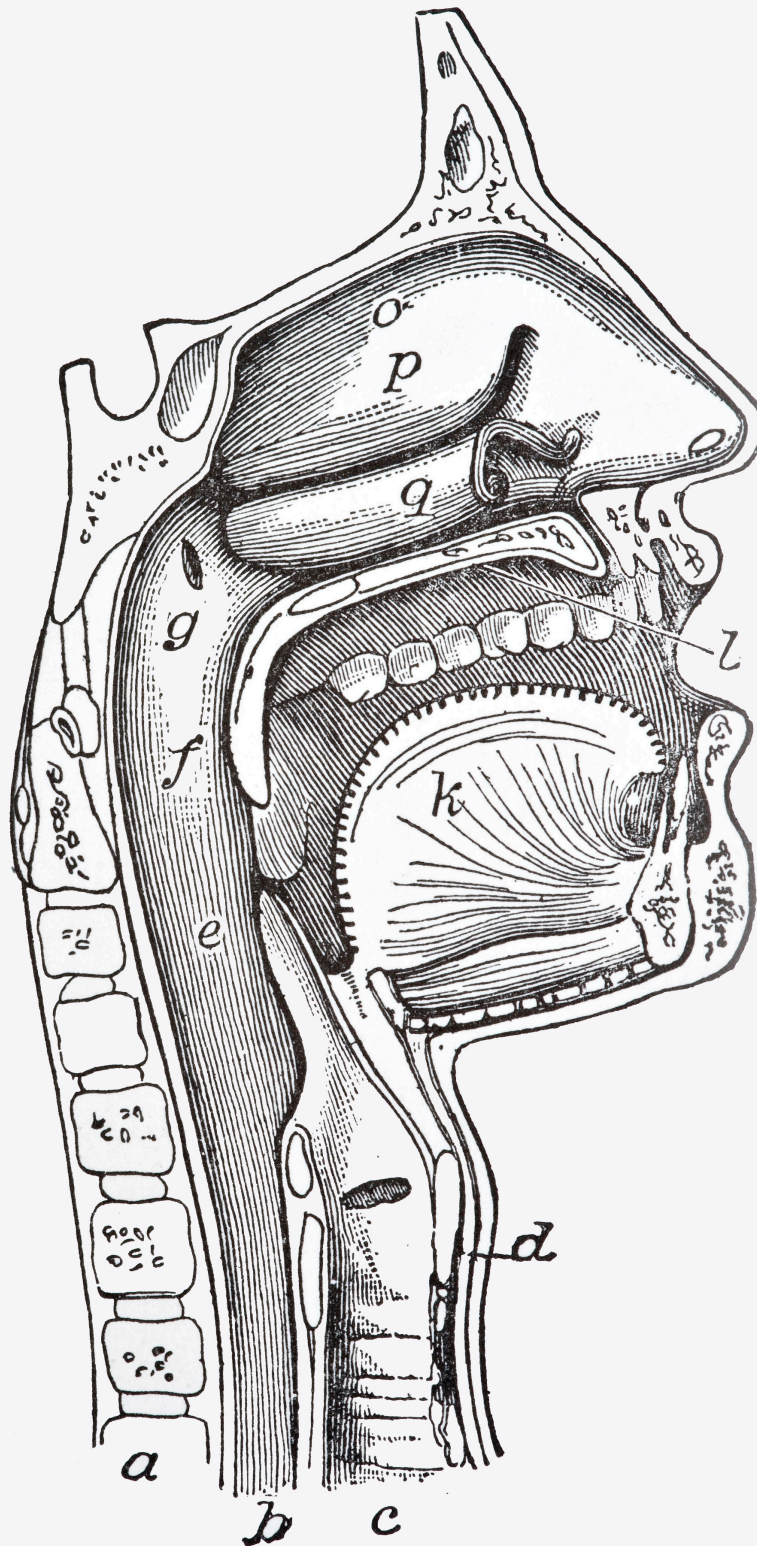


# STRUCTURAL INTEGRATION

THE JOURNAL OF THE ROLF INSTITUTE®

DECEMBER 2012





**STRUCTURAL INTEGRATION:  
THE JOURNAL OF  
THE ROLF INSTITUTE®**

December 2012  
Vol. 40, No. 2

**PUBLISHER**

The Rolf Institute of  
Structural Integration  
5055 Chaparral Ct., Ste. 103  
Boulder, CO 80301 USA  
(303) 449-5903  
(303) 449-5978 Fax  
(800) 530-8875

**EDITORIAL BOARD**

Craig Ellis  
Jazmine Fox-Stern  
Szaja Gottlieb  
Anne F. Hoff, Editor-in-Chief  
Kerry McKenna  
Linda Loggins  
Heidi Massa  
Meg Maurer  
Robert McWilliams, Managing Editor  
Deanna Melchynuk  
John Schewe

**LAYOUT AND  
GRAPHIC DESIGN**

Susan Winter

Articles in *Structural Integration: The Journal of The Rolf Institute®* represent the views and opinions of the authors and do not necessarily represent the official positions or teachings of the Rolf Institute of Structural Integration. The Rolf Institute reserves the right, in its sole and absolute discretion, to accept or reject any article for publication in *Structural Integration: The Journal of The Rolf Institute*.

*Structural Integration: The Journal of The Rolf Institute®* (USPS 0005-122, ISSN 1538-3784) is published by the Rolf Institute, 5055 Chaparral Ct., Ste. 103, Boulder, CO 80301. Postage paid at Boulder, Colorado. POSTMASTER: Send address changes to Structural Integration: The Journal of The Rolf Institute®, 5055 Chaparral Ct., Ste. 103, Boulder, CO 80301.

Copyright ©2012 Rolf Institute. All rights reserved. Duplication in whole or in part in any form is prohibited without written permission from the publisher.

"Rolfing®," "Rolf Movement®," and "Rolf®" are service marks of the Rolf Institute of Structural Integration.

**COLUMNS**

<i>Ask the Faculty: Traditional "Seventh-Hour" Work</i>	2
<i>Rolf Movement® Faculty Perspectives: Differentiating Categories of Embodiment</i>	3

**NOSE AND MOUTH CONSIDERATIONS**

<i>Cranial, Oral, and Nasal Work in Rolfing® SI: An Interview with Jim Asher</i> Derek Gill	6
<i>On the Nose</i> Dan Somers	11
<i>Craniofascial Structure: In Osteopathy, Dentistry, and Rolfing SI</i> Olixn Adams, Rebecca Griffiths, Anne Hoff	14

**THOUGHTS ON BREATHING**

<i>Breathing Through the Whole Body: Toward A New Functional Definition of The Line</i> Will Johnson	20
<i>Rolfing SI and the Buteyko Breathing Method</i> Robert Litman and Helen Luce	22
<i>Middendorf Breathexperience Work</i> Judith Mayanja	24
<i>The Breath That Breathes Us</i> Carol Agneessens	27

**PERSPECTIVES**

<i>Mental Health Is in the Body</i> Karl E. Humiston	32
<i>The Case Study Method: Year Two</i> Pedro Prado	33
<i>Rolfing SI and the Brain: An Interview with Kevin Frank</i> Sabine Weis	35
<i>Conceptual Housekeeping</i> Jeffrey Maitland	39
<i>An Excellent Adventure: Poster Presenting at the Fascia Research Congress</i> Karen Sallovitz	43
<i>Ida's Imprint Holds for Life: The Passing of Ed Jehebar</i> Anne F. Hoff	44

**REVIEWS**

<i>From Manual Evaluation to General Diagnosis</i>	45
<i>The Roots and Philosophy of Dynamic Manual Interface</i>	
<i>Visceral Vascular Manipulations</i>	
<i>Manual Therapy for the Prostate</i>	

**INSTITUTE NEWS**

48

**CONTACTS**

# Ask the Faculty

## Traditional “Seventh-Hour” Work

**Q:** I hear that some Rolfers™ no longer do traditional Seventh-Hour mouth and nose work. Some have dropped it, or changed the way they do it to a more craniosacral approach. Others do it in sessions besides the Seventh Hour. Can you discuss what you see as the current understanding of this work and its place in the Ten Series, post-ten work, and advanced work?

**A:** Sometimes, when doing a traditional Seventh Hour of a ten-session series, I look at the notes that I took as a student more than thirty years ago. And usually my attention gets drawn to a few details, mentioned by different teachers of the first generation and their implicit interpretation of Ida Rolf’s original vision. One detail is the emphasis put on the roof of the mouth and its relatedness to the rest of the cranium. Another detail is the attention that was paid to the various tensional patterns around the TMJ. And then, of course, I find quite a few details about nose work. I remember Emmett Hutchins stating that nose work is about stretching the membranes inside the sinuses while getting out of the nose. Getting out is the job to be done, getting in is just preparing it. I remember working in class with a model who was not able to breathe through the nose for eight years after a car accident. In my notes I find the description of the dramatic and elegant procedure that my teacher Jan Sultan suggested to get this case handled. We had to move the nose by “following” towards the more compressed side along the zygomatic arch – almost to the ear – to get inside, until tight membranes and compressed cartilage would let go at once, creating some very scary noises.

