hayes, Certified Advanced Rolfer®, Rolf Movement® Practitioner with Anne Hoff, Certified Advanced Rolfer

ABSTRACT This article excerpts the material on session two of the Ten Series from Moving into Alignment, a book to accompany the Ten Series by Rolfer and Rolf Movement practitioner Jennifer Hayes. We precede the excerpt with a brief interview with Jennifer.

INTERVIEW WITH JENNIFER HAYES


Jennifer Hayes: Celebrating twenty-five years as a Rolfer and Rolf Movement practitioner was part of the impetus of me writing the book. I wrote the book because there is a void in self-care at-home direction for folks to maintain and revitalize the positive changes they achieve in their Ten Series of Rolfing® Structural Integration. As a movement practitioner, I find empowering folks with embodiment ideas inspires them to be in charge of their well-being and explore their self-care.

AH: Say a bit about the content. Do you go through self-care or homework exercises for each session of the Series?

JH: I’ve chosen the best movements, from many modalities, that are a companion to the Ten Series. Each chapter has five movements and one neck stretch that mirror the goals of that Rolfing session. They can be done after the session to deepen and maintain the objectives of the session, or after the Ten Series as tune-ups, revitalizing a chosen session that speaks to the client. The book is beautifully photographed with easy-to-follow descriptions.
An Interview with Author Jennifer Hayes and Book Excerpt (Session Two: Ground)

AH: Were the elements used for each session things that came together for you in your practice organically over the years, or did it more come about as you brainstormed the book?

JH: Mostly, the movements are ones that I have shared with clients over the years. I wanted to have them all in one place and easy to reference. While writing the book, it was a bonus to be able to fill in movements that are applicable to the goals of that Rolfing session.

AH: What about sessions eight, nine, and ten? The goals for those are less specific to certain body parts and more about integration and holism. Say a bit about how you formulated those chapters.

JH: I went with the classical principle of session eight being a lower body session, so that chapter is called “Stability.” Session nine, called “Integration,” is an upper body focus, and the material for session ten is about finding your own way in gravity and closure. These chapters have deeper layers of fascia in mind. They will be for the more experienced somatic folks. The material for session nine includes a gem – an easy-to-follow description of Ida Rolf’s arm rotation sequence. This was passed on as oral tradition in my 1993 Rolf Movement certification class. Some Rolfers may have come across it in their training, but to my knowledge it has never been formally documented. I have entitled the movement “Dr Ida Rolf Arm Rotations” and am excited that this helpful, unique movement sequence is now accessible to Rolfers and their clients!

AH: It sounds like you wrote the book with your clients in mind, but I imagine practitioners could also use it as a reference in giving clients specific homework, or to support their own embodiment.

JH: Agreed, for Rolfers who have yet to embark on their Rolf Movement Certification, the entire book is particularly valuable. They will understand the principle of the goal that is being addressed and see how the movement applies. And self-care is a must for Rolfers new and old.

AH: How can our readers or their clients get the book?


Jennifer Hayes is a graduate of the Rolf Institute®. She did her Basic Training in 1990, her Rolf Movement certification in 1993, and her Advanced Training in 1998. She also certified as a craniosacral practitioner in 2010 and a Somatic Experiencing® practitioner in 2012. Jennifer is a founding member of The Rolfing Association of Canada and holds a BA in dance and theatre from the University of Guelph (Canada). Her practice is in Toronto.

Anne Hoff is a Certified Advanced Ruffer in Seattle, Washington and the Editor-in-Chief of this Journal.

BOOK EXCERPT – SESSION TWO: GROUND

AIMS:

» Create increased flexibility and adaptability in the feet knees and hips, so whole body can feel supported.  
» Release fascial restrictions from feet to knees and hips.  
» Improve alignment in feet, ankles, knees and hips.  
» Re-arch the foot.

DANCER WARM UP ANKLE ROTATIONS:

While standing turn to be parallel to the wall (you can have one hand on the wall or a chair for balance).

Rotate ankle of right leg. Turn fully 10 times to right and then fully rotate to the left.
Change sides and rotate left ankle through 10 full, slow rotations.

This begins to decompress the ankle joint—where the heavens meet the earth.

The fascial sheath of the calf and foot are like one long connected sock. This movement alone can help with the condition of plantar fasciitis.

DELUXE TOE HINGE STRETCH:

Face the wall, put toes on wall, leaving heel on ground. Hands can come up and place on wall for support.

Take five deep breaths. With every breath make a tiny lengthening movement in your splayed toes. Return foot to ground beside other foot, notice if the back of your body feels longer or different on the side you had toes up.

Feel the difference between the feet in terms of contact on the ground. Repeat with other toes up against the wall.

This is an opportunity to notice the ground supporting you and create new synapses in your brain affirming that you are supported by gravity.
GRAB TOWEL (FOR RE-ARCHING YOUR FOOT):

Place a towel or textured cloth on the ground. Don’t use something slippery like silk.

While standing, place one foot over the cloth. With your toes, grab the towel and lift it a few inches off the ground. Hold for a few seconds then place it back down. Repeat four times. Try to use all of your toes when lifting.

When done, compare the contact on the ground of your feet. Take a minute to notice the sensation in the foot that you did the movement with. Repeat with other foot. Over time you can hold the towel up longer and repeat a few more times.

In our daily lives, wearing shoes, and often walking on concrete, can dull the many neuroreceptors and small, necessary muscles at the bottom of our feet. This exercise revives them and allows the fascial membranes to move in their multi-directional capacity.

TREE POSE:

Standing close to a wall or chair if needed for balance, bring one foot up, knee out to the side, rest sole of foot on calf or thigh of standing leg. Bring hands together in prayer position. Lift up and out of the standing leg hip. Find a focal point that is not moving.

Remain for three full breaths or longer, looking straight ahead at your focal point.

Slowly bring foot down, repeat on other side.
There are a few options for arms, as shown.

Choose one and remain in position for three breaths.

Feel how this is strengthening your structures of support. Notice how you can find gravity holding you up.

SITTING ON TOP OF YOUR FEET:

Come to sitting on top of your feet, knees bent and somewhat together, hips resting back on your heels. Feel the front of your feet stretching.

If this is too intense, take some weight off by lifting yourself up with your hands or placing a rolled towel under your ankles.

The fascia and muscles of the toes rarely get to be mobile in this direction. A flexible toe hinge is an important part of pain-free walking.

More advanced version: While hips are resting on heels, go up onto toe hinge. Only your toes are on the ground with heels on your pelvis.
SHIATSU CALF STRETCH:

Roll up a towel and in similar position to “sitting on top of your feet”, place the towel between calf and thigh. Sit on this and allow your weight to sink and yield on the towel for approximately five breaths.

Then move the towel, higher or lower. Try it closer to your feet. Rest for a few breaths then move it closer to your knees. This has the effect of “rolling out” your calf muscles.

Listen to your body. Everyone is different and will feel this more intensely in one area than another. Go at your own pace.

NECK STRETCH—THREAD THE NEEDLE:

On all fours, allow hips to sink back towards your heels, into Child's Pose. Reach your arms out along the ground in front of you. Bring your forehead to the floor between your arms and rest for 10 seconds or so.
Lift your right arm out to the side, up high. Let it come down with gravity and momentum to thread through, under your left arm. Let your cheek come to the floor, then the ear, then the shoulder. Take three full breaths.

Notice how the fascia of your neck and trapezius is continuous with your shoulder, scapula and upper back. Here you are increasing the gliding capacity so there is an ability for one structure to differentiate from the adjacent structures.

Slowly, rotate back to centre and let your left arm reach under your straight right arm, looking under right armpit with cheek, ear and shoulder on the ground, the same as the first side. Take three inhales and exhales.

Return arm to straight in front of you.

PERCEPTIONS:

» Joints feel more aligned, better range of motion and improved walking pattern.

» Ability to feel the ground is enhanced, balance is improved.
The Deeper Truth of The Ten Series

By Karl E. Humiston, MD, Certified Rolfer®

In today’s ‘fix-it’ culture, it is all too easy to fixate on isolated problems and ignore their context. That quantitative science wields such an incontrovertible authority in modern medicine only exacerbates this trend of reductive analysis. In a presentation that I gave in April 2018 at the symposium of the International Association of Structural Integrators (IASI), I attempted to convey what makes Rolfing® SI different. The things that most need to be said are often the most difficult to put into words, but I will attempt to express the uniqueness of Rolfing® SI in the following axiom: *Rolfing® SI is basically a process of restoring a person’s body and functioning to that ‘blueprint of perfection’ that was given to us in the beginning and still is within us.* I was trained by Ida Rolf in 1971. I never heard her use such words regarding her work, but, to me, she conveyed them in her teaching. I cannot make sense of the classic Ten Series of Rolfing® SI without this concept.

It is clear to me that the remarkable capability of the Rolfing® Ten Series to restore health to persons with serious chronic pain and disability is best explained as follows: wherever the symptoms or structural aberration may be, the strongest and most permanent healing of them comes from restoring the entire rest of the body to its proper organization. As a retired medical doctor, I know that such a concept is entirely foreign to the world of medical science, education, and practice. But the healing of my own foot can hardly be explained on any other basis.

**ABSTRACT** The author believes that the core of Rolfing® SI, as conveyed to us by Ida Rolf in her classic Ten Series, is a restoration of a person’s being to that ‘blueprint of perfection’ that has always been in us. In this article, based on his presentation at the April 2018 IASI Symposium, Karl Humiston shares his view that restoring the entire body to its proper organization supports ‘healing’ better than any of the ‘fix-it’ or ‘release’ approaches typical of the medical or massage world. Proper Rolfing® Structural Integration (SI) training restores this pattern in the Rolfer, who can then convey it to his/her clients.
In my IASI presentation, I took off my shoes and socks so that all present could see my seriously deformed right foot. Apparently, a tick-borne Lyme disease infection in my foot during childhood had prevented further normal development. For years I had suffered pain from a downwardly displaced third metatarsal bone that pressed into the floor. But about two months before the IASI conference, that bone moved itself up enough to enable nearly normal walking, which continues to improve further now, at age eighty-eight. My firm belief is that the ground was prepared for this unlikely healing of my foot by the combined result of two things I have been doing for decades: my own continued active Rolfing work on clients (always based on the Ten-Series formula), and my years of attending my wife’s weekly Feldenkrais classes, which connect everything to everything in my body. A Rolfer whose practice focuses on the basic ‘blueprint of perfection’ of the Ten Series will inevitably be helping to restore his own body to its blueprint, even as he works to restore that of his clients.

I will illustrate this principle with another story from my own experience. This one reminds me of Ida's emphatic statement to us: “Follow the ‘Recipe’!” As a practicing psychiatrist in about 1978 in Oklahoma City, I had a woman admitted to the hospital under my care. In addition to her mental problem, she had severe pain in her feet from old injuries. I decided to shortcut the Recipe and start right away with session two on her feet. It was a disaster, making her pain much worse. The next day I did session one, and most of the pain was immediately gone. We continued the Series with good results. This fits with what another presenter at the IASI symposium described, in relating an experience in which Ida Rolf told her, “The sequence determines the outcome” (she had put the coffee in Ida’s cup before the cream, and Ida tasted the difference). I know now that the sequence contained in the ten sessions is fundamental to its effectivenes.

Throughout my schooling of 1947-1962 (Stanford degree in biological sciences, MD from Harvard Medical School, internship and psychiatric residency training at Universities of Washington and Glasgow), I had a growing awareness that my progressively deepening desire to assist people to heal, to actually become well, was not supported in that realm. The first teacher I found whose work actually guided people to mental health was Virginia Satir, and I learned family therapy from her. She urged us to go to Esalen, where I met Fritz Perls and learned Gestalt therapy. By then I saw that the basis of true mental health is in being fully connected to our physical, sensory bodies, which I needed just as much as my patients did, so in 1968 came an Esalen workshop in Body Awareness by Ed Maupin. The excitement I felt when he talked about his recent training with Ida Rolf would be hard to put into words. That excitement re-emerged the following year, as I received my Ten Series from Ed; again, what happened to me was profound, and outside the realm of my formal education and of the medical science I knew.

During the first seven years of my life, my grandfather, a Chicago surgeon, was a member of the American Medical Association’s Council on Medical Education and Hospitals and served as its chairman. His passion was to shift the focus of American medical schools from the apprentice style of learning from a skilled practitioner to the impersonal corporate funding, and how those may impact findings. Personally, I cringe when I hear fellow Rolfers saying we should seek validation of our work from medical science. I do not see the conventional medical model as relevant to our work, especially to the deeply personal basis of Ida Rolf’s Ten Series.

Science generally has remarkable power to tell us how things behave, like how the laws of gravity operate, with unchanging mathematical precision. This is what science was developed to be. It has proven its ability in this respect. Nevertheless, the same science that can calculate the behavior of things with supreme precision has no power to tell us what the nature of those things actually is, how they came to be, or why they came to behave in the way that they do in the first place. This viewpoint came to me from my conversations with the eminent British biological scientist Rupert Sheldrake (see his fine book Morphic Resonance). When Ida Rolf personally showed me how to restore a client’s body to its proper organization, I never heard her say where that proper organization came from in the beginning, but it was clear that she did not claim to have invented it; rather she had spent years searching for how she could use her hands to obey it. I assume that she simply saw it in us, I know she was a seer in the classical sense, able to see into the essence of individual human beings, in function, form, and soul.

I personally believe that we came to have this ‘blueprint of perfection’ in the beginning from divine beings who organized us in their own likeness and image, male and female, directed and empowered by their desire that it be so. Even if this is not your own belief, I think it’s true that for a Rolfer to successfully organize a client in accord with that client’s ‘blueprint’, the Rolfer’s work must flow from his or her own inward picture of that blueprint as well as the deeply driving desire that it be so, rather than just mechanically following a recipe without such clear and compelling personal intention. A Rolfer may be very good at such things as releasing a frozen joint, but when this is done without inwardly seeking (at least partially) a restoration of the client’s entire ‘blueprint’, it is not Rolfing SI that is being done. The Rolfer’s own inward picture of the client’s ‘blueprint’ cannot be the same as Ida Rolf’s inward picture, but will be that which was formed within him during his Rolfing training if it was properly done, and will further evolve and deepen through the years if he continues to practice with true intent.

Karl E. Humiston was trained in Rolfing SI in 1971 by Ida Rolf, PhD. He has an undergraduate degree from Stanford and an MD degree from Harvard. He practiced psychiatry and founded several holistic health centers. Retired now from medical practice, he still practices Rolfing SI, working with his hands to restore people’s bodies to their original design, as they were created to be. For those Rolfing clients who may need help with addictions or other difficulties in functioning, his holistic approach is most helpful.
ABSTRACT  The author discusses the Third Hour of the Ten Series through his understanding as both a Rolfer and manual osteopathic practitioner.

Introduction
The Third Hour of the Ten Series of Rolfing® Structural Integration (SI) is uniquely impactful on human structure and physiology. Done effectively, it serves as one of several milestones throughout the Series, and sets up work for hours four through seven. This article is not intended to be a complete treatise; rather, it is my view of some aspects of Rolfing SI’s Third Hour run through my individual osteopathic lens.

Innominate Intraosseous Distortion
Bone is slow-moving mesoderm and can give us a nice tool to affect joints. From an embryologic point of view, joints form secondarily as a result of what is called a physiological dislocation. This process is easiest to see in the limbs. The limb starts out as a solid, continuous structure, but there is a differential rate of growth of the limb versus the artery, which grows slower than what it supplies. This is a principle found in embryology everywhere in the body and is one of the main reasons we have curves. For example, this is why our limbs bend in the direction they do, and not in any other way. The periosteum is continuous with the ligaments, joint capsules, and tendons. By working with the bone intraosseously, we can have a normalizing effect on not only the joints, but also on the surrounding muscles and connective tissues. This section will focus on the innominate bone. There are many intraosseous distortions that can occur in the innominate bone. I will call attention to just three that can have more of a direct impact on a classic Third Hour.

First, there can be intraosseous compression of the ilium to the ischium at their embryologic fusion site, running transversely through the acetabulum. (Remember fusion at the acetabulum doesn’t take place till late teens.)

Second, there is a “buttress line”, a thickening of the innominate that runs from the iliac tubercle down to the ischial tuberosity. This buttress can be likened to a piece of rebar inside concrete, and acts to strengthen the pelvis. You can learn to palpate the fusion site as well as the buttress line on almost any skeleton. I have noticed that when people have had a hard fall onto the ischial tuberosity, this buttress line can get compressed, the way an old-
time telescope slides inside of itself to get shorter. Classic manual therapists tend to have a bias towards diagnosing 'up-slips' of the innominate from this type of injury. Depending on how the force is transmitted, it can up-slip (relative to the sacrum) or it can remain stable. If it remains stable, depending on which muscles contract, we can have a relative down-slip of the sacrum on that side and/or the compression of the buttress line or fusion line within the acetabulum. This type of injury can also compress the ilium and ischium in a more general way by compressing at their fusion line in the acetabulum. This can have long-term consequences on the health of the coxafemoral joint, and it can speed up typical age-related changes of the angle of inclination of the neck of the femur. For treatment, we can use an indirect, intraosseous technique to slightly compress the buttress line, exaggerating the compression, in order to allow it to expand. Similarly, we can use a less specific focus, using broader hand contact, and treat the embryological fusion line inside the acetabulum to get relative breathing between the ilium and ischium.