Today I believe that we were actually doing much more than opening the nose. We were, without being aware of it, releasing the whole relationship of the neurocranium to the viscerocranium in profound ways: on the level of myofascial and membranous tension, on the level of important nerve structures, and on the level of arterial supply.

If this is really true, we have to look more carefully both at our concept of the Seventh Hour and at the techniques we apply. We may go in and just “release tension” or just “put the head on” as we used to say. In doing that we will be successful, to a certain degree, with clients who are ruled by strong mesomorph-type tension all over. However, with people who are more fragile

or even hypermobile around the TMJ, a new avenue of detailed structural integration (SI) may open for our practice if we follow systemically significant details all the way down. It will help us to be aware that the inside of the mouth and the anterior part of the neck are, aside from the respiratory diaphragm, the most dynamic parts of the organism. And we may use these dynamics to open or stabilize patterns all the way down behind the sternum, or laterally all the way to the shoulders and arms.

How can we do that in practice? We may allow ourselves to be more selective with our items. Which of the traditional intra-oral techniques are effective, which ones are not? Which tests can help us? – tests concerning the TMJ function, the resilience inside the sinuses, and the tissues around the hyoid sling. And what kinds of choices are to be made according to our tests? Do we treat one TMJ only, or both, and when? And finally, when do we have to work directly by “stretching tissue” or stimulating mechanoreceptors? When do we work indirectly or in a combined way? Then, if we really want to change gears and follow up by going into the field of micromotion of the craniosacral concept, the larger field will be well-prepared.

**Peter Schwind, Ph.D.**  
**Advanced Rolfing® Instructor**

**A:** Personally I teach mouth and nose work in the basic Rolfing SI training as well as other concepts and techniques that designate the seventh session. I don’t think that a craniosacral approach can be a substitute. Craniosacral work is, in my understanding, a method and not a technique. Part of the territory overlaps, but concepts and goals are very different.

There are a lot of good reasons to work inside the mouth and nose when the client agrees to receive the specific work and when it is not painful. Again, it is not the only territory we cover in the seventh

hour, it is simply the most “strange.” It has happened to me that my model in class did not want any work inside the mouth or the nose, and I then did everything else in the session, reaching the goals of the Seventh Hour by other means.

**Pierpaola Volpones**  
**Rolfing & Rolf Movement® Instructor**

**A:** It’s understandable that Rolfers and Rolfing students sometimes find the Seventh-Hour work mysterious – some Rolfers might just stop doing all or part of it, asking themselves “What’s the point?” How does one see the results and how does one sell the client on its value?

Over the decades different views have been offered, which have led to further questions, such as: Are we attempting to shift the positions of the cranial bones? Are we doing a mini session of craniosacral therapy? How would fascial work on the scalp change posture? If it does, why? Questions can persist, literally, for decades.

We might also wonder: How do we sell someone on the idea that an entire session focused on the head is going to help with, for example, low back pain? How do we sell a “head” session after selling the notion that Rolfing SI is about shifting the connective-tissue matrix to help you stand up better? What would tiny bits of fascia on the surface of the skull have to do with that?

The Rolfing series ostensibly involves moving fascial cables to make the body stand up better. We apply pressure or deep strokes on the ribs or back or thigh and the story appears to make sense because we are working on things that segmentally move. Rolfers theoretically unglue these layers, and posture changes. But what cables are we un-gluing in the head, and why would that help? A legendary Rolfing teacher once said ironically, “We are pushing on the head to make it larger,” the implication being that it doesn’t logically make sense. Does pushing on the scalp make the head push back in a kind of rebound effect? (And how does a “larger” head help posture?) Attempts to use “body-as-soft-machine” thinking to explain the Seventh Hour ultimately stretch credulity. Magic thinking wears thin after a while, so this is a great question: “What are we up to here in session seven?” This question is useful since it prompts us to re-examine our assumptions and ask, for example, is fascial tissue really the thing we change? We do touch fascial tissue and it’s powerful.



Why? Why would we do intranasal work – is it fascia we are after there? If we find a plausible explanation for session seven, we might gain a better explanation for one through six! In order to re-imagine the value of the Seventh Hour we really need to re-imagine what we are trying to accomplish in all our work, and be clear about session seven when we do session one.

Where do we start? Almost everyone will agree that the point of the Ten Series is to achieve lasting improvements in the way a body responds to its environment. The healthy response to the normal demands of life is to meet them, and to grow a little longer as one does so. How do we evoke this healthy response in a body that has lost this capacity?

We can summarize our work as founded on the biological imperative to orient. The prime directive is: “don’t fall down.” To obey, the body must orient foundationally to up and down. We are restoring a person’s capacity to orient, and by orientation we mean the relationship of the body to its sources of information about location, its location to up and down, its locations throughout body structure, and to the immediacy of the potential for action and response in all directions surrounding the body. This point of view leads us inevitably to the role of work with the head. The head has many aspects involved with orientation starting with the inner ear and including the sense of hearing, seeing, smelling, and sensing with the tactile channels of the skull. These portals of perception are the stuff on which lengthening response depends. The head is, first and foremost, an instrument of orientation.

When we touch the fascia of the scalp, when we teach (hopefully long before session seven) the skillful purpose of eyes in orientation, when we differentiate the jaw girdle from the axis in the same manner we differentiate pelvic and shoulder girdles from axis, we are freeing the process of orientation to location from the dominance of image, idea, and effort. The orientation process is hungry to restore aliveness, aliveness that comes from contact with the space inside and around the head, and the sense of up and down. Our body system is set up to do this activity, and does so whether we pay attention or not. But Rolfing SI gets us to notice it. What Rolfing SI makes possible is a new relationship to a normally non-conscious process. When we touch scalp fascia, and when we teach

people to feel the potency of presence to the senses, postural integrity amplifies. We see it over and over while not necessarily crediting the primacy of orientation.

An orientation premise works best if we link it to work on all the other parts of the body as well. If we wait until session seven to make the pitch, it’s maybe a bit late. We can offer a narrative that makes the Seventh Hour a natural continuation of every session before. The function of the head and the orientation process can’t be left until session seven if we hope to enroll clients in taking an active interest in its potential. And after the work in our office is done, what can we offer so that clients can verify the experience over and over for themselves, so that finding length becomes a natural and un-efforted experience? We can teach our clients many self-care tips, to feel the location of the A/O, or the sense of extended axis that continues above the head and beyond the coccyx through ideokinesis. We can offer avenues to notice modes of eye gaze. We can teach clients to enliven the peri-personal space around the head by simply rolling the head slowly on the floor or a wall. We can offer breath and sound as tools to find internal dimensionality in the sinuses and the palate. We can teach clients to differentiate

the jaw and skull in simple exercises first accompanied by fascial touch in a session, but then practiced at home and ultimately in everyday situations until the head finds buoyancy and the jaw finds the support of the feet on the ground. We can begin in session one to introduce the relationship between orientation and breath. Breath is interwoven with orientation.

It’s a welcome relief to make friends with the Seventh Hour, to frame it in terms that can be explained and taught clearly and simply, at least as a practical foundation. [Considerations of inherent motion, tides, and intercranial lesions are valid and important topics of inquiry. But, as structural integrators, do we put our strongest foot forward or are we overreaching when we claim these phenomena are the basis for Seventh Hour work? Might a simpler and more provable explanation serve our students and public image more reliably?] Our work with head and jaw and even intra-nasal exploration can be grounded in modern science, linked to improved motor control, and congruent with structural integration as body-based education.

**Kevin Frank**  
**Rolf Movement Instructor**

## Rolf Movement® Faculty Perspectives

### *Differentiating Categories of Embodiment: An Educational Rationale for Rolf Movement Integration within Rolfing® SI*

**By Kevin Frank, Certified Advanced Rolfer™, Rolf Movement Instructor**

Embodiment is intrinsic to structural integration (SI). SI depends on a practitioner’s learned capacity to experience, demonstrate, speak about, and work from a personal embodiment of Dr. Rolf’s work. A practitioner learns to empathically “see” another person’s body process; but we learn to see primarily through what we know in our own body – embodiment. Seeing depends on one’s own differentiated body awareness. Our awareness becomes differentiated as our body awakens to more and more of its

full range of inherent capacity to move, sense, and meet challenge. Embodiment is a lifelong inquiry into inherent body movement intelligence.

Embodiment, for purposes of SI, means a set of developed skills of awareness and coordination: skills for conscious awareness of perceived phenomena and, at the same time, acquired non-conscious capacities to perceive and respond skillfully. What kinds of skills are involved? SI training is built around specific skills of body learning that were synthesized and assembled by

Rolf as a particular gestalt. Rolf defined SI by certain hallmarks of function – these hallmarks are part of what offers contrast to other forms of body and psychological therapy. In any tradition though, it is through depth of embodiment that we contact the limitless nature of somatic inquiry. Historically, the Rolf Movement faculty has been the group at the Rolf Institute® most focused on curricula that support skills of embodiment aside from fascial mobilization.