A third type of restriction, more serious, is a distortion of the innominate that can show up as a non-physiological 'hinge' just above the acetabulum. This is where the ilium flares outward but the ischial tuberosity doesn’t go medially, as in the classic osteopathic ‘outflare’. I first noticed this on a postpartum client, and attributed it to the hormone relaxin, which softens connective tissues. The first time I noticed it on a male was in a client who had lost a large amount of weight quickly and I assumed he had relative innominate outflares due to the increased pressure from his large abdomen or 'bay window' (to quote Dr. Rolf). The 'bay window' often is associated with raised sympathetic nervous system activity and a relative shortening and compression of the diaphragm on the abdominal cavity, thus increasing turgor. But this client was not in innominate outflare. Rather, he had long-term distortion of the innominate. I now check this on all clients. The test is easy and flows right into treatment, and both are easy to learn. When people have this lesion, it dramatically changes their sacroiliac joint mechanics. In walking, they lumber side to side, and lose their ‘spiralizing vermicular undulation’ (see “Natural Walking,” Ohligren and Clark 1995). This walking pattern will then be reinforced by gluteal shortness. Chronic gluteal shortness will not only speed up the non-physiologic hinging of the innominate, it will also speed up the age-related changes of the angle of inclination of the neck of the femur and lessen motion within the sacroiliac joint. This will speed up of the aging process associated with sacroiliac joint ossification.

All of these changes will have a direct impact on our ability to get the sought-after lift in the lateral line of the Third Hour. I would challenge readers to do their classic Third-Hour work and then assess and treat these lesions and notice how much more lift they will get in the lateral line.

**The Arcuate Ligament’s Relationship to Rolf’s View of the Twelfth Rib**

Historically, in Rolfing SI, there has been a great deal of focus on getting length in the quadratus lumborum (QL) muscle. I was taught by Peter Melchior that at the end of a good Third Hour, the QL should have span during breathing. This will show up in the classic caliper motion of the eleventh and twelfth ribs (sometimes the tenth rib too, if it is also floating). I refer to the QL as the ‘Rodney Dangerfield of muscles’ in that it gets little respect and tends to get beat up on. I used to overwork this tiny little muscle myself. Those who have done dissection can easily see how small this muscle usually is. As I continued to study, I learned that the QL muscle has three different fiber directions. This knowledge allowed me to be more specific with how I intervened and got length into this muscle. During my osteopathic training I was introduced to various treatment styles and methods. One technique pertaining to the QL in particular came directly from W.G. Sutherland, DO. The arcuate ligament, easily overlooked, is a thin structure, like a running sewing stitch, that starts at the tip of the twelfth rib, and tacks down on the diaphragm. Then it repeats on the other side. It is easy to see how it forms a continual connection on a horizontal plane straight through the body. If it shortens, it will pull the twelfth rib medially and inferiorly, thus crowding the fibers of the QL together and shortening the QL as well. This pull acts as an anchor that has the potential to prevent that nice opening of the breath we want in the First Hour, much the same way as an anchor will hold a boat from floating freely.

The relationship between the twelfth rib and arcuate ligament can be partially addressed through the classic view of the first three sessions: lengthen the front, lengthen the back, and lengthen the sides. The arcuate ligament acts as a ‘gasket’ in some ways as it goes over the top of the QL muscle and wraps around the top end of the psoas (which can attach as high as T11). There is a nice, gentle way of addressing this area to get the upper end of psoas to be able to floss under the arc of the arcuate ligament. When this gets free, and the upper end of the psoas comes alive, we start to see that beautiful undulating movement that we love.

Michael Salveson once said that the key to the diaphragm is releasing the back side of it. I agree. The posterior diaphragm attaches on the superior edge along the entire arcuate ligament and therefore is not as easily accessed as the front portion of the diaphragm, which attaches on the inside of the costal margin. One can get ahold of the whole posterior diaphragm in a very safe way via the posterior aspect of the tip of the twelfth rib. This spot gives access all along the arcuate ligament as it loops over the QL, psoas, abdominal aorta, and thoracic duct. I recommend caution in directly treating the posterior fibers of the diaphragm unless one has had good visceral training; otherwise, we run the risk of pushing the kidney(s) caudal.

Classic osteopathy acknowledges that big stresses, fear, and shock can pull the kidneys and adrenal glands medially. When this happens, the arcuate ligament will shorten and pull the twelfth rib inferiorly, bunching up the posterior fibers of the diaphragm. In her work, Rolf emphasized this ‘lumbodorsal hinge’. While it is not possible to explore fully the implications here, I wish to emphasize how critical this area is to the spiraling and rotational movement of the spine and pelvis. There is a similar reflection of this motion found in embryology. Don’t be surprised if work on the arcuate brings up random, but usually fleeting, memories. Why these memories surface is not random, but usually fleeting, memories.
adrenals, and celiac plexus and their relationship to the stress response.

The corollary to the twelfth rib at the upper end of the rib cage is the clavicle. In osteopathy we refer to the clavicle as ‘rib zero’. It can act like a cork on champagne bubbles, preventing the wave of lift of the breath from expressing its full potential. (I will devote a whole article to the clavicle in the future.)

Morphology

Years ago, Rolfist Richard Wheeler introduced me to the word morphology. Rolf emphasized how a barrel-shaped rib cage can be associated with heart problems. Several of my mentors in the Rolfing SI world – Peter Melchior, Jim Asher, and Ron Thompson – as well as various osteopathic teachers often emphasized the importance of breathing into our rib cage’s sides. When practiced over time, this breathing pattern can result in a more domed, relaxed diaphragm and more of an oval morphology (compared to the barrel-shaped rib cage). (That said, I urge caution when discussing morphology, as a barrel-shaped rib cage can be perfectly functional.) The Third-Hour lateral-line work is a wonderful opportunity to allow this potential for the breath to open laterally and giving potential space for the re-doming of the diaphragm.

Biomechanics

For our purposes, there are three classic biomechanical movements of the ribs around axes: pump handle (transverse axis), bucket handle (anterior/posterior axis), and external/internal rotation (vertical axis). The ratios of how much, and what percentage of bucket and pump handles, will vary depending on the individual’s unique morphology. In general, the lower ribs have a higher percentage of bucket-handle motion and a lower percentage of pump-handle motion. The upper ribs have a higher amount of pump-handle and lower amount of bucket-handle motion. For those who know lung visceral work, you will find that there is a 50/50 crossover point of bucket/pump ratio found at the fissure of the lungs roughly at rib five. This allows for rotation to continue upward as the rib cage becomes smaller cephalically. The clavicle has 100% pump-handle motion (relative to breathing). Finally, because rotation of the ribs occurs around a vertical axis, we can relate rotational movement to the classic ‘cylinder model’ from SI. This model affords us a view of rib movement through a ‘macro’ lens – how individual ribs move upon the whole ‘cylinder’ of the rib cage. Seen as separate cylinders, the left and right sides of the rib cage become two vertical axes. Even though the Third Hour introduces the vertical axis via the classic SI ‘spreading of tissues’ away from the ‘lateral line’, it also involves restoring rib movement within all three axes.

Styloid Diaphragm

I want to emphasize the styloid diaphragm and its unique relationship to the lateral line. The styloid diaphragm is a vertical oblique diaphragm running from lateral to medial in the anterior upper neck. Its fibers make up the space between, and wrap around, the following structures: sternocleidooccipitomastoid muscle, digastic muscle, stylohyoid muscle, stylohyoid ligament, styloglossus muscle – and we can include the stylopharyngeus muscle as well. It mostly hangs from the styloid process of the temporal bone, and it has vast implications for the full freedom of the temporal bone and brain health. Together, these structures form somewhat of a fan shape on either side of the pharyngeal tube; they act to keep pressure off of the carotid artery. This diaphragm also supports the posterior and inferior parotid gland. We can see it as an extension of the lateral line into the neck. With overall tightening/shortening of other core and anterior neck structures, the styloid diaphragm’s subsequent shortening creates a downward pull on the temporal bone (a topic for another time that is very important for long-term health). In this scenario, we also get a narrowing of the ‘fan’, much in the same way as the medial shortening and narrowing of the arcuate ligament, described above.

Microscope/Macroscope; a Lemniscate of Perception

One thing I love about the Third Hour is that it can cover such a broad expanse of territory, tying many things together. The Third Hour relates the front and back by establishing the lateral line. Opening up this line paves the way to reveal the midline of the body. Another way we have a ‘lemniscate of perception’ in the Third Hour is that we can zoom in with our ‘microscope’ and get very specific with anatomical details, such as individual rib mechanics; then we can zoom out with our ‘macroscope’ to see a regional (cylinder model), and global big picture (movement in gravity).

In Third-Hour work, structural and physiological changes can occur in a cascade of interwoven events. For example, cardiovascular pumping return from the legs can be enhanced by freeing the fibula, (assuming the Third and possibly Second Hour was successful in liberating the fibula I will write about the amazing fibula another time). Third-Hour work also results in a better pumping effect of lymphatic return, since the cisterna chyli dumps lymph from lower extremities and abdominal contents through the diaphragm via the thoracic duct. It does this at the midline, where the arcuate ligament surrounds the abdominal aorta. The aorta’s strong muscular walls are sturdy enough to avoid impingement by tensions in the arcuate ligament.

I would challenge readers to do their classic Third-Hour work and then assess and treat these lesions and notice how much more lift they will get in the lateral line.
but such impingement can certainly slow the movement of lymph passing through this area. This contributes to excess turgor in the abdomen, resulting in less drainage of venous and lymphatic return. Excess diaphragm tension will increase gut turgor, which lessens fluid drainage not only from the gut, but the lower extremities. This diaphragmatic tension can create increased pressure in the abdominal cavity, which can bias the innominate into outflare; this (relatively) opens the superior aspect of the SI joint while compressing the inferior aspect of the SI joint, thus limiting the normal dissociation of the two innominantes from each other in the walk cycle. Less mobility of the innominate goes synergistically with less psoas function and less rolling through ankle and toe hinges. Increased pressure in the lower legs will also contribute to decreased ankle dorsiflexion, resulting in less fibular motion thus less innominate rotation.

When I originally trained as a Rolfer, our structural and educational work was biased towards expansion (inhalation) in the breathing cycle. Mechanically speaking, during inhalation the ribs rotate around a vertical axis of external rotation. This pushes the posterior rib head anterior into the sympathetic ganglia chain, thus stimulating a sympathetic nervous system response that contributes to a tighter diaphragm, thus increasing gut turgor. As time went by, I started working with clients on their exhale. This approach helped to achieve an old-time osteopathic view: most people need to have their diaphragm ‘re-domed’, or lengthened, because it tends to shorten and flatten in chronic sympathetic nervous system activation. But focusing on the exhale contains its own bias of just half of normal motion. Nowadays I work on helping both inhalation and exhalation, teaching and inducing the client’s full genetic and morphologic excursion of his/her unique rib mechanics in breathing. Below, I describe two approaches I use to optimize breath.

Technique #1 is a variation of a basic SI technique of tracking. First, through tracking I assist the client’s ribs to mechanically go through their full excursion of inhale/exhale with the client’s respiratory assistance. Then, I add to this based on an old European osteopathic principle called ‘lemniscate hydration of the target tissues’. In using this principle, we are adhering to one of Rolf’s statements, that “We are educators,” and in this case I am educating the client with my hands on his/her rib cage. I do this by encouraging and inducing the full biomechanical excursion of the ribs by mechanically taking them through the complete range of motion of pump handle, bucket handle, and internal/external rotation with the client’s respiratory assistance, but I briefly hold the ribs in their opposite motion of what the lungs are doing. This technique creates a rising and falling pressure gradient of the tissues of the rib cage, and especially of the many joints (sternochondral, costochondral, costotransverse, and costovertebral joints) involved in breathing. The other aspect of this approach is that it acts as indirect visceral work. Holding the ribs in opposition of the lung motion creates a generalized shear, or dissociation, of the parietal pleura versus the visceral pleura. This is done in sidelying position, and dovetails perfectly with the classic Third-Hour positional strategy. I recommend always finishing this technique with a few breath cycles matching the biomechanics of the ribs to the corresponding breath motion to mobilize and reeducate the joints involved in ventilation. This fits a classic tracking principle from SI applied to this region.

Technique #2 is more regional, direct work on an entire cylinder. All of this technique is done, again with the client in sidelying, while decompressing the cylinder directly away from the midline of the client towards the ceiling with one forearm just lateral to the sternum and the other on the medial border of the angles of the ribs. I admit that this is not easy to accomplish, but the benefits are well worth the effort spent in learning it. (There are size limitations for the client if the practitioner is small.) In this technique we can ask many questions based on the six ways things can move: rotation on the X, Y, and Z axes, and shear on the X, Y and Z planes. I do this toward the end of the Third Hour, after having the client stand and feel the effects from the classic sidelying work. S/he gets to experience how this direct cylinder decompression helps to connect her/his awareness into the ‘Line’ or ‘midline’. I recommend going direct with the decompression parameter towards the ceiling, and then any combination of parameters (direct and/or indirect) that gets results.

Another way of viewing this is that we are decompressing the pleural sac laterally away from the pericardial sac and mediastinum. This is setting us up for the Fourth and Fifth Hours to get length up the midline in a couple of different ways. First, by reducing sympathetic stimulus, we relax and potentially re-dome the diaphragm. This will reduce downward pull on the pericardium, which is essentially welded to the diaphragm and has very little stretch (similar to the dura mater). By reducing the lower tensions from the diaphragm, and reducing the lateral tensions from the lungs, we can get a cleaner effect of ‘lift’ (in sessions five and six) on the mediastinum and especially the pericardial ligaments, which blend with the posterior aspect of the majority of the sternum and manubrium, as well as their attachments on the anterior aspect of the bodies of the upper thoracic vertebrae and lower cervical vertebrae. These attachments contribute significantly to the typical age related ‘hump’ that often occurs at the cervicothoracic junction. Viewed this way, we can see how the Third Hour prepares us for sessions four through seven, where we will open up and connect through the so-called core.

In this article I have attempted to share some thoughts to deepen our inquiry into the Third Hour, and hopefully stimulate readers to take it further.

Endnotes

1. In a future article, I will explore how German embryologist Blechschmidt’s information on what he called the ‘lateral ectodermal ring’ relates directly to Dr. Rolf’s ‘lateral line’, and how this line or ring has continuity with the buttress line I described in this article as well as the styloid diaphragm line.

Ron Murray trained in the second Comprehensive Studies Program at the Rolf institute® in the mid 1980s, then went on to train in a ‘bonesetter’ lineage (Lauren Berry method) in the early 1990s, and then to osteopathic school in Toronto in the late 1990s where he presented his thesis on the concept of the cranium being modified vertebrae. He now teaches for two osteopathic programs in Canada as well as small private intensive classes across North America. He can be found at his website, www.osteoron.com.

References

Back Work Through the Ten Series

By Carol A. Agneessens, MS, Rolfing® and Rolf Movement® Instructor

ABSTRACT Every session of the Rolfing Ten Series includes back work. Carol Agneessens offers ideas to raise our awareness of the opportunities of this work and to increase its effectiveness.

Back work is an essential opportunity for practitioners to educate clients and facilitate their body awareness. The possibilities for interventions are many. Here are three approaches that I work with.

• transitions: lying → sitting → standing → walking
• orientation: to the field around the client
• core awareness: continuity from the feet through cranium with energetic embodiment of the back, front, and side body.

Transitions

When asking clients to come to sitting from supine, I use these moments to observe their pre-movement. How do they organize their body to get up?

• Does the client initiate this movement with jaw, neck, or diaphragm contraction as in doing a sit-up?
• If s/he does initiate with contraction, bring that movement to the client’s attention and suggest s/he “roll to the side, bring the knees toward the torso letting the legs drape over the table, and then pushing up with her/his arm.” Repeat as needed.

Once sitting:

• Have the client put his/her feet on a memory-foam bath mat (inexpensive at Bed Bath & Beyond), making sure knees are over ankles.
• Educate to the three arches and diaphragms of the feet, asking the client to “press gently” into the carpet feeling the “big toe mound – little toe mound – and heel” and the lift that arises in the ‘diaphragm’ of the feet. By session four, I place a ‘soft’ inflatable ball between the client’s knees to activate the midline to pelvic floor connection as the client does this same exercise.