## Keen's Discussion of Embodiment

Rolf Movement training is becoming better documented and defined; the time is ripe for more precise descriptions of this elusive term, “embodiment.” Roling SI and Rolf Movement Instructor Lael Keen has contributed significantly to this task. Keen offers eight components of embodiment intrinsic to Roling SI in her 2009 article on the subject.<sup>1</sup> She highlights the following qualities: presence; palintonicity; contralateral movement; responsiveness, lightness, and fluidity; dynamic balance; grace; and optimal relationship with gravity. Keen's article elaborates on each quality to illustrate what we aim to evoke in SI.

Keen's hallmarks of function reflect decades of evolution in the SI field and, at the same time, ring true to Rolf's original vision. In terms of Rolf Movement education, a next step is to ask the question: how do we categorize embodiment? How do we sort the dimensions of embodiment that inhabit the lessons we teach? How do we link them to physiology?

The purpose of this article is to differentiate underpinnings to integrated function in gravity so we may further ground the abstraction “embodiment.” When we categorize forms of embodiment, we offer students specificity to their learning process – what skills are explicit to their development and what leads to depth in the work. We make the process less mysterious. What we cannot do is make the process quick and easy. By any name, embodiment takes practice.

## Embodiment Seen in Terms of Brain Maps of Body Function

Physiologically, embodiment, both conscious and non-conscious, is conveniently linked to a scientific model:

differentiated sensory and motor maps in the brain. Greater embodiment means more differentiation in the brain's maps of sensory and motor processes. Maps in the brain are not literally pictorial maps in the way we think of, say, road maps. “Brain maps” is a neuroscience term for the brain's organization of learned coordinative and perceptual patterns, like musical scripts that the brain can play. These routines, once learned and practiced, are called upon for whatever purpose the brain/body is asked to play. Whenever the terms “map” or “maps” are used in this article, it is the sensory and motor brain maps that are being referred to.

While brain maps are not pictorial maps, the metaphor helps explain the differentiation of these terms. A paper road map that covers an entire continent can't show the smaller, back roads. If we make the map huge, though, we magnify the scale. Our map of the continent could become the size of a soccer field and those tiny little roads would show up and be easy to read. The more tiny roads and hamlets on the map, the more it has been *differentiated*. A large thing is broken down into fine distinctions between one thing (location) and another. In the brain, the more that tiny things are distinct and defined and the more connections between points, the more differentiated the sensory and motor maps are, and the more refined and skillful the movement – a hallmark of SI.

Maps exist mostly below the level of conscious awareness. However, we witness our mapping when we feel the quality of our body movements and how we respond to circumstance. We feel the “movement brain” make choices faster than we can think about doing so, and more skillfully than we can control with thought. When you tie your shoes or flip a pancake, there are hosts of maps operating automatically. Maps that allow shoe tying or pancake flipping are fundamentally similar to maps that cause us to stand upright in gravity or walk down the street. Maps offer a way to explain the power of SI.

To build new maps, maps that lead to SI, we can describe categories of learning: new maps and improved maps represent learning. This type of learning is embodiment.

Models, of course, are not the thing itself. So it is with models of sensory function and motor control. The list below artificially

divides embodiment into categories of body process that we can think about separately. It is an approximation. The body doesn't work in divided categories, but we think and talk this way. The list assists us in organizing our thinking about different parts of a course or training. The list categorizes parts of the learning process so students have another overview of what they are learning; it's a chance to notice which body processes are skillfully embodied and which ones are less so.

## Seven Categories of Embodiment

Why seven categories? There is nothing magic about this number. It is a starting point from which we may consider additional categories in the future. This list attempts to include important perceptual and coordinative processes for which SI has a relevant contribution. The descriptions are necessarily brief. The larger story behind each category of embodiment constitutes the content of other articles, as well as courses taught as part of the Rolf Movement certification program. The overlapping nature of these components and their natural interrelationship are left for future discussions.

We begin at the body process that is the foundation for consciousness and movement organization – orientation.

1. **Orientation Embodiment:** Orientation is, for mammals (including people), a biological imperative that begins with orientation to up and down. “Orientation embodiment” means a capacity to draw on orientation as a resource for meeting demand. To be clear: in order to read and think about the words in front of you right now, you are necessarily oriented. It's automatic. It functions in the background for every minimally functional person. Part of embodiment, though, involves a deliberate and conscious awareness of the orientation process: for example, we can learn to be aware of our orientation to weight, and orientation to space and distance. We can learn to perceive a spectrum of ways for arousing orientation response to establish security at a sensorimotor level. We return over and over to gravity orientation, experienced as the foundation for all other forms of orientation. Orientation embodiment includes a capacity to feel differentiation between orientation to

“where” and orientation to “what” – that is, between orientation that locates us at a sensorimotor level versus orientation that lives in thought. Understanding of the relationship between where and what is fundamental to the SI process.<sup>2</sup>

#### *Body Perceptive Processes:*

2. **Interoceptive Embodiment:** What is interoception? Clare Fowler, in the journal *Brain*, states, “As originally defined interoception encompassed just visceral sensations but now the term is used to include the physiological condition of the entire body and the ability of visceral afferent information to reach [conscious] awareness and affect behaviour, either directly or indirectly. The system of interoception as a whole constitutes “the material me” and relates to how we perceive feelings from our bodies that determine our mood, sense of well-being and emotions.”<sup>3</sup> This comment is apt. Interoception is a concept that has evolved and now provides structural integrators with a way to describe how felt sense affects function and posture. It’s a definable skill: to differentiate interoceptive information and integrate it into life. Interoception embodiment includes capacity to find a sense of the internal volume and density in the body and to arouse and enhance an experience of body volume. It includes a capacity to sense and enhance the experience of body containment with a feeling of what Hubert Godard calls “body envelope,” which he links to Jacques Lacan’s first (real) body image.<sup>4</sup> Interoceptive embodiment includes a capacity to interpret conscious interoceptive awareness as felt sense, and link it to emotion, resource, and security. Interoception includes the manner in which we perceive and interpret pain. As in the case of other forms of body information, and as the above quote points out, non-conscious interoceptive signals abound. In SI, it is the portions of these types of signals that we notice consciously that are the most relevant for learning. Non-conscious processes develop in response to what we learn consciously.

3. **Proprioceptive Embodiment:** Proprioception, like interoception, has shifted in definition over the past decades, but a modern working definition includes how the body consciously differentiates shifts in body position,

shape, movement, and relationship to gravity through stretch receptors and vestibular function. Healthy proprioceptive embodiment means that proprioception is given a chance to do its job; meaning that proprioception is not eclipsed by image-based efforts – images of performance or learned patterns of fear and compensation. Conscious proprioception can be a way of restoring body intelligence so efforts and images can release. Proprioceptive embodiment education includes the fascial mobilization component of SI as well as instruction in experiential anatomy, and other means that provoke or refresh a differentiated experience of the physical body.

4. **Exteroceptive Embodiment:** Exteroception concerns one’s position in gravity and space like proprioception, but references the world “outside” the body boundary, using the eyes, ears, and skin. Exteroceptive embodiment includes a capacity to sense the world as a differentiated moving event – an event that I reach to touch with my being, and (when coupled with orientation to weight) is an event that holds me and touches my being. Exteroception is another source of basic body security. It is prominent when we observe the use of the eyes. Eyes can integrate with proprioception or can interrupt proprioception; this issue is central to SI. Palintonicity can be viewed as proprioceptive awareness of weight or the down direction, coupled with exteroceptive awareness of space or up direction.

#### *Body Coordinative Processes:*

5. **Agency Body/Coordination Embodiment:** As human beings there is a being aspect and a doing aspect. “Agency body”<sup>5,6</sup> refers to the embodiment of functional (and optimal) coordination to meet physical or psychological demand of the moment. In SI the term helps clarify the idea that integration means helping people be effective in life. Agency also means in the SI aesthetic that we might not even feel like the doer but rather we can witness as effective doing happens. “Stabilization embodiment” is a specific embodiment that falls within the agency-body category. Stabilization is interwoven with all other aspects of posture in the SI process. Stabilization embodiment, when named, helps to

define an essential quality that underlies hallmarks of integrated function: stabilization of the spine for hip flexion is one example; another is freedom of the axis from the girdles – many of the hallmarks of our work are examples of appropriate stabilization. Stabilization embodiment means the capacity to draw on all forms of embodiment to meet the broad spectrum of demands thrown at us with and without warning – how we meet the demands of the moment. In SI the capacity to meet demand means one can feel the body lengthen and find spaciousness rather than contract as one meets demand. It is a capacity to respond with primary stabilizer muscles before secondary, and secondary before tertiary, as demand escalates; also included is the capacity to perform action with reduced effort.

6. **Levels of Abstraction Embodiment:** This is the capacity to navigate skillfully between thought and sensation, and skill to navigate toward lesser or greater degrees of abstraction in language and self awareness. Rolf’s work was influenced by Alfred Korzybski and his theory of general semantics,<sup>7</sup> a view that sees language use as a common limiter for all dimensions of human experience. Derived from Korzybski is the work of J. Samuel Bois who builds on Korzybski’s thesis and presents a more accessible story about how our use of language and thought structures experience so fundamentally as to render human beings captive to the unexamined use of language. In his book *The Art of Awareness*, Bois shows us how we can learn to navigate between degrees of abstracted experience, with pure sensory awareness being the least abstracted “knowing” we can identify.<sup>8</sup> For SI a fundamental issue is how language and thought patterns reinforce faulty motor control. Rolf Movement makes the case that when students gain basic skill in distinguishing sensory information from inference *about* sensation, other aspects of embodiment are easier to learn. Coupled with direct experience of sense perception, it’s helpful for students to learn to name sensation, to deepen an experience with words, and, at the same time, not lose direct observation. Peter Levine’s Somatic Experiencing® training works similarly but focuses on the treatment of shock/trauma. SI is facilitated through practice in shifting between words of



low abstraction and words that are more loaded with meaning, inferential and/or abstracted from primary experience. With practice, sensory experience is more easily observed in oneself and others, which, in turn, makes it easier to teach embodiment to clients and students.

7. **Autonomic Embodiment:** Autonomic nervous system activity gets studied medically and academically; in SI one learns to discern the cycles of sympathetic and parasympathetic arousal in one's own body. One learns to feel how these "involuntary" bodily responses are, in fact, like posture, plastic and susceptible to choices in mindfulness, movement, and expression. SI includes an embodiment of the capacity to regulate based on learned ability to notice changes of autonomic state in oneself and others and to have practiced ability to meet each of those states with resource and spacious, timeless presence.

## Further Notes on Mapping

The body, the sensorimotor brain of the body, cannot, and does not, think of itself as a body. That is an idea that we imagine; it is a cognitive idea rather than a physiological fact. The idea of a body is an abstraction. To the extent that the body "thinks," functions at a physiological level, it does

so in reference to the perceived potential for movement. The brain has evolved as a tool for predicting and responding to movement. The mission of the brain is to map the space in which action can occur and action involves the body and the space available to the body equally and without preference. In other words the body and its surrounding space are all the territory, the matrix for action, and inasmuch, the brain maps the "action space."<sup>9</sup> SI is a field engaged in a multidimensional approach to mapping the action space – the dimensions of body, both conscious and unconscious, as they apply to all actions of perception, gesture, body movement, stabilization, regulation. SI is the territory of introducing the various dimensions of embodiment in a titrated manner for lasting improvement of human potential.

## Endnotes

1. Keen, Lael Katherine, "Embodiment and Grace." *Structural Integration: The Journal of the Rolf Institute*, December 2009, pg. 25.
2. Frank, Kevin, "Body as a Movement System". *Structural Integration: The Journal of the Rolf Institute*, June 2008.
3. Fowler, Clare J., "Visceral Sensory Neuroscience: Interoception." *Brain* (2003) Vol. 126 (Issue 6), pp. 1505-1506. Available online at <http://brain.oxfordjournals.org/content/126/6/1505>.

4. Author's notes from a class lecture by Hubert Godard. Godard cites the work of French psychoanalyst Didier Anzieu, author of *Le Moi-peau* (Paris: Dunod, 1985), as an influence that led to his use of the term.

5. Godard has taken up the usage of "agency body" as it has become common in neuroscience work.

6. Schwabe, L., and O. Blanke, "Cognitive neuroscience of ownership and agency." In *Consciousness and Cognition*, Volume 16, Issue 3, September 2007, pp. 661-666.

7. Korzybski, Alfred, *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*. Lakeville, CT: The International Non-Aristotelian Library Publishing Co., 1948.

8. Bois, J. Samuel, *The Art of Awareness*. Dubuque, IA: Wm. C. Brown Co., 1978.

9. Godard drew most directly on Rizzolatti as inspiration [G. Rizzolatti and C. Sinigaglia, *So quel che fai* (Milan: Raffaello Cortina Editore, 2006)] to bring this term into usage, derived from Rizzolatti's phrase *spazio per l'azione*. The idea derives also from Poincaré [see H. Poincaré, *The Value of Science* (New York: Dover Publications, 1905/1958)].

# Cranial, Oral, and Nasal Work in Rolfing® SI: An Interview with Jim Asher

By Derek Gill, Certified Advanced Rolfer™

**Derek Gill:** The story is told that Dr. Rolf gave you a mandate to go off and study cranial work with various osteopaths to bring that knowledge back to the Rolfing [Structural Integration (SI)] community.

**Jim Asher:** Yes. It started out when I was in a Rolfing class with Ida in the Florida Keys in 1971. In those days we didn't have a Unit I, and some people didn't have their anatomy down – they had done a college course, but hadn't gotten a lot of gross anatomy. Ida asked me to do an anatomy

class in the evening, so I was teaching them. Dr. Rolf had her copy of *The Cranial Bowl*<sup>1</sup> by Dr. Sutherland with her and asked me if I would give a little talk on it. As I read it, I was fascinated by the whole idea of everything moving – bones, membranes, fluids in sync, everything moving inside of us. I had seen references to this, I understood the anatomy, but it was hard to picture it all happening together. Dr. Rolf gave a lecture on it herself after I had briefly gone over the anatomy, and she told the class, "if you want to learn this, the place to learn it is

from the osteopaths." Ida had studied with Dr. Sutherland and her osteopathic friends, but she didn't feel it was her place to teach cranial work. In the late '60s and early '70s, Rolfing [SI] was really unknown – there were like fifteen or sixteen Rolfers in the world, and she was hoping that Rolfers would hook up with osteopaths and work in their offices. So, she didn't want to be teaching the craniosacral work and have the osteopaths thinking that she was treading on their territory. She knew Dr. Sutherland, and she had an incredible cranial skill.

So I went off to an osteopath Ida knew in St. Petersburg, Florida, a Dr. Kimberly, and had some sessions with him. I started reading the cranial textbooks – *The Cranial Bowl*, Dr. Magoun's *Osteopathy in the Cranial Field*,<sup>2</sup> etc. There were also articles written by osteopaths on cranial work relating to the "core" work we were doing. This helped in understanding that the respiratory diaphragm and thoracic inlet/outlet are part



of the core, thanks to a handout Ida gave the class about the core, "The Line," and the three diaphragms. Because I had done my homework, some osteopaths would teach me a few of their skills. At that time, there wasn't a lot of outside interest. Cranial work was seen almost as an occult thing. Most osteopaths did standard osteopathic spinal manipulations, but not a lot of cranial work. So that's how I got started.

**DG:** So, was it more your own curiosity, or did she actually ask you to go out and gather a body of work that other Rolfers could use?

**JA:** Well, both. Dr. Rolf would encourage us to explore cranial osteopathy, among other things, like homeopathy. She asked me to do some in-depth research into the cranial field to bring back to the group. In 1971 we brought Dr. Rolf to Florida for a series of lectures and Roling demos at The University of Miami, Florida Atlantic University, the Southern Dental Association, and several "growth centers," all of which were attended by various osteopaths. She introduced me to an M.D. from Stanford, Dr. Will McDonald – a brilliant guy. He did cranial work and Roling [SI]. She asked him how much Roling [work] he'd done and he said "not much." He didn't like putting pressure on his fingers because it then became harder for him to feel the cranial work in his fingers. I talked with him and he piqued my interest. Dr. Rolf suggested I learn cranial work from him, especially since he also did Roling [SI] with the cranial work.

At the same time Jan Davis was in class with me. Ida mentioned that she might want to explore this too. So Jan, who was also a doctor, went off and made friends with this osteopath and took some cranial classes. She steered me to some classes I might not have found out about otherwise. In those days osteopaths would show you a few things, but it was hard to get into their classes. You could find some that would spend half a day or maybe a full day with you, but that was all. So Jan had taken some formal classes and then she helped me meet some osteopaths who were more open to teaching.

In those days we used to travel around a lot. I used to drive from Florida to Colorado and sometimes I would stop in Texas. One time I got a treatment from Dr. Core, an osteopath in Dallas. I would always bring along my skull that was held together by wire [Editor's note: an "exploded" or Beauchene skull], and he showed me a few things. In the early days, if you showed them you had a

serious interest in learning, by having a skull, then they would show you some things. A few years later I studied with an osteopath named Dr. Fulford in Tucson, Arizona. At first he was really closed and stared at me almost like I was a communist or something. I was pretty serious and brought in all these fascial studies. I had slides and slides of fascia [dissections] that Ron [Thompson] and Louis [Schultz] and I had done. I said "I want to show you my research." Then I showed him my skull and he said "well you take this seriously, don't you!" and I said "yes, sir." So he started showing me some things and let me in to a class or two with him. I found that that was the best way to study with people who had been doing it for a really long time – with people who were like seventy or eighty – you had to show them you were serious first, not just that you were going to read the book and then practice.