Be sure to check the balance of the client’s torso through the sitz bones. Is s/he lifted (or dropped) on one side? Bring that preference to the client’s attention. If lifted on the right (for example), meet the lifting with your hand (under the tuberosity) to ‘take over’ the lift. Meeting the pattern this way allows the client to gently let the tuberosity drop to match the opposite side, settling into the pelvic seat. The sensation of balance through the pelvis and weighting through the sitz bones is revisited during all back work in the Series. Link this awareness: “Sitting balanced through the pelvic bones can be linked to driving habits, playing the piano, working at a computer, or sitting at the table for dinner.” Facilitate your client feeling weight through his/her bones.

• While sitting upright, ask the client to ‘imprint’ his/her feet into the mat, sensing the connection from feet through legs into the low back (L3-4-5), where your hands are contacting the tissue. Feel for that connection. Often clients will ‘do’ this move by ‘thinking’ their feet/legs, not by feeling into feet and legs. Feel for this discrepancy. Ask the client to bring awareness directly into the legs and feet, to ‘be’ inside the legs and feet as if s/he is stepping into the skin stocking of the legs and feet. Be aware of the client’s breathing as s/he explores these sensations. (Is s/he breathing?)
• To assist spinal lengthening: I may ask the client to imagine a feather coming out of the top of her/his head as s/he slowly curls forward into flexion with arms hanging at sides – (if this movement is available to the person). If not, make modifications depending on needs. For example, have a large physioball in front of the client that s/he can place her/his hands on to roll over on with the support of the ball. Before s/he begins the curling movement, have the client sense his/her hands imprinting the texture of the ball.

While curling in flexion, direct the client to touch the front-facing wall with the ‘feather’. Watch that the client curls into flexion by lengthening from the hip joints, and not by taking the lumbar spine posterior.

As the client uncurls, have him/her feel for the support and connection through legs and feet. Suggest stacking abdominal muscles to stack the spine – one vertebrae at a time – letting the cranium be the last to come to upright.

• Addressing shoulder/scapula function and tension: Begin addressing scapula issues while supine. Often, I place my hands beneath the client’s scapula and encourage a felt sense of weight in the bone. Or have an under-inflated balloon placed beneath the scapula, and have the client gently push the air to the edges of the balloon. Bring the client’s attention to the serratus anterior muscle and how activation/sensation of this muscle facilitates thoracic opening and the activation/sensation of this muscle.

These are just a few ways to work in gravity with the client sitting or standing. Follow the movement from standing into walking observing the ‘roll’ through the toe-hinge and feet, push-off, and the transmission of connectivity between the psoas and the upper center of gravity (G) and their desire.

Orientation

Where am I? The ability to locate ourselves within the environment around us is crucial to survival. If a client shows any signs of disorientation after a session – even when s/he says it feels fine to drive – you can help in a few different ways!

With the client standing, you can do traditional ‘tracking’ making sure that the client’s eyes are open and looking out at the ‘horizon’. Ask for a knee bend and sense of the sacrum dropping. I’ll use the cues ‘sit’ and ‘unsit’.

Or, gently contact the occipital base (client standing, eyes open), and have the client make small movements of flexion/extension, sidebending (ear to same shoulder), and rotation. These movements imitate the positioning of the semicircular canals within the inner ear.

Core Awareness

Whether your client is lying, sitting, standing, or walking, facilitate ‘core’ awareness fundamental to alignment and orientation in space.

• When lying, bring the client’s attention to the continuity from mouth, throat, and neck through abdomen and genitals.

• When sitting, have the client sense feet imprinting the carpet and simultaneously sense through the top of the head. Sense the ‘big’ toes weighting into the carpet. Sitting can be the first way to begin working upright in gravity that is fundamental to advanced work in gravity.

• In standing and walking, observe if the client is moving through ‘core’ or walking around this three-dimensional space, and guide appropriately.

As you engage your client in deepening ‘in-bodied awareness’, use your own system as a guide. Sometimes, I’ll have the client place his/her hands on my body to feel my interpretation and often exaggeration of his/her holding patterns and then the release of the pattern. When educating the client from sitting to standing, I ‘do’ the movement with him/her. While moving from sitting to standing, I guide the client’s system in this new way feeling for increased sense of in-bodied awareness and presence. Use of gentle, sensation-based language and a guiding touch are essential ‘tools’ to cultivate for all interventions.

Carol A. Agneessens, MS has been a practitioner of Rolf Movement Integration since 1982. Cultivating feeling-sensing-grace in movement is one of the guiding orientations of her life.
Nerves, Arteries, and Veins in SI

By Jeffrey Burch, Certified Advanced Rolfer®

ABSTRACT In this encyclopedic article, Jeffrey Burch discusses nerves, arteries, and veins with consideration to tissues, fibrosity, the impact of fibrosity on structure, and appropriate treatment (including both cautions and illustrative examples).

Introduction

This article discusses the structural roles of nerves and blood vessels in our bodies; how they function well within our structure; how fibrosity in nerves and blood vessels contributes to alignment and mobility problems we as structural integrators observe; how we as structural integrators can recognize these problems, and by what means we can often work with nerves and vasculature to more efficiently achieve the goals of Rolfing® Structural Integration (SI).

On the way to these several goals, relevant features of connective tissue organization and maintenance are described, along with elements of the history of Rolfing SI, and the development of nerve and vascular manipulation. By adding awareness of vasculature and nerves, we can further improve our effectiveness and efficiency, while at the same time allowing our work to be more comfortable for client and practitioner alike.

History

Ida Rolf, PhD taught methods for assessing body alignment and movement that were principally visual. She stated her opinion that we can learn everything we need to know from observing the contours of a person’s body. Rolf taught methods of working with fascia to improve the local and global functioning of the person’s body and, ultimately, whole being. These methods were the application of pressure, often strongly, in an attempt to change the span of tissue. Sometimes a client would be asked to move in specific ways while the pressure was applied. The force she applied was often substantial, establishing Rolfing SI’s reputation as a painful process. Methods have improved over the decades both in effectiveness and comfort, yet the work continues to be described as being painful.

Rolf’s doctorate was in biochemistry. Research for her doctoral dissertation and subsequent published research was the elucidation of the lecithin molecule’s structure and its many variations, all being from various animal sources. According to her son, Richard Demmerle LMT, DC, ND (personal communication, July 2008), the first person she trained as a Rolfer, she had limited knowledge of anatomy. No information has been presented that she ever took a course in anatomy. Her son Richard assisted her in teaching some of her early classes and describes asking his mother why she did not quiz her...
students about anatomy. She answered that she was not qualified. Her work was guided principally by visual assessment in a rather artistic, sculptural fashion, with limited attention to the details of anatomy, but rather, as if the body were clay to be sculpted.

In the more than seventy years since Rolf first developed her work, many others have contributed to the field. In addition to observation of static structure, we now include detailed assessment of both active and passive movement. Growing awareness of nervous-system responsiveness further informs our work. Additional treatment methods have been developed within our profession and even more methods have been imported from other professions, notably osteopathy, which could be considered SI's 'parent' discipline because of Rolf's attention to and interest in that field. With more detailed assessment to know the best place to work at each moment, and a larger treatment-method vocabulary, the results we achieve for our clients continue to be effective and efficient treatment.

There is a current fashion encouraged by some prominent Rolfers and other bodyworkers to refer to all types of connective tissue as fascia. This brings awareness to the fact that the human body has only one piece of connective tissue, a continuous extracellular matrix, which branches, divides, and changes texture from one part of the body to another. Naming the whole web as fascia draws attention to its unitary and continuous nature, and at the same time distracts from how strongly differentiated one part of this matrix is from another. Speaking of the whole fibrous extracellular web as the 'connective-tissue matrix' can foster awareness of both continuity and differentiation. Regions of this web are variously named as fascia, ligament, cartilage, periosteum, peritoneum, pleura, dura, loose areolar tissue, etc., reflecting both differences in texture, and in some cases location.

The fiber content of the various types of connective tissue differs from each other in two aspects: types of fiber and quantity of fiber. Some fibers, such as the various elastins, are – as their name suggests – elastic or stretchy. Other fibers, the various types of collagen, are not elastic. All types of connective tissue contain both elastin and collagen but in very different proportions. For example, loose areolar tissue is mostly elastin with little collagen. Tendons are about half collagen and half elastin. Various kinds of connective tissue also differ in total fiber content. To use some of the same examples, loose areolar tissue has low total fiber content, tendon has much higher fiber content, and articular cartilage has the highest fiber content of the three.

**Maintenance and Repair of Connective Tissue**

Connective tissue is extracellular and is created and maintained by certain migratory cell types of mesenchymal origin. Fibroblasts have shape and movement like amoebae, and function like silk worms producing fiber. They have been visualized crawling through tissue and streaming multiple strands of fiber from their trailing end. Another type of migratory cell, the fibroblast, removes fiber. In daily life, fibroblasts remove fiber from the body in small amounts here and there, and fibroblasts lay down new fiber in response to the recent history of mechanical forces on that area of the body. Thus, our connective tissue matrix is continuously remodeled to match our body’s patterns of use. The half-life of collagen in articular cartilage is measured at 117 years, and in skin at fifteen years. When there is tissue damage this replacement process is accelerated as the fibroblasts remove damaged fiber, which is then replaced by the fibroblasts.

Think of a house damaged by a hurricane: there is some demolition to do before rebuilding can begin. Often when a hurricane hits there has been wholesale damage to a house, and sheets of plywood are promptly nailed over the now empty window and door openings to preserve the interior of the house from wind and rain damage. Temporary structural support may be supplied in various forms to prevent collapse. As repair continues, these quickly applied, early protective elements are progressively removed and replaced with a more refined final structure. Something similar happens within our bodies in response to an injury. Initial repair usually produces too much fiber, and an initial-repair fiber-content balance shifts strongly toward less elastin and more collagen than that tissue normally has. Later, the body removes part of this excess collagen for better fiber-type balance and more appropriate total fiber content. A number of factors can leave too much collagen, both in proportion and total content. Generally,
the more severe the injury the more collagen is left. Re-injury or over-use after injury will contribute to excess residual collagen. Having a high normal vitamin D level at the time the injury occurs tends to lead to more appropriate fiber content during healing. Comfortable and gentle movement during healing promotes appropriate fiber content in the repair. In severe injury, appropriate movement may initially be quite small, even as little as just the intent to move. Very gentle external mobilization has been shown to reduce the incidence of adhesions (Chapelle and Bove 2012).

After an injury, completion of replacement and remodeling of this new fiber may take up to two years. Depending on nutritional status, activity level, and genetic factors, the final state of the connective tissue may be either excessively fibrotic, fairly good, or lax (insufficient fiber).

Content and Behavior of Fiber in Nerves
We are accustomed to thinking of nerves as the very long cells that carry information. Nerve cells have a bulbous portion known as the body and thin projections of various lengths up to one meter long called axons. The diameters of human axons are each microscopically small, ranging from .004 mm to 0.2 mm. At the very least, a magnifying glass is required to see one of them. We also have nerves that can be seen with the naked eye and easily palpated with the hand. The radial nerve at the wrist is about 2 mm in diameter. The sciatic nerve is about 20 mm in diameter. These macroscopic nerves are multi-conductor cables containing many individual axons. Like any multi-conductor cable, the individual conductors, axons in this case, must be covered in insulation to prevent crosstalk – a leakage of electrical charge between them. This insulation is connective tissue. As multi-conductor cables become larger, additional material must be added for structural support so accelerations from gravity or other forces do not rupture the cable. This structural material in nerves is also connective tissue. Histologic examination of macroscopic nerves shows the composition of each nerve to be between 50% and 90% connective tissue, with the axons making up the remaining minority of the substance of each nerve (Barral and Croibier 2007).

Nerves are usually embedded in loose areolar tissue – a low-density, mostly elastin part of the connective-tissue matrix – which facilitates movement of the nerve through other tissues as the body moves, and while buffering it from friction against neighboring structures. In healthy tissue, nerves glide extensively through the body during movement of all kinds ranging from simply breathing during sleep to extreme sports. Nerves are also elastic. In resting neutral position, nerves have a little tension in them like lightly stretched bungee cords. As we pull, stretch, and bend portions of our body’s nerves, elasticity is engaged to elongate and shorten, accommodating to movements of neighboring tissues. This slight tension is an expression of the elastin component of the connective-tissue portions of the nerve.

Damage to Nerves and Associated Tissue
Both the connective-tissue components within nerves and the loose areolar tissue surrounding nerves are routinely damaged by any of several mechanisms including direct blows or abrasion, overuse, and allergen or other irritant exposure. Once damaged (even slightly), inflammation begins. Fibroblasts and fibroblasts congregate from the far reaches of the body to begin the repair process. The worse the damage, the greater the amount of inappropriate movement during healing, and the poorer a person’s nutritional status is, the more likely healing will end with inappropriate (usually excessive) collagen fiber content reducing both the elasticity of the nerve and its ability to glide through neighboring tissue. In other words, when contractures and adhesions are formed, this limits the nerves’ ability to move through neighboring tissue and to change length. These fibrosities make movement more effortful, may reduce range of motion, and may anchor body parts in less than ideal relationship to each other.

Examples include:
1. Stiff nerves emanating from the brachial plexus and traveling deeply through the shoulder structures anterior to the midline may contribute to a shoulder girdle held in protraction.
2. Shortened occipital nerves running from upper cervical roots up onto the back of the head may fixate the atlanto-occipital relationship in extension.
3. A fibrosed femoral nerve may increase lumbar lordosis and anterior tilt of the pelvis. It may also hold the femoroacetabular relationship in more flexion and external rotation of the femur.

Additional Consequences of Nerve Fibrosis
Our bodies are protective of nerves. When a nerve is less able to stretch and glide it is more vulnerable to being torn during quick movements or acceleration injuries. Our nervous system will engage musculature to protect the nerves, further limiting movement and producing fatigue-related discomfort from the overworked muscles. Skeletal muscle is meant to operate intermittently, not continuously.

Relationships Between Nerves, Arteries, and Veins
An artery and a vein accompany each nerve in the body, the three traveling together. Arteries carry oxygenated blood away from the heart. Veins return deoxygenated blood to the heart. Nerves have a very high metabolic rate and when deprived of blood supply die more quickly than most other tissues. All along their shared course, arteries supply many arterioles to nerves and many small veins return the blood from the nerve to the venous system. These vascular elements supplying nerves are called vasa vasorum. Similarly, nerves innervate the arteries and veins at numerous sites along their course with branches called nervi vasorum.

Assessment and Treatment of Nerve and Vasculature Fibrosity
Nerves and vasculature travel through the body in intermuscular septa and other planes of connective tissue. While the intermuscular septa and related tissues may be fibrosed, experience with releasing nerves and vasculature suggests that a large part of apparent fascial stiffness is actually neurovascular fibrosis. It seems that many times when we thought we were treating planes of fascia we were inadvertently treating neurovascular
structures. Focusing assessment and treatment precisely on neurovascular structures makes for a more effective and efficient treatment. To be clear, working with nerves and vasculature will not accomplish everything; however, at many moments in the SI process, work with nerves, arteries, or veins is the most productive thing that can be done. Therefore, skills in working with neurovascular structures are essential colors in every structural artist’s palate.

Mechanisms of Injury

This next section will examine mechanisms of injury to neurovascular structures.

Direct mechanical damage: Arteries, veins, and nerves can be bruised or torn by direct impact or abrasion. Such injuries may be very serious requiring prompt medical treatment, or they may be very subtle.

Ballistic stretch: Overstretching can injure nerves and vasculature. It is possible for a stretch to simply be too far, but the speed of the stretch is at least as important. Quick, sharp pulls on the body can be quite damaging. Examples include a quick movement by a dog pulling on a leash, or a sudden wind shift jerking the sheet in a sailor’s hand; or, with whiplash injuries, the vertical arteries in the neck, notably the vertebral arteries, are routinely injured.

Inertial sidebending or distension: In impact injuries to the body, severe inertial forces damage tissues. If my arteries and I are flying through the air together and my body comes to a sudden stop on the ground, many arteries are still moving. The whole artery or the leading edge of the artery can be damaged by the inertial movement of the mass of blood inside of it. The cause of Princess Diana’s immediate death in a 100-mile-per-hour motor-vehicle collision was a torn aorta. Her aorta was not directly hit, but rather, the tear was from an inertial injury. This type of injury was elucidated by research conducted in the late 1970s in France.

Pierce injury: Veins can become quite fibrosed from repeated hypodermic needle sticks. That is one reason why ports are installed when repeated injections must be done.

Chemical injury: Vasculature (particularly veins) is severely damaged by certain chemotherapy agents. Other allergen or irritant substances entering the body by oral ingestion, inhalation, or transdermal means can damage vasculature and nerves.

Reduced repair rate: We all get minor insults to vasculature from time to time. Repair of these injuries requires adequate levels of methyl folate. While methyl folate supplements are now available, our bodies normally make it out of folic acid (vitamin B12) utilizing the methyl folate transferase (MTHFR) enzyme. If a person has either insufficient folic acid intake or gene coding for inefficient MTHFR enzyme, or both, small insults to vasculature will accumulate or be poorly repaired. Like inadequate maintenance for a house or car, insufficient vasculature maintenance accumulates toward failure. Lack of dietary vitamin B6 produces similar effects for nerves.

Differences in Response of Arteries and Veins to Mechanical Insults

Arteries are far more likely to be fibrosed by mechanical damage than veins. Arteries and veins travel right together in the body, but the two respond differently to impact injuries or abrasion. Blood leaves the heart under substantial pressure and travels out through smaller and smaller arterial branches eventually losing its pressure in the capillaries. Blood must then return to the heart under very little pressure. To contain and tolerate higher pressure, the walls of the arteries are much firmer than veins. Palpating an adjacent artery and vein such as the radial artery and vein at the wrist, the artery has a distinctly cord-like, firm feel, whereas the accompanying vein has a softer feel resembling an uninflated bicycle inner tube. While arteries are constructed to handle more internal pressure than veins, the same structural difference makes them more vulnerable to jerk and inertial sidebend injuries. A familiar analogy is an oak tree and a willow tree standing side by side, both being bent down by a windstorm. After the storm the willow springs back up with little damage, while the oak lays shattered.

Cautions

Nerves, arteries, and veins are critical to life and are somewhat delicate. In some pathological conditions they may even be more fragile than usual. While some basics of assessment and treatment for blood vessels are described below, they are for illustrative purposes only; it is imperative that the reader receives good-quality, closely supervised training before attempting to assess or treat any nerve, artery, or vein. Training in nerve and vascular manipulation is available from several sources including: The Barral Institute (barralinsitute.com); Jon Martine (jonathanmartine.com); and Kirstin Schumaker (agilebodysi.com).

Additional Cautions

Even with proper training, there are other cautions to consider, both physiologic and philosophical.

Physiologic cautions: Blood vessels are more fragile in some people than others. Consider the risk factors known and the ones from suspected kin or first-degree relatives (parents, siblings, and children). At a minimum, discuss risks and benefits with your client and proceed with utmost caution. The greater the severity and/or number of risk factors present or suspected, the more weight is given to not proceeding with neurovascular manipulation.

Risk factors include but are not limited to:

- advancing age
- aneurism including palpation or ultrasound imaging of aortic or other vascular anomalies
- diabetes
- easy bruising
- Ehlers Danlos syndrome – vascular type
- heart attack
- hemophilia
- hypertension
- low vitamin B12 level
- low vitamin B6 level
- low vitamin D level
- phlebitis
- serious MTHFR mutations
- stroke

Philosophical caution: Occasionally a practitioner will fall in love with nerve and vascular manipulation, using it disproportionally to working on other kinds of connective tissue. This is as
great an error as ignoring nerves and blood vessels.

Practical Application

Source and Target Method for Nerve and Vascular Assessment and Treatment

While it is often useful to assess the glide of nerves and blood vessels at many specific points along their length, a great deal can be accomplished by using structures attached to ends, or certain other points of these long, narrow structures, as 'long-lever' handles.

Each nerve and artery supplies something. These structures can be referred to as targets of the nerves and arteries. With notable exceptions including the brain and pancreas, many of these supplied target structures are sturdier and more easily accessed than the nerves and blood vessels that supply them. We will first consider nerves.

Where a nerve emerges from the central nervous system may be described as its source. The bony elements of this source can serve as a long-lever handle on that proximal end of a nerve. Nerves emanating from the spinal cord supply most of the body. Each spinal nerve exits between two bones, usually two vertebrae. The present description of assessment and treatment will treat only spinal nerves, though these methods are readily adaptable to the other anatomic variations.

In the interest of completeness, here is a summary description of variations on this nerve anatomy theme. Cervical nerves exit between the occiput and first cervical vertebra. In adults, sacral nerves exit through the sacral foramina, each of which in children are portions of two sacral vertebrae. Coccygeal nerves exit the sacral notch, which is describable as a natural and appropriate spina bifida of the two inferior sacral segments. Cranial nerves exit apertures in the cranial base, some of which are wide spaces between two bones and some of which are apertures through an individual bone. The situation is a little more complex with autonomic nerves; however, these are also traceable to spinal segments and ultimately to brain nuclei.

If one contacts the bony segments of the axial skeleton that a nerve emerges from with one hand, and the target tissue the nerve innervates with the other hand, and slowly moves the target tissue away from the source along the anatomic line of the nerve, soon enough of the elasticity of the nerve will be used up so that the bony segments will be felt to move under the traction of the now gently stretched nerve. If the bony segments are observed to move too soon in response to the target-tissue traction, this indicates the nerve is strung too tight.

Flossing Treatment Technique

Several different manual therapy methods can be used to reduce fibrosis associated with nerves and vasculature. The flossing method was developed specifically for this purpose and is often a good choice. Here is a basic description of the flossing treatment technique. More complex versions are sometimes used.

Make two points of contact more or less distant from each other. The contacts should be arranged so that gentle stretch is possible between the two points. In some instances the path between the source and target will go around one or more anatomic 'corners'. Then, by moving the two hands slowly away from each other, load the tissue to be treated to a first barrier of stretch between the two contacts. A first-barrier load is the point noted when a structure is stretched, compressed, or bent in an extremely slow fashion, where the first modest step-up in force is required to further change the shape of the tissue. This is in contrast to a smooth force deformation curve for other materials that do not exhibit this step phenomenon.

While maintaining this gentle stretch, move both hands in the same direction but with the leading hand moving slightly faster than the following hand so both glide and stretch are maintained at first-barrier loads. When a limit of glide is reached, reverse directions without releasing the stretch load. The very gentle stretch elongates the nerve or artery. The moving back and forth at the same time helps reduce adhesions along the nerve or artery. Several small increments of both lengthening and improved glide will usually be felt. When movement is sufficiently improved or there is a larger, more general sense of release, it is an indication to stop. Also, if the slightest hint of fluid filling is felt, indicating even the slightest inflammatory response to the treatment, stop. This treatment should be entirely comfortable. Instruct the client to tell you about the slightest discomfort. If discomfort is felt, lower the forces used to a level comfortable to the client, or stop. As Loren Rex, DO said (personal communication to me from Tom Takeuchi, DO), “It is better to undertreat by a mile than to overtreat by an inch.”

Here are some examples:

Radial nerve: The radial nerve originates from all nerve roots C5-T1. The C5 nerve root exits the spine between C4-C5, and the T1 nerve root exits the spine between T1-T2, thus traction on a structure innervated by the radial nerve may produce motion in any vertebra C4-T2. The radial nerve innervates the base of the thumb, along with other upper limb structures. Thus, if the client is lying supine, the practitioner can stand or sit at the side of the client facing his/her torso. If the right radial nerve is to be examined, the practitioner is at the right side of the table. Fingertips of the relaxed left hand are placed in contact with the spinous processes of C5-T1, while the right hand gently grasps the base of the client’s right thumb. The fingers of the left hand monitor movement of the spinous processes while the right hand slowly tractions the base of the thumb distally. Ideally, the thumb can be moved about a centimeter before all of the monitored vertebrae are felt to displace laterally. If some or all of the vertebrae move in response to a shorter displacement of the thumb, this indicates nerves are strung too tight. Which vertebrae move indicates which roots of the nerve are tighter. For treatment, the left hand in contact with the vertebrae is then moved to the lateral aspect of the spinous processes. The right hand remains holding the base of the thumb and is slowly distracted distally until the first hint of movement of the vertebrae is felt. With this slight stretch, flossing treatment can be initiated.

Intercostal nerve: Each intercostal nerve originates from the spine between two vertebrae, associated with two costotransverse joints on either side of the intercostal space of interest. While additional details can be palpated separately, a good place to start is with one hand on the spinous processes of the two vertebrae associated with that intercostal space, and a fingertip contact on intercostal musculature at the anterolateral portion of the intercostal space. While this can be done with the client supine, a sidelying position is more convenient with the side to be treated up. The procedure is then the same as for the
radial nerve described above.

**Gluteal nerves:** The gluteal nerves arise from L5-S2 nerve roots. Thus, one hand on the spinous process of L5 and the upper part of the sacrum and the other hand on the gluteus maximus provides ‘handles’. As with the radial nerve example, gently traction the gluteus maximus muscle belly distal along its fiber direction toward the greater trochanter. Observe movement in the vertebral segments in the usual way.

**Vascular Treatment**

Restoration of stretch and glide of blood vessels is similar to that for nerves, however the source handles are of a different kind. Unlike nerves, vasculature does not present bony handles. Instead, relatively proximal portions of blood vessels are used.

Here are some examples:

**Artery to deltoid muscle:** The subclavian artery supplies virtually all of the blood to the upper limb, thus the subclavian artery is a good handle for vasculature to many shoulder girdle and upper arm structures. As a partial pre-test, standing at the supine client’s side use the tips of a thumb and index finger to gently reach behind the mid portion of the clavicle. Gently traction the tissue first medially and then laterally, and compare with the other side. You will learn to recognize the feel of a stiff subclavian artery.

Developmentally, the deltoid muscle is formed as three separate muscles, which usually fuse together in maturity. These three are the anterior, middle, and posterior portions of the deltoid muscle, with all converging to its insertion at mid-shaft of the humerus. First traction each of these separate portions of the deltoid distally, noting their relative elasticity. Next, gently traction the subclavian artery on that side distally, and while maintaining a hold of the artery, again gently stretch each of the three deltoid portions distally to test the elasticity. If a deltoid portion that was stiff is now less tight or relatively slack, this indicates a tight vascular branch into that portion of the deltoid muscle. Use the belly of that portion of the deltoid muscle and the subclavian artery for the flossing technique. As always, this method of working should always be comfortable for your client.

**Extensor muscles of the hand:** A major branch from the subclavian artery is the brachial artery, running close to the humerus between the medial sides of the biceps and triceps muscles. Its pulse can be readily felt. This artery makes a useful handle for vasculature to forearm structures. Similar to what was done with the deltoid muscle, gently traction each of the extensor muscle bellies in the forearm distally, and note which are tight. Then gently traction the brachial artery distally, and maintaining this gentle arterial load again, gently traction the extensor muscle bellies noting which ones are now less tight. Floss between the brachial artery and that extensor muscle belly.

**Gastrocnemius muscle:** Posterolateral and posteromedial to the knee are the two popliteal arteries that supply blood to the lower leg. Anastomoses between the two popliteal arteries allow each of the two arteries to perfuse all parts of the lower leg. Such redundancy in vascularization is the norm in our bodies.

As pre-tests: 1) With the client supine, dorsiflex the ankle noting the range and ease of movement. 2) With a hand under the calf, gently traction the lateral head of the gastrocnemius distally, noting the ease and extent of excursion. Compare with the medial head of the gastrocnemius. 3) Locate the pulse of the lateral popliteal artery. Gently traction the artery distal, and maintaining this gentle load on the artery, retest the distensibility of the stiffer head of the gastrocnemius. If that head of the gastrocnemius now stretches farther and more easily, this indicates tension in an arterial branch from the lateral popliteal artery to that head of the gastrocnemius. Similarly, try slacking the medial popliteal artery. Any tight branch from a popliteal artery to a gastrocnemius belly can then be treated with flossing in the usual way.

After flossing, test again with these post-tests. 1) Having released your hold on the popliteal artery, traction the head of the gastrocnemius. Does it stretch farther or more easily than in the pre-test? 2) Dorsiflex the foot. Does it go farther and/ or with less effort than before?

**Conclusion**

In some instances, astute assessment of the elasticity and glide of nerves and blood vessels are the only way a Rolfer can achieve portions of the goals of SI. In other instances, assessing and treating nerves and blood vessels is a more efficient, less effortful, and more comfortable way to achieve the goals of SI. Used appropriately, manipulation of nerves and vasculature is an indispensable set of skills. I look forward to a day when an expanded basic training of SI includes thorough training in nerve and vascular manipulation.

Jeffrey Burch was born in Eugene, Oregon in 1949. He grew up there except for part of his teen years lived in Munich Germany. Jeffrey received bachelor’s degrees in biology and psychology, and a master’s degree in counseling from the University of Oregon. He was certified as a Rolfer in 1977, and completed his advanced Rolling SI certification in 1990. Jeffrey studied cranial manipulation in three different schools, including with French etipath Alain Gehin. Starting in 1998 he began studying visceral manipulation with Jean-Pierre Barral and his associates, completing the apprenticeship to teach visceral manipulation. Although no longer associated with the Barral Institute, Jeffrey has Jean-Pierre Barral’s permission to teach visceral manipulation. Having learned assessment and treatment methods in several osteopathically derived schools, he then developed several new assessment and treatment methods that he now teaches, along with established methods. In recent years he has developed original methods for assessing and releasing fibrosities in joint capsules, bursas, and tendon sheathes, which he is also beginning to teach. Jeffery is the founding editor of the IASI Yearbook; he contributes regularly to this Journal and elsewhere. He is a longtime member of the Dr. Ida Rolf Institute® Ethics Committee. For more information visit www.jeffreyburch.com.

**References**


Neural Strain Patterns Associated with Low-Back Pain and Pelvic Asymmetry

By Stephen Evanko, PhD, Certified Advanced Rolfer®

ABSTRACT

The author discusses an approach to low-back pain and pelvic asymmetry that looks at nerve tethering as the pain generator. He discusses a manual approach to repositioning nerves and fascia to release nerve tension.

Most clinical approaches to low-back pain focus on the condition of the intervertebral discs and impingement of spinal nerve roots. Idiopathic low-back pain is not explainable according to the standard diagnostic tests and imaging. The primary references in mainstream literature offering explanations other than the intervertebral disc for back pain derive from a doctor Robert Maigne (1989, 1991), who specifically suggested that lumbar dorsal rami can also contribute to back pain. He suggested that the dorsal rami of the lumbar vertebrae, aka cluneal nerves, can be main contributors to back issues. The main allopathic medical treatments include steroid injections, disc surgery (sometimes unnecessarily), spinal fusions, nerve blocks, and opioids. It seems none of these really address what is frequently a major cause, which in my experience amounts to a sagging and tension on multiple nerves at once. This scenario should be examined particularly in clients whose MRIs show no apparent disc involvement.

Recently, our colleague Robert Schleip and coworkers have also suggested that nociceptors in the lumbodorsal fascia can be the source of low back pain, as evidenced by increased numbers of myofibroblasts and other inflammatory mediators (Wilke et al. 2017). In addition, I agree with Maigne and suggest that as a source of idiopathic low-back pain we extend our consideration beyond the lumbodorsal fascia to the perforation sites for the cutaneous dorsal rami (and the other components of the neurovascular bundles), as well as a collective tension on several nerves, particularly segments of the lumbar and sacral cluneal nerves where they cross the iliac crest, sacroiliac joint, and hips, and to include their entire pathways plus skin innervation. If the entire course of a nerve is not free to glide and stretch evenly, it potentially could lead to tension on the vulnerable segments or branch points and, ultimately, on the nerve root and spinal cord. This can drive neurogenic inflammation. The documented evidence of nociception by nerve-sheath nervi nervorum (Sauer et al. 1999) would suggest that pain and neurogenic inflammation could be generated anywhere along the nerve sheath of any peripheral nerve by mechanical stretch.
As Rolfers, we tend to look holistically at broader fascial strain patterns and structural distortion. Taking a more neurocentric perspective than our normal way of looking at fascial strain patterns, it makes sense to look at the strain patterns within or along the larger neurofascial tree in the more distal peripheral tissues, because tensional forces on nerves can be a large driving force for inflammation and pain, as well as the inhibition of muscles that limits mobility and prevents further damage. Addressing the strain patterns in the peripheral nerves themselves is key to attain the kinds of structural results that we want and successfully treat people with low-back and hip issues. In many cases, the tension on superficial cutaneous nerves may be as important as any deeper myofascial and neurofascial structures in contributing to pain, poor range of motion, joint stiffness, and immobility. I suggest that one major focus should be to reposition the fascia to relieve strain on the nerves.

A previous article (Evanko 2010) discussed generally how the superficial fascia and the nerves therein are underappreciated for their role in postural distortion and movement patterns. Our colleagues, the late Don Hazen, as well as Robert Schleip, Christoph Sommer, and Jon Martine have been inspirational along this avenue. Hazen popularized the idea in our community that tethering by fibrous connective tissue (fascial bonding) around the nerve sheaths creates susceptible places where the nerves can be overstretched and sensitized. Restoring lateral and longitudinal glide for the nerve, as well as flossing and extensibility of nerves, is emphasized. Dampening inflammation by mobilizing inflammatory exudate around nerves, with light pumping action, was also emphasized by Hazen. Barral and Crobier (2005) have an excellent book on the theory behind and techniques for direct nerve manipulation. This article will discuss specific, but broader strain patterns within the nerves and superficial fascia that may give rise to back and hip pain, and their role in pelvic asymmetry.