Luckily, here in Denver we had Dr. Magoun who wrote *Osteopathy in the Cranial Field*. I had a treatment with him, and then with his son, who recently passed away. Dr. Magoun had known Dr. Sutherland and he didn't like talking much. He did these amazing treatments, and just by going in there and getting them done on yourself you could start intuiting or feeling his way of doing things. I would go to a lot of different people who had been trained quite a while ago and get a couple of sessions from them and feel their style. Each person was slightly different – almost like a different language in a way. People might be doing a very similar thing, but have some differences of style. I studied with a guy in Tucson once in a while, Herman Myers, I believe his name was. He didn't do much cranial work, mostly some other form of osteopathy. He also taught there and he had a nice way of describing the work. I read a lot of books, too. I was really interested in the anatomy of it all, of the membranes, and how they move.

**DG:** Do you know where Dr. Rolf learned her cranial work?

**JA:** In her early days in New York, Ida was asked to work on a child, a young boy in the neighborhood. He was dragging his feet and she said his legs weren't working too well. She worked on him and he looked better, his legs were looking better. It turned out his father was an osteopath, though Ida didn't know this as the mother had called her up. He asked if he could come over and watch, which he did. He really liked what she was doing and he brought over another friend to watch. The second guy couldn't see much

going on and didn't think much of it. The first guy got intrigued by it and he invited her to go to some of the classes that he was taking with Sutherland. So, she started taking some classes with Dr. Sutherland. There were one or two people who'd ask "Who are you?" because she wasn't an osteopath, though she had a Ph.D. in biochemistry. She joked that she was the other doctor's secretary, though he didn't really treat her like a secretary. You have to remember that in the early days, like in the thirties or forties, there was just a small group of people you might refer to as hands-on healers or manipulators, or however you want to phrase it. So there weren't a lot of cranial osteopaths – there weren't a lot of osteopaths, period. They didn't have many schools then and only a small group of them were doing the cranial work. It was more like an open forum. They weren't holding it close to their chest; everybody was like "What do you do for this?" or, "How does what you do help?"

There was a lot of openness in those days, like when Dr. Rolf became good friends with a chiropractor named Byron Gentry who took her class. Byron had a very energetic approach. He could actually read [people] at a distance, so you could call him up and describe someone over the phone and he could tell you what to do. Ida had a lot of psychic friends, and a lot of, in a way, mystical friends. She had friends who were M.D.s. Did you know she was friends with Jonas Salk [the developer of the Salk polio vaccine]? She also knew Dr. Krebs, the guy who discovered the Krebs cycle. She introduced me to both of them: Dr. Krebs once in Miami, and Dr. Salk in California. Dr. Salk really liked Roling [SI]. He'd had a number of Roling sessions himself and encouraged Michael Baker, Ph.D., who worked with Dr. Salk, to study Roling [SI].

In the early days, when Dr. Rolf was developing Roling [SI], before she started teaching it, she was trading ideas with other people, including osteopaths. She worked with a blind osteopath in her hometown – I think it was New Rochelle, New York. She took two years off, after her husband died, to help her boys get settled into school. During the day while Dick and Alan were in school, she would go over to his office and read to him, because his books weren't in Braille. They would discuss them and then he'd work on her and she'd work on him.

**DG:** Did she ever integrate cranial work into her sessions and demos during trainings?

**JA:** Yes, sometimes. I remember once, when we were in Vero Beach, Florida, doing a public demonstration, and she picked out this lady for a demonstration of the First Hour. She was a local politician. She had distinctive facial features; her face had a little asymmetry to it. Ida did a First Hour where she worked on her shoulder girdle and got the breathing to open up. Ida would always get the breathing to open so people could see that. Usually, she'd do one side and let the person feel into that side. She said, "Well, we're going to get up in the head for a minute," and she did a little neck work, and then did a frontal lift. She then had her stand up and it was amazing to see not only that her breathing was better, but also that her posture was a little better. Ida would always get your "Line" a little better, so when you stood up you just looked longer, more open. With this lady, her face changed a lot. Everybody was like, "Wow, look at that." So after they saw that, everybody wanted a frontal lift! It's like a frontal-ethmoid release. When she was teaching a Seventh Hour, she'd frequently talk about the ethmoid. One class, oh, in '71, she had us work on the temporal fascia. She would say, "When you get in there, just lift it lightly, like you're lifting the parietal bones." Her whole idea was that when you're in that temporal fascia, you weren't trying to crush the head or work as deep as you could dig. She wanted you to visualize that as you're lifting that fascia the parietal bone would lift up too. So she would have you visualize the frontal and the ethmoid bones releasing.

**DG:** When she was doing a demo in a class, did she make a distinction between cranial work and Rolwing [SI]?

**JA:** No. Her Seventh-Hour sessions fit into the Recipe that she was trying to teach. She never got way off in the cranial work because she didn't want to pull away from the Rolwing work. She would do some neck work and she'd do a little work on the sternum and the manubrium to get the breathing to open. She felt she just wanted to make sure the breathing and the thoracic inlet were open. Every session she did was a little different, so even though she had a "recipe," her sessions weren't all the same. She had a similar rhythm to them, though. Like in the Fourth Hour, she would always do some adductor work – she'd try to create a midline – but she didn't do each person the same way.

Then I started bringing in my skull. I had a half-skull when I first started with her, and she said, "That's really nice! Where'd

you get it?" She talked about the Beauchene skull, so the next time I saw her, I had gotten one; all the bones will separate but are held together with wires. There was a woman named Connie, a student, and her husband was an osteopath who did cranial work. Connie freaked out a bit and said, "Oh, you can't have that skull! My husband's wanted one all his life! That's all he talks about is having one of these." I didn't realize it at the time, but there's a picture of Dr. Sutherland in one of the books, I believe the Magoun text, where he is holding a Beauchene skull in the photograph. Connie's husband couldn't believe that a mere Rolfer had this skull and he didn't. The whole class was trying to buy it from me. I wound up ordering a second one and when I got it, I sold Connie the one I had. Anyway, I brought it to the class and pointed out the sutures – Dr. Rolf thought it important that everyone know the sutures. Then she discussed how the dural tube connected the cranial membranes to the sacrum and about the movement of the cerebrospinal fluid.

When Ida worked in the head, she didn't use a lot of pressure. She did not have the smallest little finger in the world, so when she'd go in to someone's nose, they'd feel a big shift in there. She didn't go way in – she'd get in just enough to shift things a little bit. A lot of people can't breathe through the nose, so she'd go in a little and make sure they could. Her mouth work was very profound, she'd get big changes. She worked under my tongue once – I could feel it release down through my throat and into my lungs. She didn't want to get way off into something else, though. She also didn't want the osteopaths to perceive that she was teaching cranial work. She'd indicate that osteopaths teach this, and that that was the best place to go learn it. Like I said, she kept encouraging us to make friends with osteopaths. Perhaps we could work in their offices, or have an office next to theirs. She thought that would make us grow, and also bring us inside the medical umbrella. She thought it would be a good fit.

**DG:** You mentioned that in her nose work, she didn't go all the way in. Did she talk about going into the three conchae?

**JA:** Yes. She'd say there are three conchae in there, and that the goal is to get them open. She'd say, "You do what you can do." Sometimes she would just get into the bottom one, which is the largest. She'd have you look at your anatomy book, and she wanted you to visualize those three

conchae opening. Ida was a big believer in visualization. You visualized what's underneath the skin and the connections [while you were working on it]. When you're doing the sacrum, you're visualizing the dural tube and all the way up, feeling up through the body.

**DG:** Did she ever mention any esoteric reasons for doing the nose work, like doing a Rolwing session on the brain or opening the third eye, or anything like that?

**JA:** Yes. She would have you visualize the pituitary gland, say "You're affecting the pituitary gland." She was especially interested in the pituitary. Sometimes she would talk about the third ventricle as well.

**DG:** So, I have another question about the seventh hour. Many Rolfers have abandoned the nose work these days. I've heard them say that they use a frontal and ethmoid lift, cranial techniques, and that this somehow accomplishes the same results as the nose work. How do you think Dr. Rolf would respond to this assertion?

**JA:** I think she would say that they both get a result, but they wouldn't be the same result. Ida never felt like she was doing the *only* thing. She knew there were other ways to go about getting things done. She had good friends who were chiropractors and osteopaths and she felt like they did great work. She would refer you to certain [ones]. She knew how to work the vomer and the ethmoid and the frontal – I've seen her do a frontal-ethmoid release. When she was inside, you could feel her moving your vomer or maxilla. Or the hyoid – you can move the hyoid from the outside, but if you get that bottom part of the tongue to let go, if it's tight, the hyoid moves in a much freer way than if you just wiggle it back and forth or even unwind it. So, Ida felt like they both got a result, but they got different results. Ida didn't spend much time in the nose – it wasn't a long thing. She would go in both sides and get out, then balance around it.