What are the consequences of sagging, twisted, and bunched superficial fascia and deeper investing fascias? The basic answer is that it places tension on multiple peripheral nerves. As Hazen pointed out, the nerves tend to rule everything, so more focus on their role in creating or holding the patterns we address in a structural integration series is important.

Research (Sauer et al. 1999) has shown that mechanical irritation (such as a stretch) or other noxious stimulation of spinal nerves and sciatic nerve preparations can result in the release of nociceptive neurotransmitters from the nervi nervorum within the nerve sheath. In addition, the nerve sheath, whether it be the nervi nervorum or the fibroblasts, can be the source of inflammatory mediators, such as prostaglandins. This is the basis of neurogenic inflammation, which also includes antidromic activity (weak electrical activity out of the spinal cord and down sensory nerves) and the transport of inflammatory mediators to the tips of the sensory nerves. This means that the nerve sheath itself can act as a sensory organ, with the nervi nervorum, or other types of stretch receptors, such as Ruffini endings, monitoring the tensile state of the nerve. Tension on the nerve sheath can result in motor inhibition and/or pain. An acute over-stretch of one or more nerves can result in ectopic firing, electrical zingers, and spasms that can mimic a disc ‘going out’ (speaking from personal experience when my own back went into spasm, when my belt and tight waistband raked across my iliac crest and my already sensitive iliohypogastric nerve was violently jerked by ill-fitting jeans and belt).

Torsional patterns within the superficial fascia and in the deeper investing fascias are underappreciated, and untwisting the rotations in the myofascia can be key to mobilizing the nerves in the legs and thigh. We’ve all felt how the fascia lata and deeper muscular structures can be laterally rotated at the hips. This will tend to put a twisting strain on the nerves that cross the hips. Further down the legs, there will be with twists in the crural fascias and associated nerves. Similar torsion (but typically internal rotation) occurs in the fascia and nerves of the shoulder girdle and arms.

Sometimes palpation by skilled hands is superior to currently developed imaging techniques. While expensive MRI imaging or ultrasound can sometimes detect inflammation around nerves at local peripheral sites, imaging techniques would likely be unable to reveal longitudinal tension along a small segment, let alone the entire pathway of a nerve. There may also be low-grade inflammatory processes, or neuritis, happening that is below the resolution of the imaging technique, but that skilled palpation can detect.

Careful palpation reveals the broader strain patterns and tension along many neural pathways as they course from the spinal cord through various muscle layers and fascial or bony tunnels, and then perforate into the superficial fascia. This will include tension along various branches that terminate in the skin. Basically, tension along the skin is a good indicator of tension along the cutaneous nerve. Knowing the pathways of the nerves and being able to palpate strain along them will help Rolfers to be more effective in addressing structural issues and avoid potentially creating inflammation by inadvertently overstretching nerves as we work.

Addressing the strain patterns in the peripheral nerves themselves is key to attain the kinds of structural results that we want and successfully treat people with low-back and hip issues. In many cases, the tension on superficial cutaneous nerves may be as important as any deeper myofascial and neurofascial structures in contributing to pain, poor range of motion, joint stiffness, and immobility.
Figure 1 illustrates the posterior cutaneous nerves (A) and the direction of strain (B) that is common in difficult-to-explain back issues. These nerves and the fascia containing them tend to be pulled down the buttocks and legs and their proximal segments (from the perforation site in the investing lumbodorsal fascia layer and across the iliac crest) are subject to overstretched, like little rubber bands. The tethering can extend farther down the glutes or the leg than one might realize.

As mentioned above, the iliohypogastric nerve (see Figure 1) can be very much involved in back issues. This nerve comes from the ventral ramus of L1 with some fibers from T12 and travels through the body wall, with a lateral cutaneous branch emerging through the external oblique muscles near the lumbar triangle of Pettit, next to the quadratus lumborum muscle. The cutaneous portion passes inferiorly behind the greater trochanter where it is usually tethered in the dense fascia. It also has a vulnerable branch point, just superior to the iliac crest. The anterior branch travels forward along the inguinal ligament. This nerve is often the source of trouble when back pain complaints also involve pain radiating down toward the pubes. The branch point in the back is quite susceptible to pulling as the anterior branch sags over the top of the inguinal ligament with the rest of the belly and the posterior branch sags down the hip (see Figure 2).

Traveling further toward the sacrum, we run into the superficial lumbar (or superior) cluneal nerves, which tend to be tethered over the gluteal muscles, as well as the middle cluneal nerves or the sacral cutaneous nerves, which emerge from the sacral foramina and get tethered in the sacroiliac ligament and also over the gluteal muscles [Figure 1 (A)]. All of these nerves tend to get pulled downward by sagging due to gravity and, especially, when seated in a slouching posture that creates a downward drag on the superficial fascia and gluteals. Of course, the gluteal nerves (not shown) are deep to the gluteal muscles and will also be involved. All the tissues here, including gluteal fibers, need to be unrolled and lifted in a headward direction. A strategy that frees the entire course of the nerves and feeds them back toward their origins and spinal cord works well [see Figure 1 (C)]. Attention also has to be paid to differentiating individual dermatomes as well, because adjacent patches of skin can be innervated by a nerve from front and one from the back. For example, the dermatome of the lateral femoral cutaneous nerve can encroach on the tissue supplied by the posterior femoral cutaneous nerve and care along these lines can pay off.

Another nerve that I find very important in back pain is the posterior femoral cutaneous nerve (Figure 1). The superficial strain on the nerve is not appreciated much either because tension on this nerve is often confused for hamstring tightness. It emerges near the hamstring tendons by the ischial tuberosity and travels superficially down the back of the leg in the fascia lying over the hamstrings, and then terminates below the knee. Sagging of the superficial fascia here puts a great deal of strain on this nerve. So, with respect to pelvic asymmetry, on the posterior tilted side, tight hamstrings and sagging gluteals come with a more superficial level of tension along the posterior femoral cutaneous nerve and pulling in of the fascia along its branches. If you palpate carefully you can feel how the superficial fascia is usually gathered up around the knee (and also the ankle) like bunched up stockings. Careful attention to spreading out and moving the superficial tissue superiorly (or headward) to take the strain off of the nerve is important. It is also very important to work to differentiate at the gluteal fold and to lift the glutes off the leg. In some people the glutes are halfway down their leg, putting tremendous collective strain on all the posterior nerves. Extended sitting, especially on toilet seats, is one way in which the posterior fascia lata and the posterior femoral cutaneous nerve can be repeatedly dragged down the legs.

More deeply, the sciatic nerve (not shown) tends to get tethered deep to the gluteal insertion on the IT band and, of course, in the lateral rotators and beyond. Tethered and twisted branches of the sciatic that innervate the hamstrings can be responsible for cramping when overstretched or torqued by muscle action. This means that deeper into the back of the leg we must make sure that the hamstring fascias, which get rolled and adhered to each other (mostly from sitting) are well differentiated also. Aim for fluidity in the seams between investing fascias, where the nerves travel. The common peroneal nerve (not shown) is almost always tethered along the tendon of the biceps femoris and around the knee and the fibular head. Judicious use of
fingernails to gently pick the nerve loose from the tendon is effective. Releasing the common peroneal nerve is vital in a posterior tilt pattern. The extensibility of the tibial nerve all the way down to the foot and plantar nerves should also be assessed and will affect lower leg cramps.

In order to relieve pain most effectively all the superficial (and deeper tissues) essentially need to be repositioned headward to take the strain off of these nerves [see Figure 1 (C)]. Special attention may need to be paid to dampening inflammation around particularly tender nerves. At the skin level, individual dermatomes from individual nerve branches can be under tension, so it is important to take them in the right direction and differentiate their distributions so as not to irritate a stretched nerve even further.

To help maintain length and proper ‘flossing’ of the posterior nerves, I recommend my clients do bodyweight-only squats and ‘good morning’ stretches with proper form and full range of motion. This keeps the posterior femoral cutaneous nerves, the sciatic nerves, and sural nerves nice and long. I encourage them to sit with their buttocks up and behind – not underneath – to keep the downward pull on the fascia to a minimum. In addition, the way pants, belts, and other clothing can pull on the superficial nerves can be an important source of the problem. If the pants ride low on the hips, the superficial nerves will be put under more chronic tension.

In the front, there are nerves that can also be part of idiopathic pain patterns that accompany back pain complaints and hip issues (see Figure 2). The lateral femoral cutaneous nerve originates at L2 and L3 and is part of the lumbar plexus. It passes behind the psoas and in front of the quadratus lumborum muscle, travels along the iliacus, passes under the inguinal ligament (where it can be trapped laterally near the ASIS, causing lateral-thigh parasthesia or pain), and then emerges through the fascia on the front of the leg, where several large branches fan out over the anterior lateral thigh and IT band. It is important to note that there is one branch (the gluteal branch), which tends to creep way around to the back of the leg, underneath the glutes, as part of the lateral rotational pattern of the fascia lata (see also Figure 1). Since other branches of L2 and L3 spinal nerves innervate the psoas, this neural strain pattern will be part of the shortening in the core.

This is the result of the tightening and twisting of the groin strap and the inguinal strap (or body retinacula) as described by Schultz and Feitis (1996). The groin strap is essentially a bunching and thickening of the superficial fascia at the crease of the hips. The anterior nerves, especially, can be caught in these creases. I suspect it results largely from prolonged sitting with slight external rotation to the fascia lata and other upper leg fascias. In fact, the rest of the fascia lata, as well as the deeper investing fascias of the quads, hamstrings, and adductors, will display this external rotational torsion. This means that every nerve crossing the hip is subject to torsion or twisting strain [Figure 2 (B)]. Sagging of the skin and superficial fascia adds more tension to the nerve sheaths all the way down the leg. The lateral femoral cutaneous nerve extends all the way down past the knee. This means that the downward pull along the fascia in the territory of that nerve ultimately can put tension on the L2 and L3 nerve roots and even, potentially, the spinal cord [Figure 1 (B)]. In a right innominate anterior tilt pattern, a stronger downward and lateral pull of the fascia and more pronounced tension and shortening on the anterior nerves of that hip will be part of the pattern. The torsional patterns will also include the femoral nerve, ilioinguinal nerve, the iliohypogastric nerve (anterior branch), and the obturator nerve (which innervates the adductors and skin over them. The lateral pull on the upper leg fascias toward the trochanter can make the skin along the inguinal area toward the crotch very thin.

The ilioinguinal nerve (Figure 2) can also be affected here. It passes directly through the psoas. Palpation along the tissue that rolls over the inguinal strap [Figure 2 (A)] will reveal these rolled and tethered nerves. The stretch of these nerves within the tissue rolls can be a source of sharp shooting pain when tethered small segments get acutely overstretched during movement. In addition, the femoral nerve and obturator nerve will be affected by the lateral torsion of the fascia lata. In some people the obturator nerve, together with the adductors, is rolled severely anteriorly near the top of the thigh and posteriorly near the knee.

To relieve the strain here, I endeavor to reposition and de-rotate the entire fascia lata, working with the intention to feed the

---

Figure 2: Anterior nerves involved in low back and hip issues. A – nerve anatomy adapted from Netter (1989). B – note how tissue can roll over the inguinal strap with nerves trapped at the crease. C – directions for repositioning fascia and nerves.
nerves and tissue back up and toward their origin or perforation site, as shown with the arrows in Figures 1 (C) and 2 (C). It is also important to restore glide locally and dampen any inflammation by gently pumping out the inflammatory fluid that contains nociceptive neurotransmitters and that can put turgor pressure on the nerve fibers. Alleviating strain on the lateral femoral cutaneous nerve and the other anterior nerves caught in the groin and inguinal straps can help considerably to tone the abdominals and reduce an overhanging belly, and help activate the psoas. A light gentle strumming motion to gently unroll the tissue headward at the inguinal strap is quite effective to free these nerves. Rolling of the IT band with foam rollers could be made more effective by attention to the direction of the lateral femoral cutaneous nerve. In this case, rolling to push the tissue upward with a vector as shown in Figure 1 (C) helps to alleviate neural strain. Rolling or stroking the tissue downward is less effective because it just stretches the lateral femoral cutaneous nerve even more. Flicking techniques with spiraling or lemniscate motion can also be used to liberate or potentially stimulate the most superficial nerve twigs. With self care, the direction of rolling with foam rollers is important and could be made more effective if the direction of neural strain is considered.

Posteriorly, the twelfth thoracic nerve (or subcostal nerve) emerges underneath T12 and travels through the body wall between the internal and external obliques and emerges to the cutaneous level just above the ASIS and the TFL muscle [Figure 1 (A)]. This nerve extends as far down as the TFL. Tethering over the TFL and tension along this nerve also helps to pull the rib cage down on the pelvis, shortening the waist and leaving less room for length in the lumbers.

An image of a client with a deep crease in her back along the course of the twelfth thoracic nerve is shown in Figure 3 (A). If you palpate carefully along such creases, you can track the nerves all the way down to their distal tether points. In or along the body wall, you’ll feel a bunching of the fascial tissue as it gathers around the nerve sheath. The tension along the nerve as it travels through the body wall and sagging of anterior tissues helps to create these creases. To address this, gently pick with fingernails and finger pads, detailing along the course of that nerve within the abdominal muscles to liberate it on that part of its pathway [Figure 3 (C and D)]. (Finger pads or gentle fingernails can be used along or around a nerve. Never crush a nerve with a fingernail.) Of course, you must also release its distal end, where it’s tethered over the TFL. If you palpate carefully, you will find there will be at least one tethered nerve at the base of any such telltale crease in someone’s back. After a bit of nitpicking along the course of the twelfth thoracic nerve, as shown in Figure 2 (C, D), the depth of the crease was reduced (B) and the client had a pronounced feeling of increased length through her core.

Some people require multiple sessions to reposition the tissue enough to alleviate the pull on all the nerves involved. It is important to note that tethering of the nerves all the way to the nail beds in the toes can foil our attempts to alleviate pain and restore function. Any nerve left tethered in the legs can help to pull someone back into his/her pattern. After effective de-rotation and lifting of the fascia containing the nerves, repositioning them higher on the leg, and removing the tension and torsional strain on the involved nerves, back pain will usually be relieved, and this helps to improve lift through the core and fluidity of movement around the hips and low back.

Stephen Evanko is a Certified Advanced Rolfer and conducts cell biology research at The Benaroya Research Institute in Seattle.

References


ABSTRACT  James Schwartz discusses manual work for the nerves and the use of the cold laser in his Rolfing® Structural Integration (SI) practice, and how both have dramatically increased the effectiveness of his work.

Editor’s Note: this interview was conducted in spring 2018.

Anne Hoff:  
James, I first met you in a class Jon Martine was teaching on nerve work, and you were already pretty deeply into it. Would you share your story of how you got interested in this and decided it was an important piece to bring into your Rolfing practice?

James Schwartz:  
By the time of that class, I had already done the Rolfing Advanced Training twice, and had explored craniosacral work and Somatic Experiencing® and found them interesting and useful but knew that they would not be a major focus for me. I did the visceral manipulation training, which eventually became an important part of my work, but it took me quite a while to feel like I was getting the hang of it. I decided to take the nerve work classes that Don Hazen was offering in part just because they were so close and convenient as I live near Berkeley.

I still remember the first time Don was demonstrating working on someone’s hamstrings and explaining that the muscles were tight but that the posterior femoral nerve was inflamed and tethered – and that this was in fact causing the strain and tightening of the muscles. I distinctly remember realizing I knew exactly what he was feeling under his fingers, that I had felt that many times and that I had just never realized that the taut cord was separate from the tight muscle fibers it was traveling over or...
One of the things that has made us much more effective as Rolfers over the years is that we have become better at deciding what kind of barrier we are dealing with (joint or visceral or cranial fixations, nerve issues, and even emotional or trauma-related patterns) and have developed our skills enough to deal with these and have the very powerful organizing principles of Rolfing SI to tie all of these together.

through. I somehow knew that quickly that this changed everything for me. I went home after three days and realized I had been feeling these all over the body without making the connection. I soon found out that I could not only untether and calm these nerves down and relieve chronic and acute pain, but that when I did, I saw dramatic structural changes in some of the most resistant patterns in my clients’ bodies.

I slowly began to learn how to use this new information more skillfully. At first I realized I could find nerves all over the body, could even become obsessed with working on nerves, but then started to differentiate between nerves that are tender but are more background noise and other times when they were so painful or tethered that the body was organizing around avoiding pain or preventing further strain or even injury to the nerve. When this was the case, if I could release and calm down a painful nerve, it would often release a whole pattern of myofascial guarding since it was no longer needed. Whereas learning craniosacral or visceral work felt like they would involve a long learning curve, somehow the nerve work just seemed like an exciting new playground for me.