**DG:** Do you think there is something missing from a Rolwing [SI] standpoint if the nose work goes away and is replaced by more gentle cranial techniques?

**JA:** Yeah, I think so. I've had people come in who have had this or that done and they say, "I just need a good, old-fashioned finger in my nose." I've had people come in and request it – those who have had the nose work and have had really good cranial work. I have one client whose grandmother does cranial work, and he has a number of really



good cranial people he goes to and he feels that sometimes his nose is just not opening properly. I had a couple come in recently with their son and they said that he wasn't breathing through his nose and they were thinking about an operation. So, during the first session all three of them were in the room and I pulled out a skull and was explaining to them what I was going to do. I did the outer work and then told the boy I was going into his mouth and wiggle this bone in there. When we finished the mom asked me, "Well, can you fix him and in how many sessions?" I told her that I didn't know and she says, "Well, the surgeon wants to do a surgery and you didn't do the nose!" I said, "Well, no, I just met your son and I'm not going into his nose twenty minutes after meeting him." He was just an eight year old kid. I said, "We don't go right into the nose – we go in the nose if it's appropriate." They had been going around getting opinions, so finally I gave her the names of three different osteopaths because I couldn't tell them how many sessions it would take to get him breathing properly. I felt like they really wanted someone with medical credentials. I don't know how they got the idea that I was going into her son's nose. I never even brought it up. We might do that, but here it was not appropriate. Their son was a mouth breather and they were worried about it.

**DG:** Can you talk a little more about the tongue work? Going under the tongue and how it affects the hyoid?

**JA:** Sometimes you go in and work under the tongue and sometimes you work on the top of the tongue because it is pushing up too much – some people are "pushers," their tongues are always pushing up against the palate, and they can't relax them. Even in their sleep, their tongues are pushing. They wind up having various mouth issues – that tension in the throat can cause various health issues. I have worked the tongue in very small babies and they don't cry or get upset, because you're not hurting them when done properly. If you feel the tongue is pushing up too much you just gently push it down. Some adults can't relax their tongues. It's not a big muscle so it doesn't take much – you're trying to get it to relax and drop down. Usually it's pushing up and sometimes it's pushing forward. I've also worked on people who, literally, couldn't swallow at all – they were being fed with a tube. By doing some cranial work, some mouth work, and some tongue work, you can reactivate the swallowing reflex. I would also do some work in their throats.

**DG:** Through the anterior compartment of the neck or through the mouth?

**JA:** You work around the tongue and then you work the suprahyoids with your thumb and forefinger – it's almost like you are translating, moving left and right a little bit. Sometimes you will see the voice box pulled off to the left or the right. With some of these people you work downward on the throat while with others you go real low and grab the cartilage and work up. They are not choking because you are being real careful. You can feel that it is stuck down in the swallow position. Dr. Rolf would teach this – go in there and grab the larynx, but only when someone needed it – you didn't do it in every Seventh Hour. A person will not pass out or gag when doing this. You have to have your body in the right position and your hands are being real specific. You slowly take out that wrinkle. There are lots of ways to work in the throat but we don't teach them all in the Seventh Hour. In the early days, Ida would show this work only on people who needed it. If someone had a problem, she would show you how to solve that problem. One of the reasons we don't teach it is because we have students whose hands aren't relaxed enough to do this work. Someone was working on me once and I had to tell him to relax his hands because he was gripping my head too tightly. He really needed some arm and hand work because his hands just couldn't relax. Ida didn't always have everyone practice every one of these techniques on each other. You would see it done and understand when to use it.

**DG:** How would you say your cranial background influences how you approach the Seventh Hour, since you have a strong Rolfing background and a cranial background? How does that guide you in a different way than someone who might not have that cranial background?

**JA:** Hmm. That's an interesting question that I often ask myself. I think that they both help me. With a child or a baby, by understanding the mechanisms, I'm able to go in there and work at a real, real light level. I think I'm much more precise now. If someone comes in with trigeminal neuralgia, I pull out the techniques of Rolfing [SI] and the techniques of cranial work that are going to help specifically. I have a woman with tinnitus. I started working on her tinnitus in the first session. I do neck work because I know it is going to help her tinnitus, as well as working on her temporals and her A/O joint. If you get the A/O joint balanced, you're

taking pressure off the vertebral arteries and the little arteries that run down inside the dural tube. If you add in some Rolfing work, you are going to help the tinnitus much more quickly than if you were just doing cranial work. Frequently, if someone has tinnitus, the neck is really tight on one side as well. The other day a client said to me, "That's interesting cranial work, do you ever do Rolfing [SI]?" I had been doing Rolfing work mostly – I'd do some Rolfing work on her then I'd do a temporal technique, then I'd do some Rolfing work on her and then I'd do a tentorium technique, then I'd do some Rolfing work on her and then I'd do a fluid technique. Ida kind of did this, but I actually learned more from Dr. Greenman, an osteopath from Michigan who taught osteopathy and wrote *Principles of Manual Medicine*.<sup>3</sup> He was like Dr. Rolf in that he had the same exact pattern as to how the body should be. He wanted to get all the spinal curves balanced. I would watch him do cranial work in some classes, even though he was teaching how to translate and how to get a vertebra and all the joints to move properly. But sometimes he would say that this person needs cranial work and he would stop what he was doing and do some cranial work. I once asked him if he was doing long tide or short tide, and that was the only time I ever saw him get aggravated. He said, "I just do what the client needs." He felt that this client's neck was too short on one side and he adjusted it, and then he did some translation; then he did a little soft-tissue work on one side, then he went up and did some cranial work.

Back to my client with tinnitus: I ran into her downtown the other day and she said, "I have to tell you that all that noise I hear day and night was gone for about two weeks. It took me a while to realize why I was feeling so much better. But now it's coming back." Well, I had only treated her once or twice. She did come in again and I would work back and forth between Rolfing [SI] and cranial work. She could really use a Ten Series and some cranial work, but she has limited resources, so I'm just going to try and get right at the tinnitus by using a mixture of what I know. [Her background was that] she had stepped into a hole, like an open manhole cover. She went straight down on one leg, and when she hit, she landed on her ischial tuberosity. After that she would get these spasms running through her body as well as energetic problems. I hadn't even gone down to work on her sacrum. I got her balanced while



sitting on the bench – got her lumbar curve in and got her sacrum to move a little bit.

**DG:** Do you follow your intuition, what with the constraints of her budget? How do you strategize?

**JA:** For her it's more the symptoms – she has major body symptoms, so I know I could do some Rolfing work to help her. I checked her two ilia and she had a posterior ilium that I was able to bring forward. I made sure her lumbar were moving a little and there was no serious sacral compression. I told her, "You have to tell me the three things that are the most important to you." She has a lot going on and she knows it. She felt that if she didn't have this noise ringing in her ears then she could sleep better and work better. So, addressing the tinnitus was going to help her the most.

**DG:** I'm curious as to when the cranial work became a staple in a Rolfer's tool belt. When would you say that the tide began to turn?

**JA:** In the early days we would all share books. Chuck Siemers got a cranial book from his dentist. In those days it was hard to get an osteopathic book without going through an osteopath. When someone got a book we would pass it back and forth. I remember that Peter Melchior had a cranial book and he had loaned it to another teacher and later there was a discussion about whose book it actually was. You would find people who were interested and you would share what you were doing. The idea was to get out of the way and try and take in what others were doing. In Florida, Ron Thompson was doing some of this work. Jan Davis, an M.D., was able to get into more classes than we were able to. She really helped my perception tremendously because my cranial work was too heavy and I wasn't feeling certain things. They both helped me work lighter. Then Dr. Davis would work on me and I could tell that her work was really different. She had me work on one of her friends and showed me how she would do it.

**DG:** So this was before [John] Upledger?

**JA:** Yeah, before Upledger, though she had met him before he started his Institute. I had already had a session or two with Dr. Core in Dallas. I had already read *Osteopathy in the Cranial Field*. Upledger did shift the perception of the work at the Rolf Institute. There was a wonderful Rolfer, Charles Swensen, who was an anatomy teacher at the Institute and he became friends with Upledger before he even had a school. Upledger was just traveling around

doing classes. He was still affiliated with Michigan State. He did a class in Santa Fe and most all the Rolfing teachers were there – Emmett [Hutchins] wasn't there but Peter [Melchior], Jan [Sultan], and I were there. He did a combined Level I/Level II class with a lot of unwinding techniques. It was open mostly to Rolfers, not that it was closed to other people, but there was just so much room in the class. In those days he would have a limit of fourteen to sixteen people. Then all of a sudden his classes got real big and he realized he could have forty people in the room. He ran it through the Unity church in Florida – these little old ladies who worked for the church would send out flyers and they would answer the phone.