AH: I think you bring up an important point about how you could become obsessed with nerves. Sometimes when we learn something new we tend to want to play with it all the time, but you differentiated when it was appropriate to do that for the overall structural goals of your work.

JS: It’s not like I was just doing nerve work and not ‘real’ Rolfing SI anymore – I have always thought that another way of putting Jeff Maitland’s question of “What do I do first?” is “What, at this point in time, is the biggest barrier to progress and how can I release that barrier?” One of the things that has made us much more effective as Rolfers over the years is that we have become better at deciding what kind of barrier we are dealing with (joint or visceral or cranial fixations, nerve issues, and even emotional or trauma-related patterns) and have developed our skills enough to deal with these and have the very powerful organizing principles of Rolfing SI to tie all of these together.

AH: Well said. So what was the trajectory from first learning the nerve work to it becoming such a key part of your practice?

JS: I have always liked working with interesting challenges, with clients who took me to the edge or a little beyond my skill level. Learning to work with nerve problems and acute and chronic pain issues certainly kept me challenged. Every time I thought I was getting pretty good at it, my clients kept presenting me with ever more complex problems that I would learn over time to resolve, and before long I was getting a chain of referrals of people with these kind of problems.

AH: Yes, I find that with acute and chronic pain issues there often seem to be tethered or inflamed nerves involved. Can you talk a bit about nerve work in terms of pain, and also in terms of numbness and muscle weakness from nerve compression issues? Can you work effectively with all of these?

JS: Let me give a couple of examples that might help answer these questions. Sometimes the main issue is a painful and tethered nerve that is at the heart of a whole pattern of guarding and shifting weight to avoid this pain, like in what is generally referred to as plantar fasciitis and often manifests in heel pain. Most of the time I find this is a nerve issue, namely the tibial nerve and less often the sural nerve, both of which come down the lower leg and have a branch that wraps behind the malleolus and under the heel. Most of the work I would do for this would be to release any tethering along the length of the calf and behind the malleolus, particularly where they turn the corner on the calcaneus (motion-restricted nerves often get inflamed where they cross hard, bony surfaces). I would use the laser on
nerve inflammation and adhesion settings to facilitate this.

I had a session with a woman who had a chronic pain in the groin area that had caused her no end of problems since having surgery for endometriosis several years earlier. It caused sharp pain when climbing steps or getting up from sitting. She had tried a number of different treatments for it to no avail. It seemed to radiate out from the center of the inguinal ligament but extended to the ASIS and along the crest of the ilium. As it turns out, there is a nerve that follows that exact trajectory and its name describes it well – the ilioinguinal nerve – and everywhere I touched it made her jump. Because she has a history of PTSD and anxiety I had to contact each hot spot very carefully and wait for her nervous system to get used to the idea and respond to the input of the laser and gradually calm down. Within ten minutes the pain and her fear of it was dramatically reduced. There were secondary issues with the obturator and femoral nerves to adductors and quads, and some work to help her let go of the rest of the guarding pattern in her upper leg and groin, but these resolved easily. Most of the work I did not was not standard Rolfing SI, but the dramatic change in her structure and movement patterns were typical of the goals of Rolfing SI.

AH: I'm glad you are mentioning the cold laser because I know that's been important for your work in recent years.

JS: I have had a number of clients recently with pain, motion restriction, weakness, and numbness in their arms and hands. The laser has been invaluable for this. One of the ways the laser works is by entrainment – in other words, when a nerve or organ or system is over- or under-active, the laser will bring it towards the mean. You can use it to calm down a nerve that won't stop firing or to up-regulate nerves where signals are not flowing properly, causing numbness, lack of proprioception, or weakness because the muscles are not getting a strong signal from the brain. In most cases, clients will have a steady improvement from the laser with these, and sometimes the change is stunning, even when an area has been completely numb or a muscle very weak for years.

My father had serious neuropathy in the bottoms of both feet that made him cautious about walking and put him at greater risk of falling from losing his balance. Mayo Clinic said they had nothing to offer him for this and I had tried nerve work and Rolfing SI, which helped his mobility but did nothing for the numbness. Then I started using the numbness setting on the laser on his feet when I saw him, and each time he improved. Within six months he told me that most of the time his feet were not numb at all – if he stood or walked too long they would tend to go a little numb, but if he got off his feet this would quickly go away. Another problem was weakness in his left leg – he showed me that he could cross his right foot over his left knee easily, but could only do this with his left foot with great difficulty, and not without using his hands to drag it into place. So I tested the major muscles of that leg, and for each one that tested weak I used an up-regulation setting on the opposite-side motor cortex and same-side cerebellum to get them to send a stronger signal, and they would test stronger. When finished he was able to do the motion more easily, although still using his hands to help. An hour later, he wanted to show me that he could do it just as well as the other side. Two months later when I saw him again, I asked him how it was doing and he showed me that he could still do it just as well.

AH: That is wonderful, and something we've not necessarily had good tools for before.

JS: Another fascinating use of the laser is for healing bone breaks and fractures. My father caught his big toe on the carpet one night when I was there and fell, rolling over it with his full weight. It was broken in two places and the doctor said he would need to wear a boot for eight weeks. I was concerned this would really set him back so I left the laser with him for an extra week. My mother called to say that ten days after the break they had it X-rayed again and the doctor told him it was healed and he could get rid of the boot. I also used it on my cousin nine days after she had her second knee replacement. Her knee was still so swollen that she had no more than 5° of movement, but after a single treatment of twenty minutes with the laser setting for postoperative wound and scar healing, the swelling was visibly down, the pain was decreased, and her range increased to 30° – which totally shocked her surgeon the next time he saw her, he said he had never seen a change like that. She ended up healing faster than anyone in her group.

Last year I worked with a colleague before and after the double hip replacement surgery she had after twenty years of dealing with increasingly severe pain and dysfunction resulting from reconstructive surgery to her femur after a major car accident. I managed to find a laser for her to rent for two weeks. I was convinced it would get her back to work a couple of weeks earlier than she would have been able to do without it, and she reported that she had an excellent recovery and felt good enough to go back to work within four weeks, but gave it an extra week to be sure. Within a couple of weeks, she was back to her full-practice workload. She is thrilled with her progress and has been doing Bikram yoga and stretches she could not even do before the accident. She felt her surgeon was excellent but felt that combining his work with the laser made a real difference in her recovery. In my experience, using the cold laser before
and after this type of surgery significantly reduces swelling, discomfort, and healing time of soft tissues, incisions, and bone. 

**AH:** This is all fascinating. We are used to our work being impactful, but it seems like the addition of the nerve work and the laser has added further dimensions for you.

**JS:** If you had interviewed me five years ago when I was doing pretty standard Rolfing SI (although outside the Ten-Series format) and doing the nerve work as a tool that enhanced and sometimes expanded my work, it would have been pretty simple. Since I have added the laser work, though, my work has expanded in so many directions that I don’t know where to start. I am doing a lot of health-related work on asthma/allergies/sinus problems, anxiety and depression, gut problems, and immune enhancement and postoperative healing – not because I had any great need to go there, but because I can and if it is a value-added proposition and helps my clients while enhancing their experience, then why not? Particularly when it helps resolve problems that nothing else has.

I have been thinking of some of the articles and interviews I’ve read recently in the Journal. Michael Salveson wrote about how careful we have to be about narrowly focusing on ‘techniques’ like visceral, cranial, and nerve work, and in so doing losing sight of the larger integrative goals of Rolfing SI. It is a pertinent question, but then in another article Peter Schwind went on at length about working with [Jean-Pierre] Barral and even doing brain work, and Stanley Rosenberg is taking his exploration in all kinds of different directions. I say this as a prelude to my own realization that despite my contention that most of what I do with nerves and with visceral and trauma work still fits within the context of the Rolfing goals, I have some clients where my work could almost be considered a prelude to Rolfing SI.

A good example is a client who was sent to me by a doctor I worked on once. This client had been in escalating levels of pain in her jaw; it had gone from sporadic to constant acute pain. In our first session I spent less than twenty minutes working on this with the laser and manual nerve work and typical Rolfing work on her jaw, and the pain reduced by 80% and never came back as a significant issue. (Oh that it could always be that easy . . .) As her case sounded complicated, I had asked her to send me some of her medical history, which turned out to be three long paragraphs about life-threatening asthma with one or more hospitalizations every year of her life, periods of severe depression and anxiety, and a list of medications for these that was quite impressive. There are protocols for the laser that I thought might help, so in that first session I decided to try some of them. (Most of the time I just put the laser on the stand on these settings while I do my Rolfing work.) She responded well to the anxiety and parasympathetic facilitation settings, and this and the asthma and lung settings seemed to help her breathing. We made a second appointment to check on the jaw and do more work with the neck and shoulders, and I decided to continue exploring what the laser could do for her asthma and also her immune system, which was very vulnerable to catching anything that was going around, which would go to her lungs and necessitate hospitalization and heavy antibiotics, prednisone, etc. To make a long story shorter, I have been working with her almost weekly for eighteen months, in conjunction with her psychiatrist and doctors, and she has made it through two winters without being hospitalized, the second without even taking antibiotics, and her asthma and anxiety are mostly under control. All of this has been life-changing for her.

Working with clients like this was not something I had planned when I decided to add the laser to my toolkit, but sometimes life takes you in surprising directions . . .

I don’t think these are Rolfing sessions, although I do some Rolfing work in them. Sometimes people come to us with serious problems that need to be dealt with before anything like a standard Rolfing series is even relevant, so we refer them out. But when it is something I can help them with, particularly, as has often been the case, when they have not had results with other medical or alternative practitioners, I am happy to work with them. They can tell clearly if I can help them, and if I can they are often profoundly grateful and become long-term regular clients. I have always loved new challenges when a new client’s needs match my skill set, and some of these people need almost every skill I have. It’s one way to never get bored doing this work. I only have a few of these types of client at any given time, but I learn so much from working with them.

**AH:** How do you frame what you offer for them? They are presumably coming to you as a Rofler, so what is the dialogue when they mention something health-related and you have curiosity to offer work with the laser in conjunction with hands-on work?

**JS:** Whenever I see new clients I assess what brought them to my practice and what expectations they have coming in. It varies a lot, from “I have always heard Rolfing work is great,” or “My friend says you helped her with her chronic pain,” or “My friend had the same complicated problem as me that no one has been able to help or resolve and you helped her so much I want to try it too,” and so on. The ones who come in for Rolfing SI (but may or may not know much about it), I try to update them on how our conception of Rolfing SI has changed, how like many Advanced Rolfers I don’t follow the ten-session format anymore and have added new skills, like nerve and visceral work. Depending on their issues I may or may not even talk about the laser for a while unless there is something I think it will help them with.

Some clients clearly come to me hoping to deal with distressing chronic or acute pain problems that in some cases have taken over their lives. With all clients I feel it is important that they feel heard in terms of their goals or worries so I try to make it clear that I am addressing their priorities right from the start. If they are dealing with a lot of pain or mechanical dysfunction I try to get my hands on that right away and may talk about the laser and nerve work more at first, although I am also working and thinking strategically in terms of structure and my Rolfing goals. I will talk about Rolfing goals more and more as they start to get some relief from their distress, saying that it is essential to getting long-term relief from their problems and taking them past getting out of crisis-management mode to a sense of possibility and active management of their physical health and well-being.

Some people come into my practice not even knowing I am a Rolfer or even caring, but I do a lot of educating about it. It just comes at different times in our work depending on their needs.

**AH:** Tell us a bit more about the laser. How did you decide to check that out?

**JS:** I had heard of cold lasers for a few years but it seemed like they were very expensive and I had no particular interest in them. I first saw a cold laser in one of Jon Martine’s nerve trainings, when he
brought it out to work on a particularly inflamed nerve. I had been working with many clients with serious acute and chronic pain conditions – one of them had had a rare and severe reaction to back surgery that left him in severe pain. He was taking much more pain medication than anyone I had ever worked with, including methadone, Lyrica®, lidocaine patches, and Percocet® as needed. The nerve work had made a real difference, reducing his pain by 40%-50% but I was having trouble helping him beyond that. I decided to look into what the cold laser could do for him and other clients. Jon told me if I wanted to understand this better I should talk to Mark Hutton in Alaska who was very experienced with laser work. Mark invited me to come spend three days in his office so that I could see what it could do. I was mostly convinced already that I wanted to do a ninety-day trial of it, and what I saw Mark do sealed the deal for me.

AH: What kind of laser do you have, and how did you figure out how to bring it into your practice?

JS: My first laser was a model made by Erchonia that is now called the PL Touch, and cost about $13,000, but Mark told me if I got serious about using it, I would probably want to upgrade to the Base Station, a set of three lasers (two red and one with a violet beam), which was $27,000, a very serious investment.

AH: Talk a bit about learning to use it and incorporating it into your practice.

JS: You know when I took my first class from Don Hazen on nerve work, I took it to it immediately – I know this is not the case for a lot of people but somehow I knew that this was my new leading edge. I felt I could use it almost immediately as I realized I had been feeling inflamed nerves for years without identifying what they were or knowing what to do with them. The cold laser, on the other hand, was a whole new paradigm, but I quickly started getting good – and sometimes astonishing – results just using it in what I call a point-and-shoot kind of way, i.e., using nerve inflammation protocols for nerve pain, numbness protocols for neuropathy, etc.

In my spare time I would look through the protocol book and saw settings for sinusitis and allergies, post-operative wound healing, and scar revision, and started trying them out. I felt it was essential to buy the stand that holds the lasers because I could try many different settings with the laser on the stand while I went on with my Rolfing work. It has become an important value-added proposition for some of my clients that I can help them with their allergies, post-nasal drip, neuropathies, vertigo, and even anxiety. It has been invaluable for several clients after major joint-replacement surgeries, skin-reduction surgery, and even stroke recovery (one colleague was very impressed that he recovered strength and balance that he had lost thirty years ago, after a series of mini-strokes, in each of three sessions with the laser).

I am sometimes hesitant to talk too much about this kind of result as I would have found them hard to believe had someone told me about them earlier, and I know that others have found a cold laser to be useful but not this dramatic. Partly this stems from the fact that I almost immediately got some dramatic results and was intrigued enough to keep experimenting with it to a great deal. I also had a few clients with severe problems with nerve pain, asthma, and anxiety who found the laser work so helpful that they became once-a-week clients, for a year or two now, and they continue to improve beyond anything they thought was possible when we started. They constantly challenged me to become more proficient with the laser. The sessions with these clients alone more than paid for the cost of the laser and they felt it saved them money compared to the cost of the medical bills and missed work they had to pay for before.

Another important benefit to the laser is that it is great for self-care and to use on your family and loved ones and even your pets. It is one of the things that keeps me in good enough shape to still see twenty-five or more clients per week.

I have always loved a quote by Rilke: “Winning does not tempt that man. This is how he grows: by being defeated, decisively, by constantly greater beings.” Every time a new client comes in with a problem I have never dealt with before, it can seem difficult at first, but I love to rise to that challenge, and work with it until I can get predictably good results. Inevitably some of these people know other people who have been searching for solutions to their even-more-complicated problems and the process starts again . . .

AH: This has been very intriguing. Thanks so much, James.

James Schwartz first experienced Rolfing SI over forty years ago. Before becoming a Rolfier, he worked as a technical translator and English teacher for ten years in France, before coming back to the US to live in Marin County, California near San Francisco. Ten years after getting his first Rolfing series, he was finally able to complete his Basic Training in 1987. He has since done two Advanced Trainings and extended studies in nerve work, visceral work, Somatic Experiencing, and in using the cold laser.

Anne Hoff is a Certified Advanced Rolfier in Seattle, Washington. She considers Rolfing SI the overarching umbrella for her work but includes craniosacral and visceral work, nerve work, and body-related inquiry as appropriate for a given client. She also brings in the cold laser, especially for nerve inflammation.
The Mystery of Felix Kersten and His Pioneering Work on Nerves and Arteries

By Mathias Avigdor, Certified Advanced Rolfer®, with Anne Hoff

ABSTRACT  Matthias Avigdor discusses what is known of the life and work of Felix Kersten, a manual therapist who famously provided treatments to Heinrich Himmler during WWII, each treatment provided in exchange for pardons for prisoners and labor-camp inmates. Although Kersten wrote two books about his ‘physio nervale therapie’, and although from those we know that he treated both viscera and nerves, we are left with no clear understanding of how he achieved his stunning results.

Anne Hoff:
Some time ago, you mentioned to me some old books you found discussing a way of working with nerves and arteries that was not in the osteopathic tradition. Can you tell us about this?

Mathias Avigdor:
Felix Kersten was the author’s name. Ever heard of him?

AH: No, never.