**DG:** Do you think that it was Upledger teaching the faculty that made the shift?

**JA:** I think that helped. We were all there and realized that this was good stuff. Most of the people there already had somewhat of a handle on it. They had read Magoun or Sutherland and had their own take on it. The good thing about Upledger was that he gave you his recipe.

**DG:** A protocol?

**JA:** Yeah. You had a protocol and maybe you were good in one area but not in another area. Maybe you really understood the sphenoid, but you couldn't lift it. He had a bigger vision. He had amazing hands. He would come over and do a visceral release on you. He was friends with [Jean-Pierre] Barral. I remember I was in a class with him [Upledger] once and my gall bladder was spasming. He came over and put his hands on my liver and said, "your gall bladder is spasming." He said he could calm it down but he still sent me to this other osteopath over in Clearwater, Florida and this guy did something for my gall bladder. Upledger was able to diagnose it on the spot, but because it was a big class he didn't have time to resolve it. He didn't want to stop the class and have everyone come over and show them this great gall bladder technique. He wanted to show the class his recipe. He felt that that was the easiest way to get you started. I just want to say one thing for Upledger. People tended to act like he was this narrow-minded guy who had this recipe, but he had the hands to do it all. He could scan your energy field. But because he wanted to teach larger groups, he came up with a formula.

**DG:** Kind of like Dr. Rolf?

**JA:** Yeah, sort of. If you went and had a private session with him, it wasn't anything like his formula. He was creative and intuitive.

**DG:** So, when did cranial work become part of the prerequisites for the advanced [Rolfing] training? And what was behind that?

**JA:** We had always encouraged people to read books to understand it, but we never really pushed it. Then we realized that we were getting students in here who had no idea about the head or the sacrum. We taught a great pelvic lift and we would pull the sacrum down and open up the lumbar and get the sacrum balanced with the lumbar. Ida would teach you to do it both ways – physically and energetically. If you took a cranial class you could feel the energetics of the sacrum as well as the physical part. We realized that it would help us work at both ends. It would help us at the head end because we were too rough on the head frequently. Some people were putting way too much pressure on the fascia when they were trying to get the parietal fascia to open, or sticking their finger way too far back on the pterygoids. So, the primary reasons we wanted them to have some cranial experience was 1) to broaden their spectrum of touch, so they had better touch skills when they came to the advanced training; 2) so that people were *not* putting pressure on the sphenoid; and 3) they had the cranial skills to give a client relief when needed, like doing a frontal lift or ethmoid release, etc.

**DG:** Well, Jim, we are out of time. Thank you for doing this interview.

**JA:** You're welcome.

## Bibliography

1. Sutherland, William G., *The Cranial Bowl*. Mankato, MN: Free Press Co., 1939.
2. Magoun, Harold I., (ed.), *Osteopathy in the Cranial Field*, 1st Edition. Clarkston, WA: Southerland Cranial Teaching Foundation, 1976.
3. Greenman, D.O., Phillip E., *Principles of Manual Medicine*, 3rd edition. Philadelphia, PA: Lippincott, Williams & Wilkins, 2003.

*Jim Asher trained with Dr. Rolf in 1971. In 1973 he was invited by Rolf to become a Rolfing instructor and to assist her in training basic and advanced classes. He assisted her until her death in 1979. He has been a Rolfing Instructor since 1974 and was one of the first advanced teachers.*

# On the Nose

By Dan Somers, Certified Advanced Rolfer™

In Roling® Structural Integration (SI) practice and lore, intra-nasal work has distinguished us from other practitioners. Pop culture seized this aspect of our work, prompting individuals (who likely have a limited familiarity with our work) to link intra-nasal work and Roling SI with questions like, “Isn’t that the one where they stick their fingers up your nose?”

Remarks posted (circa December 23, 2011) on the Rolf Forum LISTSERV indicate Rolfers employ a wide variety of intra-nasal practice options. Some do the intra-nasal work religiously, as a matter of course, in every Seventh Hour. Others do very little or no intra-nasal work in the entirety of their client treatment, and others employ it only on an “as needed, requested, or refused” basis. Questions regarding intra-nasal work come up in the Rolf Forum periodically, indicating more information on this subject would be helpful for our community.

This author completed the basic Roling training with a good bit of uncertainty regarding intra-nasal work; it was a profound yet odd entryway into the fabulous mystery of the body. Although I could competently deliver a “paint by numbers” variation of the work, I felt my understanding was theoretically and technically incomplete. Subsequent trainings, especially in craniosacral therapy, have helped me to gain a more thorough understanding. In researching this article, I was again reminded just how important the nose is to our optimal functioning, and I also am reminded why I love this work so much: with the nose, as with every aspect of our bodies, the more you know, the more there is to know.

The nose is vital – it is the body’s airway that warms, moistens, and calms our breath as it cycles through its rhythm of being drawn in and released. Many of us experienced our earliest human contact as a babe nuzzling at the breast; it is here that we were first invited into a world of smell and intimate connection through the nose. Our sense of smell is crucial to our survival and well-being. It is central to our awareness of our surroundings and keeps us safe from the dangers of poison, rotten food, and fire. Jean-Pierre Barral states: “Olfactory stimulation generates visceral responses

such as salivation in response to pleasant smells, nausea in response to disagreeable odors and even the acceleration of peristalsis and increases in gastric secretions.”<sup>1</sup>

Our nose literally projects to the world information about who and what we are. Our nose may suggest we are: masculine, feminine, sexy, attractive, artistic, alcoholic, healthy, or sick. People spend significant sums of money on drugs and cosmetic surgery to alter its function and appearance. For some, the nose is a bothersome “leaky faucet,” or a locus of embarrassment, infection, irritation, and pain. For others, their nose is a calling card, passport, a badge of honor, and a symbol of prestige.

Clients receiving intra-nasal work sometimes experience profound somatic, psychological, and spiritual change. I recall a session where I was proceeding carefully and slowly with the intra-nasal work. The supine client’s eye sockets looked like two pools of water running down his face. I was alert and the client appeared engaged but not alarmed. There was an easing, an allowing, and a trusting as we continued our work. Upon completion, the client remarked: “That was the most amazing experience I have ever had.” Years later, the client still reflects on the importance of the shift that occurred as a result of that session.

Michael Salvesson claims: “When you have your hands on the body, you have your hands on the *whole self*”<sup>2</sup> [italics added]. The nose is a particular and literal passageway into the whole self. Due to its direct connection between the outside and the inside, intra-nasal work is a particularly potent means of accessing some of the transformational promise of Roling SI.

The cultural context for doing intra-nasal work is worth noting – the nose is stigmatized; dust, blood, and dried mucus form “boogers,” and are viewed as bodily waste. Sensory nerves in the nose and nasal cavity continue, however, to captivate nose-pickers. Toddlers naturally experience the intra-nasal space as a locus of sensation and banish their investigation from public observation only after repeated admonishment. (Intra-nasal investigation and pleasure aren’t altogether abandoned, however, as occasional observation of

oblivious adults waiting at traffic lights will validate.) There is a distinguishing boundary between hands “on” the body and hands “in” the body. When we literally enter the body, a whole new level of invasiveness occurs requiring a keen level of sensitivity, awareness, skill, and responsibility on the part of the practitioner. Bodywork is a two-way street; practitioners too, are subject to the same cultural stigma regarding intra-nasal or other invasive bodywork and must confront and resolve, to the greatest degree possible, their own squeamishness and uncertainty about where and why they are doing the work.

This work requires not only keen anatomical knowledge, but also courage and, perhaps most importantly, clarity of intent. A clear intention will answer the following questions: What am I doing? Why am I doing it? What outcome will best serve the client?

## “Fix-it” vs. Holistic Approach

Similar to other healing professions, there has been a long-running debate in the Roling community regarding doing “fix-it”-type work and honoring the holistic intentions of the “traditional” Roling Ten Series. Intra-nasal work is included as part of the Seventh Hour in the traditional Roling “Recipe.” Broadly stated, the goals of this session include freeing the thoracic outlet and balancing the head and neck on the torso. In my training, practitioners were advised that intra-nasal work should not occur prior to the Seventh Hour since the body had not been properly prepared to accept such work prior to then. As our work has evolved, some Rolfers have moved away from the orthodoxy of reserving mouth or intra-nasal work until the Seventh Hour, and there are varied opinions in our community regarding this. Interestingly, in her classic text, Ida Rolf states: “. . . myofascial structures inside oral and nasal cavities must be brought toward equipoise *before* [italics added] the cervical spine can take its appropriate position.”<sup>3</sup>

Rolf admonished practitioners to “not chase symptoms” but instead to “get the whole body aligned and the symptoms will take care of themselves.” Jeffrey Maitland and Salvesson recommend that the practitioner fully consider the principles of adaptability and support prior to treatment.<sup>4</sup> In other words, with specific application of intra-nasal work, the practitioner may want to evaluate the following: Can the rest

of the body allow for the effect of the intervention? Have limiting tensional patterns been released? Is there adequate balance in surrounding tissues? Is the head balanced, and are the major segments below the head able to support the change you are inducing?