MA: Intrigued about him and about his work, I had been somehow following his ‘trail’ for a few years and had lost track at some point, when his remaining son, living in Sweden, wrote back to me. He confirmed that he never received work from his father and that all who did were certainly dead now.

AH: How disappointing. What’s the story of that, was there really no trace?

MA: I remember well this night in the summer of 2015 when I finally found a trace of his son, Arno Kersten.

I had been searching for a while. I was ready to call the publisher of [Arno Kersten’s] book Le Dernier des Justes, which describes how his father [Felix Kersten] devised and applied a plan to save Jewish people and others persecuted during World War II. I did not manage to find the son’s address: he seems to protect his privacy very well. I first thought I could ask the television network, since he appeared in a short interview in a documentary made by Swiss television some years ago. I asked a journalist working there to help me find the contact info, but we found no clues. Arno Kersten seemed difficult to find.

But this night that I mention, I found a transcription of a radio program mentioning him. It gave the name of the village where
the journalist visited him. From there it was easy to find his name in the address book of the area. He lives in a little village in Sweden, not too far from the capital. The trip would be easy for us from Switzerland. Was he still alive? The interview I had found on the Internet was only two years old. I thought, “Yes, maybe he was alive after all. He must know, I’m sure he does. It’s his father after all, he must know.”

We wrote a letter, my friend Urs and I. Urs would be ready to accompany me to Sweden if we had a chance to meet with Arno Kersten.

Yverdon, April 15, 2015
Dear M. Arno Kersten
We are making a research on the history of manual therapy and we are particularly interested in the therapy your father Felix Kersten developed and called ‘physio nervale therapy’.
After reading his “heilkraft der hand” and “die manuelle therapie” with a lot of interest, we would very much like to know if this therapy has been transmitted to students. We wonder why physio nervale therapy is not more known to the public, because what Felix Kersten wrote is very much in advance for the time in which he wrote it. We believe Felix Kersten is a keystone person in the history of manual therapy although his work is very much unknown.
Did you receive treatments from your father yourself?
Are there other people who could tell us about the way he worked?
We would be happy to have a personal conversation with you; for which of course, we are ready to travel to Sweden.
In the meantime would you care to give us some hints to the following address?

Mathias Avigdor and Urs Leuenberger
Centre de Thérapies du lac
Rue du lac 6
1400 Yverdon
Switzerland
or by email to: mathias@rolliong.ch
Best greetings and thank you for considering our request,
Mathias Avigdor and Urs Leuenberger

AH: Did you get a response?
MA: Mr. Kersten wrote me back by email a few weeks later. He never received a treatment from his father and he knew no one who did. All who could have talked about it were dead. I was very sad. I thought: “Well, I’ll go to Sweden anyway; then I am going to find the sons of the famous people he was treating and the sons of his teachers as well. There must be something . . . I was angry. In my heart I knew that my search was over. To pursue the matter further would require months of professional research and I was not up for it. I had to accept that I could not know more for the moment. Who knows, maybe someone will find information and publish a book?

AH: How frustrating, to find something so interesting and there is no detail available. Did you ever learn anymore?
MA: You know, I never found someone who could tell me more about Felix Kersten’s work. Everyone was so much more interested in his role as a hero of the Second World War. I even found an archivist who was preserving many important pieces about the war, but there was nothing there either.

AH: Tell us what you do know about Felix Kersten.
MA: Kersten worked mainly with nerves and arteries and was obviously a genius at it, treating powerful people around Europe and remaining under their protection during the war. This man was very much in advance of his time. But how is it possible that someone would write books about his therapy, give it an official name and be published, be a very famous person, and then completely disappear? After his death, it seems no one ever heard about his therapy! He has no pupils that I have heard of. But why did he bother writing three books if he never taught his secrets personally to anyone? What happened? This remains a puzzle to me.

Whoever he learned from – he had a Tibetan teacher, a Dr. Ko – also seems to have disappeared. The people he cites in his books as leaders in the field of manual therapy – and in particular around the work with the nervous system – seem to have been completely forgotten. An entire lineage is underground and unspoken of, as if new people had to discover once again, in a new form, what had already been forgotten, as if for the first time . . . Had this happened before? Was it already a second or third round? This story tells me something about how fragile knowledge can be, and about our certitudes in the history of our own work.

AH: Let’s go back to how you first heard about Felix Kersten.
MA: Years ago, even before becoming a Rolfer, I read a book called The Man with the Miraculous Hands, published in 1960 by the famous French author Joseph Kessel. This story was one of my main inspirations for becoming a manual therapist, and it is my wish to enliven and share this feeling with you.

The book is based on an interview Kessel did with Felix Kersten, who was a Finnish citizen. After World War II, Kersten had been accused of sympathizing with the Nazis, because he was close to the SS during the war. After an examination by a special committee, however, the charges were dropped as it was proved that he actually saved an incredible number of lives. For years, he had been steadily and systematically giving treatments to Heinrich Himmler in exchange for pardons for prisoners and labor-camp inmates. Himmler suffered from terrible abdominal-pain crises that put him in an absolutely helpless position, and Kersten was the only person able to offer him relief. The only thing was that the relief did not last, and Kersten had to treat him regularly.

This story moved me. I found it amazing that you could accomplish such miracles with your hands. A therapist can normally help one person at a time. He can leverage that help by teaching students who will treat other people, and so on. But here the leverage was different, the leverage was obtained by trading for lives; thousands of lives saved by treating an evil person. I Imagine he must have had amazing hands. These are the kind of hands I wish to have: golden hands.

There is a particular passage in the book that describes how Himmler asked for treatments and how Kersten reacted. I was astonished that he actually decided to help, because it was hard to imagine laying hands on a person like that. It would be easier to imagine touching with a knife than with healing hands. Why did he not kill him? It is absolutely thrilling that, for years, Dr. Kersten stayed as a kind of a prisoner of the SS, always refusing to wear a uniform or to be involved in any political position. Himmler had to protect him against a few other SS officers who would easily have killed him without the intervention of his powerful protector.
With some research, I found out Kersten the nerves and releasing pain through Kersten, claimed he was working with interested me, when I finally became some time to get to the point that really interested me, when I finally became a manual therapist – this man, Felix Kersten, claimed he was working with the nerves and releasing pain through manipulating them.

With some research, I found out Kersten had himself written a book, Die Manuelle Therapie (which translates as “the manual therapy”) published in 1929. It was obviously out of print and the only copy I could find was kept at the Dresden State Library, in Germany. I wrote a friend and colleague practicing in Dresden, to ask if he would be willing to find this copy and photocopy it for me. I am thankful that he did that, and a few weeks later I had a copy of that book.

I was astonished at what I read. Kersten had developed a complete treatment system that he called ‘physio-nerval therapy’. While it is very difficult to understand from the text exactly what he did, some passages struck me with their accuracy. He said he had heard of Palmer’s work (Palmer was the founder of chiropractic), and that his Tibetan ‘master’ had taught him such techniques of spinal adjustments. But, he emphasized that this could only be of lasting use if you first treated the visceral and the nervous system in its entirety. Is it not crazy that someone would write that in 1929?

AH: What else did you learn?

MA: I found out later that he had written another book, an extended and revised version, called Heilkraft der Hand (which translates as “the healing power of the hands”) and it was of course out of print and difficult to find. In this text, he goes into more detail. He starts with a long chapter about the importance of treating the heart; that is close to modern osteopathy, like (for example) Patrick Van Den Heed is teaching today. The heart is the machinery that feeds the cranium, and you need to treat the heart first, before moving to the cranium and the nervous system itself.

AH: From this book can you understand any more about how he worked? Do you have any ideas or anything to experiment with?

MA: Kersten reports that his treatments were very tiring energetically for him, so he could not take many people. He only accepted a limited number of patients and gave them very frequent and numerous treatments, aiming at results of importance on various illnesses and physical conditions. He describes his way of working as rooted in a systematic work on the function of the arterioles that lie in the connective tissue. So far, I think he was making space for the tissues like we do with Rolfing SI. I believe that he was working the body in a systematic way. He was listening to the physiology of the body and was then correcting this physiology in order to restore health. You need to work on the function of the heart first, then on how the blood is distributed into the system. You need to check each physiological function and understand what is not working properly. That includes of course the brain and the cranium.

Kersten explains that you should project into the body of the person you are treating and from there you can feel with clarity where you need to work and what you need to do. Kersten claims that he had to train for years in order to be able to feel and see inside the person’s body. He had learned a method that allowed him to prepare himself for this particular ability. That means that before each session he had to prepare in a special manner. Probably meditating and using other methods I do not know of. He was working in a state of very intense mental concentration and that was probably what was so tiring for him.

He was certainly also working on the health of the patient by giving advice on food, lifestyle, and in particular advice about how to respect the nervous system. He was concerned about the stress of modern life and insisted on how to deal with that stress. In his book, he addresses practitioners like us and advises a healthy lifestyle. I guess he was also using herbs and drugs as he was treating people with a wide variety of conditions that were covered in part by classical medicine as well.

I have been experimenting a lot around these ideas and have found it profitable and inspiring. But [other than these books], the trail is lost. There is so much to wonder about and so few information sources. There are the three books I told you about already, and then Kersten’s famous war memoirs (The Kersten Memoirs, 1940-1945), but nothing else really.

AH: Well, this much alone is fascinating. If you learn any more, be sure to update us.

Resources


Mathias Avigdor was certified as a Rolfer in 2006, as an Advanced Rolfer in 2012, and as a Rolf Movement practitioner in 2013. He attained his Swiss federal degree as a complementary therapist in the field of structural integration in 2018. Together with Esther Rehacek and Mathias Berovalis, he has led an osteopathic and Rolfing center in Switzerland since 2009. They welcome and supervise newer practitioners and offer multiple therapy services including Rolfing SI, osteopathy, and psychosonetry. Mathias started rock climbing at eighteen, and appreciates fine-tuned movement and body expression. He discovered his passion for Rolfing SI while managing a small business, then shifted gears and devoted all of his energy to learning the art of Rolfing SI. He later expanded his repertoire with numerous continuing education trainings in osteopathy and Rolfing SI, mainly with Hubert Godard and Peter Schwind. He now follow his own road but refreshes his inspiration every year with Dr. Vincent Guayot, an osteopath. Mathias believes that the relationship with our clients and the understanding of their needs brings us towards a practice that is not attached to any method.

Anne Hoff is a Certified Advanced Rolfer in Seattle, Washington and the Editor-in-Chief of this Journal.
Dynamic Process Integrity

Introducing Postural Integration

By Ida P. Rolf, PhD

ABSTRACT This early essay, prepared in advance of a 1954 class for chiropractors and osteopaths, shows Ida Rolf’s early thinking on the theory and principles of what later came to be known as Rolfing® Structural Integration.

Editor’s Note: We have made minor edits for clarity.

Modern workers, struggling to find that physiological balance called ‘health’, have been coming to the realization that they must abandon the notion of a specific ‘remedy’ to correct a specific ‘disease’. Many workers have accepted the idea that by the nature of a complex universe, no one school of therapy is adequate to deal with the complicated pattern ordinarily labelled ‘disease’, ‘ill health’ etc. Nevertheless most therapists tend to give their loyalty to some one method of approach – chemical, mechanical, physiological, etc., and while they render lip service to the notion that other schools have their ‘cures’, nevertheless their one particular ‘brand’ is ‘best’.

As an attitude this is readily understandable. It is after all our emotional drive, our enthusiasm, on which we have to depend when the going gets rough. For thousands of years our ancestors have operated on ‘good-bad’, ‘right-wrong’ dichotomies. As children we as a generation learned our loyalties in these terms – linear ideas – at one end God, the Sheep, and the Right (and of course, we were with the sheep and Clarence Day’s father at this end), and at the other end the Devil, the Goats, and the Wrong.

Looking at the known world in the second half of the twentieth century, we find with a shock that this simple two-dimensional linear approach conveys no adequate representation of our universe. The science of our century is disclosing our world as a multi-dimensional manifold. Pulling a thread from a many-colored complex tapestry gives us no guide to indicate [the] beauty of the design, nor does the simplicity of the linear two-dimensional ‘either-or’, ‘right-wrong’ approach of Aristotle enable us to recognize the universe in which we live, move and have our being.

Now this complex which we call ‘the universe’, ‘the world’ or ‘man’, as the occasion warrants, is to be understood at this period of our race history – apparently not in terms of a one-cause one-effect
I understand posture as the dynamic balance of the parts of the body, in space, in relation to the force of gravity, at any given moment, and for any given position. In other words, the posture at any given moment marks an equilibrium.

sequence but as an extraordinarily complicated interplay of balancing forces. To the modern mind, the notion of this type of interplay can be evoked best perhaps, by the words ‘process’ or ‘integration’. There may be other terms, but to me these are the two verbal symbols effectively suggesting the interplay of energies, which are not merely never-static, but are also so interrelated that a shift in the balance at any one point results in a changed relationship at all other points, or in words having a mechanical flavor, the application of energy at any given point results in changing stresses throughout the continuum.

We can profit by examining the world we call ‘man’ or ‘a man’ by the assumptions implicit in this symbolism, as appreciation of its interplays constitutes a very practical asset in the process of educating (in the apparently may be an extremely low level, characterized by an indefinite number of chemical, mechanical, or psychological imbalances, each imbalance existing to compensate for other stresses imposed by yet other imbalances. But this is what they are accustomed to – this is ‘Health’ to them. This is the level at which an adjustment ‘fixes’ the ‘something-that-went-wrong-with-my-back-when-I-woke-up-the-other-morning’, or when a dose of penicillin makes a throat pain-free. And it does restore them to this level of yesterday or of last month, without a doubt.

The 64-dollar question remains to be answered however. How does one get people to understand that there can be and is another level of functioning? What terms can be used to express that which is essentially non-verbal – that which is in, holding the head up – and in general adding mightily to the tension already present as an index of the strains within that organism. Personally I understand posture as the dynamic balance of the parts of the body, in space, in relation to the force of gravity, at any given moment, and for any given position. In other words, the posture at any given moment marks an equilibrium. This latter exists by virtue of the necessity with which the organism is faced, of moving its body masses and adapting them to the pull of the Earth which can be regarded as a constant. By the above description you will note that as I see it, there are many ‘postures’, posture 1, posture 2, etc., determined wholly by the relationships which exist between muscles, ligaments, tendons, bones, etc. – all the parts of the body which we regard as structural. There is however one set of relationships between these structural parts, approach to which permits greatest ease of movement and maximum effectiveness of functioning. This pattern includes effectiveness of reflex function, as well as the more direct lift which comes by removing interference with the movement of the viscera, etc. This might be called the point of ‘least effort’. It may also be called ‘Dynamic Posture’, or ‘Integrated Posture’.

Dynamic posture and its attendant well-being is the outward and visible evidence that certain relationships in terms of length and position of muscles, tendons, ligaments, etc. have been established. It is also incontrovertible evidence that in body movement, the fundamental functional design of the body is adhered to – specifically, the extensor muscles are lengthening, and the flexor muscles are contracting. This in turn permits extension of the spine, and consequent rehabilitation of the spinal structure, reconstruction of discs, etc. This is of course, another way of saying that it permits the elimination of the ‘chronic’ ‘recurrent’ lesion, which is chronic and recurrent of necessity by virtue of the inadequacies of the supporting muscular structure.

This level which we have chosen to call ‘dynamic posture’, in which the greater degree of energy exchange become so apparent – can be established by various methods. It occurs as the result of the establishment of a body movement more appropriate to the body structure (not to be confused with calisthenics). However, such training can be a long-drawn-out process. A quicker and simpler method
starts with the manual manipulation which removes the interfering restrictions, followed by a more positive training in body movement. It is to be noted that these changes made possible by manipulation are made permanent only by the pattern of formulated, not random, body movement, which often occur spontaneously, as the restrictions to movement are released. Actually these are the patterns of movement which occur naturally, spontaneously and unconsciously when restrictions are removed. The individual being processed merely 'lets it happen'. A noteworthy time relationship may also be observed in this connection. In practically all bodies which have not been subjected to drastic trauma, automobile accidents, polio, etc., the tenth hour of processing shows a fundamental change in the muscle tone of the body. This seems to be associated with re-establishing the tone of the extensor muscles. This in turn gives the person a sense of freedom and adequacy which is both lasting and far-reaching in its effects on the personality as a whole. For this reason it is advisable to have it understood that a ten-hour processing is essential for the real success of the method. Fortunately this ten-hour sequence may be spaced in any convenient fashion – completed in two weeks or two years. The latter arrangement is not particularly satisfactory – but only because humans apparently are unable to remember the level from which they have emerged, for anything more than a very short period. Therefore, when this sequence is dragged out over too long a period, the processee fails to realize how drastic a change has been made in his functioning.

Little has been said in the foregoing to indicate any ‘working conditions’ or working ‘Manual’ for attaining the ‘integrity’ we are talking about. A worker in Chiropractic or Osteopathy may be justified in wondering at this point, whether the technique for postural integration which is being advocated differs from the older methods in use in this country.

Actually, it does differ – and fundamentally – in the following basic particulars: (It is to be noted that the following discussion applies to the chronic and recurrent case)

1) Older techniques rely on specific local correction – even though such correction may be at the base of the spine, designed for (and effective in) lessening rotation. Postural Integration posits that through the adequate ‘stacking’ in space of the gross weight units of the body, the head, thorax, pelvis, legs, rather than by placing of individual vertebrae, the tensions of the muscular and ligamentous structures are relieved; the muscles and ligaments permitted to reconstruct, in accordance with the demands of the body. Thus the malalignment of the individual parts of the spine is automatically relieved without outside interference or specific correction. 2) The method of inducing the personal physical integrity known as Postural Integration claims that its results are permanent in the same sense that the process level of the individual is changed so fundamentally that reversion to the old level does not occur.

This change is self-perpetuating and self-generating when patterns of movement are established which are in accord with body structure. Specifically this means that feet must move on ankles ‘truly’ – that is, in accord with the structure of the ankle joint. Similarly knees, hips, wrists, elbows, shoulders, and all spinal vertebrae have their own requirements before ‘true’ functional movement is established. Essentially this requires that the muscles controlling the movement about the joint be balanced in length, position and tonicity. In most instances it also necessitates lengthening the body structure slightly thus permitting the joint greater freedom of movement. In effecting this, the body itself reconstructs and rehabilitates the cartilaginous structures, discs, etc. The improvement in metabolism started here quickly finds a reflection in improved tone of viscera, glands, etc.

The methodology known as postural integration can be summed up in one sentence: to get the muscle group nearer to where it ‘belongs’ – that is, nearer to the position required for efficiency in the particular movement which is its basic function – and to demand that the muscle group move in that position. Once this pattern is established it does not regress. Unfortunately, specific ‘how-to-do-it’ directions for attaining this end cannot be given verbally. Like many of the richer and more rewarding aspects of life, this technique is essentially non-verbal and requires experiencing. Fortunately, the ‘experiencing’ does not involve the sacrifice of too much time. Ten or twenty hours of processing is sufficient to establish the new muscle pattern and the changed metabolic patterns which maintain it indefinitely. Fortunately too, in experiencing the change in himself, a worker skilled in body processing suddenly finds himself realizing the deviations of the body with which he is dealing, and its needs suddenly seem simple and obvious. At this point the term ‘dynamic process integrity’ ceases to be a verbalism. Instead he realizes that no ‘correction’ will ever again satisfy him – that only by establishing an integrity of structure and functioning in the fellow human whom he serves, can his own goal be reached.

A Posture Quiz

• What does the word ‘posture’ mean to you?
• To what extent does this formulation of yours differ from that of your lay associates?
• What do the terms ‘dynamic posture’ or ‘posture of movement’ imply to you?
• In your opinion is posture, either static or dynamic, a function of the external body structure, skeletal structure, muscle structure only?
• What are your assumptions concerning a relationship between posture and physical tension or mental tension?
• To what extent can a posture be induced which will lessen physical tension? Do you know how to do this?
• Would you consider the expression ‘a state of permanent physical tension’ a significant description of inadequate posture?
• What do you understand by the term ‘muscular equilibrium’ (‘muscular balance’)?
• How can one induce a closer approach to ‘equilibrium’ between muscle groups?
• What subjective sensations characterize muscular equilibrium?
• What areas of human functioning are related by the term postural integration?

These will be the subjects of discussion at the meetings to be held at Cedar Rapids, Iowa – April 26th to May 10th, 1954.

Ida P. Rolf created the work that is now known as Rolfing Structural Integration and founded the Rolf Institute® (now the Dr. Ida Rolf Institute®) to carry on her work.
Deconstrusting ‘Dynamic Process Integrity’

By Szaja Charles Gottlieb, Certified Advanced Rolfer®

ABSTRACT The article examines and offers commentary on Dr. Rolf’s 1954 essay “Dynamic Process Integrity: Introducing Postural Integration,” noting that this may be Rolf’s first writing on what later became known as Rolfing® Structural Integration. Significantly, the author notes that Rolf viewed her work as both structural and movement work.

Editor’s Note: This article might be considered a follow-up to the ‘Gentry Notes’ published in the last issue (see articles published under the heading “Byron Gentry and the Early Recipe” in the March 2019 issue of this Journal). However, this article is based on early writing of Dr. Rolf – what may, in fact, be her very first writing. All quotations in this article come from the essay “Dynamic Process Integrity: Introducing Postural Integration,” which we include in this issue on page 85.

What words does one use to convey that there is a state of dynamic well-being that springs from operation on a dynamic level, where energy interchange can occur on the physical and muscular level without literally being blocked by the compensations which have occurred to keep the original distortions from destroying the body.

Dr. Ida Rolf

Perhaps it is my scholarly background, having, fifty years ago, been an eager academic historian . . . Or perhaps it is my even earlier experience of having attended Orthodox Jewish academies, where hours and days were spent analyzing Biblical scripture. Though the general consensus is that Rolfing® Structural Integration is an oral culture, learned and passed on through experience rather than through written instructions, I have to admit an affinity to text, concrete and fixed text, allowing a direct engagement with and a deep understanding of the written word and – perhaps most importantly – a window into the mind of an author, in this case, Dr. Ida Rolf. Textual analysis has the solidity of ground while oral culture sometimes drifts dangerously close to hearsay.

“Dynamic Process Integrity: Introducing Postural Integration” was written in 1954 as a handout for a class Rolf was teaching in the Midwest, attended by chiropractors including Byron Gentry. It is her first written statement, to the best of my knowledge, concerning the modality which she, at that time, referred to as Postural Integration. The title of the essay itself reveals a great deal, I believe, concerning Rolf’s state of mind in terms of the development of the work. There are two parts to the title: Dynamic Process Integrity, and then the subtitle, Introducing Postural Integration. It seems, at this point in her thinking, that she divided the state or condition to be
achieved and the method of achieving as two different nomenclatures (I would like to give credit to Jeff Linn for suggesting this). Thus “Dynamic Process Integrity” is the state or condition to be achieved as the result of the method she called “Postural Integration.” The later adoption of ‘Structural Integration’ ably combined both method and goal into one concept. It is perhaps significant to remember that the adoption of Structural Integration in the mid 1960s was achieved only after having entertained a variety of names, including ‘structural dynamics’ as well as ‘postural release’.

It is clear from the outset of the essay that Rolf is prepared to deal with large, daunting questions such as what is health (which is what she means when asserting the concept of Dynamic Process Integrity) and attempts to answer those questions in a novel way. She eschews the usual Western definition of health as being symptom free in favor of a definition that is system-based and multifactored, what we now refer to as holistic. Interestingly, her point of attack is the ‘either-or’, ‘right-wrong’ thinking of Aristotle and the overly simplistic linear approach of science that existed until the mid twentieth century. The complexity of life systems, she asserts, demands a different approach that balances all the elements symbolized by the concept of ‘man’. To this end she presents the concept of ‘homeostasis’ as not only applicable in the biochemical area but also in the mechanical, psychological, emotional, and energetic domains. Given that this other level of ‘health’ exists, she then asks rhetorically, “How does one get people to understand that there can be and is another level of functioning? What terms can be used to express that which is essentially non-verbal – that which is experiential?” One must note with a bit of humor that Rolf was vulnerable to the same difficulties of explaining her work as SI practitioners face sixty-some years later.

In the second half of the essay she answers her own rhetorical question. Given that the concept of posture marks, in her words, a “dynamic balance of the parts of the body,” the goal of her system is to create superior health by achieving “equilibrium.” While there are different concepts of posture in the general population, the concept of posture that she is presenting achieves a “patterning of the body . . . which permits the greatest ease of movement and maximum functioning of the body.” She refers to this as “Dynamic Posture” or “Integrated Posture.” She then makes the claim that a manual manipulation process that takes only ten to twenty hours, and includes movement education, can change postural patterns for a lifetime.

Perhaps the most interesting aspect of Rolf’s thinking at this time is the role of movement. As a practitioner I have always found the place of movement within the SI field to be unclear. Movement integration ostensibly seems like a secondary feature of integrating the ‘structure’ of a human body. However, this essay gives pause. In 1954 Rolf compares the results and the efficacy of Postural Integration not so much with chiropractic or osteopathy but with movement therapies. “This level which we have chosen to call ‘dynamic posture’, in which the greater degree of energy exchange comes so apparent – can be established by various methods. It occurs as the result of the establishment of a body movement more appropriate to body structures (not to be confused with calisthenics).”

Thus, the appropriate field of inquiry for the practitioner is movement, specifically, appropriate movement. Why undertake Postural Integration then? Because Postural Integration is superior to lengthy movement therapies because it includes physical manipulation of tissue, which helps achieve quicker results in terms of new patterning: “A quicker and simpler method starts with manual manipulation which removes the interfering restrictions, followed by a more positive training in body movement.”

Permanent change of patterns, however, comes about only if movement education is adequate. In a sense, physical manipulation creates only the potential for integrated function; only movement education can transform that potential to a lifelong pattern: “It is to be noted that these changes made possible by manipulation, are made permanent only by the pattern of formulated, not random, body movement, which often occur spontaneously, as the restrictions to movement are released.”

Further proof of the importance of movement can be found in her discussion of the time interval necessary for the ten-hour processing of an individual. Initially she claims that the series can be spaced out over any length of time. “Fortunately, this ten-hour sequence may be spaced in any convenient fashion – completed in two weeks or two years.” However, she quickly adds that prolonging a series over a two-year period would probably not deliver satisfactory results because humans are “unable to remember the level from which they have emerged, for anything but a short period of time.” In other words, without correct movement, the gains realized by the client from each session may be lost without movement awareness. As a practitioner and a reader, I can only conclude that Rolfing SI might be a misnomer that should be abandoned in favor of Rolfing Structural and Movement Integration.

Rolf then takes aim at the question of how her system differs from the older systems of chiropractic and osteopathy. She asserts two differences. First, the older techniques rely on local corrections whereas practitioners of Postural Integration approach problems by viewing the whole body. Thus spinal problems, for example, are approached by “adequate stacking in space of the gross weight units of the body, the head, thorax, pelvis, legs rather than by placing of individual vertebrae.” Second, the results of Postural Integration are permanent and that the change is so fundamental that “reversion to the old level does not occur.”

Rolf concludes that the method of Postural Integration can be summed up in one sentence: “to get the muscle group nearer to where it belongs.” This advice of course later evolved into the familiar Rolfing refrain of “Put it where it belongs and ask for movement.” She ends the essay once again affirming that learning Postural Integration cannot be done verbally in ‘how-to-do-it’ style: “This technique is essentially non-verbal and requires experiencing.”

From the ‘Gentry Notes’ published in the last (March 2019) issue of the Journal, one could see that many aspects of the ten-session series were still in a state of evolution in the early to mid 1950s, particularly a seventh session that did not yet address the head segment. This essay demonstrates, however, that the ideas and concepts fundamental to Rolfing SI were already well formed in 1954. I am still struck by Rolf’s comparison of Postural Integration with movement therapies, which reaffirms my belief that Rolfing SI should be considered as a movement therapy – just another consideration that makes our work distinct from other modalities.

Szaja Gottlieb is a Certified Advanced Rolfer living and working in San Luis Obispo, California. He is the Research/Science Editor for this Journal. He believes in the transformational power of SI.
Institute News

Ready to go deeper with SI work?

“It’s not how deep you go, it’s how you go deeper”  
Dr. Ida P. Rolf

Here are recent class updates available to bodyworkers and SI professionals who are looking to further their work and get qualified in Rolfing® Structural Integration (RSI) or Rolf Movement® Integration (RMI).

1. Path for SI practitioners to become Rolfers™: The Bylaws always allowed a practitioner to become a Rolfer through the Rolf Movement Certification process. The Board has added to that process the requirement that an SI practitioner takes the CE prerequisites and the Advanced Training as well. We invite SI practitioners to join us as members after they meet all of these requirements. This part of our commitment of holding to higher standards.

2. RMI Certification Intensive format launched in Boulder. Open to SI practitioners and Rolfers who have partially completed their Rolf Movement certification or who want to complete their certification in Rolf Movement over a shorter period of time.

3. Dr. Ida Rolf Institute® launched the “Art of Rolfing” classes, two- to five-day classes aimed at those interested in learning more about the longer Basic Training program.

Partnering with Veterans for Rewarding Career Change

DIRI recently reached out to 2,000 plus veterans in a national recruitment fair. We had seventy-five veterans join us in our chat room, and many interested in learning more about our program. DIRI has graduated quite a few veterans in both Rolfing SI and RMI and they all speak highly of both their career path and how Rolfing SI not only benefits their clients who are veterans but has also been instrumental in their own physical and emotional path forward. The DIRI Research Committee is working on compiling the research needed to include Rolfing SI on the Veteran’s Administration list of Integrative Health options. You can visit our veterans’ information page at http://www.veterans-rolf.org/

Championing Our Faculty and Graduates

In 2018 we invested in a rebranding effort for the first time in almost fifty years. It was an incredible opportunity to dive deep, reflect, refocus, and challenge what drives us to hold to higher standards. It is without question our skilled and passionate faculty, coupled with the caliber and enthusiasm of our graduates, that continue to ensure DIRI’s future is as rich and innovative as its past.
Contacts

Officers & Board of Directors
Richard Ennis (Western USA/Chairperson)
  bodwesternrep@rolf.org
Hubert Ritter (Europe/Treasurer)
  bodeuropeanrep@rolf.org
Libby Eason (Faculty)
  bodfaculty2rep@rolf.org
Larry Koliha (Faculty)
  bodfaculty1rep@rolf.org
Cospers Scafidi (Eastern USA)
  bodeasternrep@rolf.org
Greice Gobbi (International - Brazil/Canada/Japan)
  bodinternationalrep@rolf.org
Ines Hoffmann (At-Large-Brazil)
  bodatlarge2@rolf.org
Carole LaRochelle (At-Large-USA)
  bodatlarge1@rolf.org
Ritchie Mintz (Central & Mountain USA)
  bodcentralrep@rolf.org

Executive Committee
Richard Ennis
Hubert Ritter

Education Executive Committee
Russell Stolzoff, Chair
Carol Agneeessens
Tessy Brungardt
Larry Koliha
Meg Mauer
Kevin McCoy

Dr. Ida Rolf Institute®
5055 Chaparral Ct., Ste. 103
Boulder, CO 80301
+1-303 449-5903
(303) 449-5978 fax

www.rolf.org
info@rolf.org

Dr. Ida Rolf Institute Staff
Christina Howe
Executive Director/Chief Academic Officer
Stephanie Bradley
Director of Faculty & Student Services
Jeannine Lee
Clinic & Communications Coordinator
Mary Contreras
Director of Admissions & Recruitment
Pat Heckmann
Director of Operations & Systems Management
Samantha Shervin
Director of Financial Aid & Compliance

Educational Executive Committee
Russell Stolzoff, Chair
Carol Agneeessens
Tessy Brungardt
Larry Koliha
Meg Mauer
Kevin McCoy

Dr. Ida Rolf Institute®
5055 Chaparral Ct., Ste. 103
Boulder, CO 80301
+1-303 449-5903
(303) 449-5978 fax

www.rolf.org
info@rolf.org

Dr. Ida Rolf Institute Staff
Christina Howe
Executive Director/Chief Academic Officer
Stephanie Bradley
Director of Faculty & Student Services
Jeannine Lee
Clinic & Communications Coordinator
Mary Contreras
Director of Admissions & Recruitment
Pat Heckmann
Director of Operations & Systems Management
Samantha Shervin
Director of Financial Aid & Compliance

Australian Rolfing Association

Brazilian Rolfing Association
Dayane Paschoal, Administrator
Angela Lobo, President
Associação Brasileira de Rolfing - ABR
Rua Coronel Artur de Godói, 83
Brazil
+55-11-5574-5827
+55-11-5539-8075 fax
www.rolfing.com.br
rolfing@rolfing.com.br

European Rolfing Association e.V.
Sabine Klausner
Saarstrasse 5
80797 Munchen
Germany
+49-89 54 37 09 40
+49-89 54 37 09 42 fax

www.rolfing.org
info@rolfing.org

Japanese Rolfing Association
Yukiko Koakutsu, Foreign Liaison
Omotesando Plaza 5th Floor
5-17-2 Minami Aoyama
Minato-ku Tokyo, 107-0062
Japan

www.rolfing.or.jp
jra@rolfing.or.jp

Rolfing® Association of Canada
Beatrice Hollinshead
Suite 289, 17008 - 90 Ave
Edmonton, AB T5T 1L6
Canada
+1-416 804-5973
(905) 648-3743 fax

www.rolfingcanada.org
info@rolfingcanada.org