## Brief Anatomical Review

A brief anatomy review may prove helpful by reacquainting the reader with the territory (see Figure 1). A more extensive and detailed study of the anatomy is advised to ensure competent understanding and treatment of the nasal compartment. The *Emory Anatomy Manual* states:

The nasal cavity opens anteriorly at the nostrils. It is divided by a septum into left and right halves. The septum is formed by the perpendicular plate of the ethmoid bone above, the vomer bone posteriorly and by extensive cartilage anteriorly. Each nasal cavity has a roof and a lateral wall. The roof is formed by the cribriform plate of the ethmoid bone. On the roof of the nasal cavity is the olfactory epithelium containing more than 10 million smell receptors sensitive to specific odor molecules travelling through the air.

The posterior lateral walls of the nasal cavity feature three conchae or turbinates that are formed primarily from the ethmoid bone and the inferior nasal concha. The turbinates are large, medially directed bony elements that are covered with highly vascular mucous membranes. The nasal turbinates are structures within the nose that moisturize and warm the air before it reaches the lungs.<sup>5</sup>

Our basic job is to open the nasal airways for breathing; this also allows odor particles to reach the olfactory sensors in the upper nasal cavity. We also release strain and tension in the nasal structures to positively affect fluid exchange and neural transmission throughout the cavity and beyond.

Much, and perhaps enough, is accomplished in establishing the basic functioning of the nose, but perhaps a subtle yet profound gift of Rolfing SI can be realized when a holistic integration of the “neural” and “visceral” cranium is obtained through intra-nasal

manipulation. Jan Sultan describes this opportunity for intra-segmental integration as follows:

The cranium is truly a meeting place of systems. The cranium is embryologically made up of neural and visceral components. The neural is the vault, spine, brain, and spinal cord systems, and the visceral is the face, jaw, gut, and the associated soft tissues therein. In this view the visceral cranium is the upper end of the ventral visceral layer. . . . Here is where nose work really comes together, as it is the bridge between the visceral and neural aspects of the head.”<sup>7</sup>

The reader may assert: “I’ve never had a client come in complaining of lack of integration between his/her neuro and visceral cranium.” Michael Waefler contends “. . . the power of working with the nose has as much to do with perception and filling in a more complete body image as [it] does [with] any structural relationship . . .”<sup>8</sup> This sense of completeness, unity and presence may likely be what Rolf originally deemed so valuable. In a [Steve] Jobsian sort of way, we may be fulfilling a need of the client that he or she did not know existed.

Sultan also brilliantly suggests that the goals of the classic Fourth Hour of the Rolfing Ten Series include freeing the ventral visceral layer from the pelvis all the way to the floor of the mouth thereby allowing the goals of Rolf’s Seventh Hour to be accomplished “free of ventral visceral drag.”

John Upledger describes how this intra-segmental integration is made possible by inviting the reader to consider that the olfactory nerves arise from sensory receptors in the mucous membranes of the superior nasal cavities and, as these sensory fibers bundle together and ascend from the nasal cavity, their perineurium becomes continuous with the pia mater membrane surrounding the brain. Meanwhile, the periosteum of the nasal bones becomes continuous with the dura mater membrane also surrounding the brain, thereby establishing direct linkage of the visceral and neural cranium.<sup>9</sup>

## Pragmatic Concerns

As properly trained SI practitioners know, the tissues and bony structures of the nose are delicate and must be treated with care. Many pathologies (e.g., deviated septum, either congenitally or from injury; enlarged turbinates; allergies; non-allergic rhinitis; sinus infections) can cause difficulty breathing. If your client has chronic breathing problems and hasn’t consulted an ear, nose and throat specialist, you might advise the client to do so before proceeding with nose work.

In nose work, the client is especially vulnerable. Therefore, the client’s trust and acceptance are essential.

## Presenting Complaints

A practitioner may want to observe and question the client regarding the basic functions of the nose. Can the client breathe, smell, taste, and hear adequately? Does

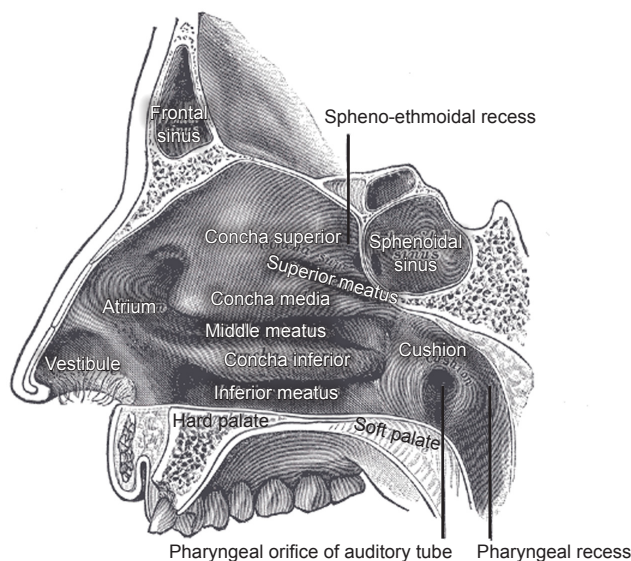


Figure 1: Lateral wall of the nasal cavity.<sup>6</sup>



the client have difficulty swallowing or sleeping? Does the client report a chronic dry or wet nose? Does s/he complain of facial or head pain, sinusitis or sinus congestion?

Nasal congestion occurs when the membranes lining the nose become inflamed and swollen. Rolf states: "Sinuses are air cavities in the skull that serve the purpose to reduce the weight of the head. The sinuses that drain into the nose are lined with mucus membranes that secrete a mucoid fluid. In its normal flow this mucus moistens the passages of the nose, lubricates the nasal structures, picks up dust and washes it to the surface. These sinuses become a focus for infection and inflammation. Sinus congestion, genesis of the chronic sinus headache, is often the result of blocked ducts"<sup>10</sup>

The four sinuses of the nasal cavity (frontal, sphenoidal, ethmoidal and maxillary) open into the nasal cavity on the lateral wall between the superior and the middle conchae. The sinus openings are mostly covered by the conchae making them difficult to access. Rolf contends: "It is noteworthy that when the head is appropriately poised on its atlanto-occipital articulation, drainage of the blocked ducts often starts spontaneously and the chronic sinus problem, even though of years standing, may disappear."<sup>11</sup> Although not always reliable, this author has found that release of suboccipital tissue does relieve sinus congestion.

Prior to doing any intra-nasal manipulations, it may be valuable to attend to any significant "outside" strains affecting the nasal cavity. Such strains may involve the bones of the nose or those directly articulating with them (e.g., frontal bone articulating with the ethmoid bone). Release of contracture and strain in facial muscles affecting the nose's functioning is also recommended.

## Inside: The Three Roads to a Happy Nose

In the basic Rolfing training, the author was instructed that there were basically three paths of access when working intra-nasally: first, the "upper" or cephalad direction parallel to the bridge of the nose; second, a "middle" entry aimed posteriorly into the region of the turbinates; and thirdly, a lower directly posterior entry over the roof of the mouth. This author suggests that, in addition to the significant benefits gained by addressing tissue obstructions

in each of these directions, there are special structures located in these directions that provide significant opportunities for improved neurological, vascular, and even psychological health.

Employing the upper access route, Barral and Croibier recommend careful but direct manipulation of the upper nasal epithelium to affect the olfactory nerves. Although they suggest using a long-handled cotton swab rather than a sheathed little finger, the direction, intention, and application of Barral and Croibier's technique closely aligns with what this author was introduced to in the basic Rolfing training. The practitioner is instructed to enter the nostril parallel to the bridge of the nose and, while remaining anterior to the turbinates, direct it cephalad toward the inner corner of the eye (Barral warns that encountering an obstacle likely constitutes a contraindication and advises discontinuing the technique). The practitioner is instructed to draw slightly and very gently the epithelium of the upper nasal cavity back toward him- or herself, thereby creating mechanical tension on the olfactory nerves and brain tissue. The practitioner is then instructed to "listen" to the tissue and follow it to release and balance.<sup>12</sup>

The middle access route is perhaps the trickiest since extreme care must be used when dealing with the turbinate bones. At times the turbinates seem quite sturdy and capable of accommodating direct manipulation, and at other times they seem to quiver nervously like paper butterfly wings and are best left alone. However, if a practitioner can safely proceed posteriorly between the turbinates to the rear of the nasal cavity, he or she can approach the sphenopalatine foramen. The sphenopalatine foramen lies posteriorly in the lateral wall of the nasal cavity at the level of the middle concha. Through this foramen pass branches of the trigeminal nerve and branches of autonomic nerves that innervate much of the nasal and oral cavities and the palate. The terminal branch of the maxillary artery, the sphenopalatine artery, also passes through the sphenopalatine foramen and its branches provide the blood supply to much of this region. The practitioner may affect this structure by manipulating the greater wings of the sphenoid externally in concert with the palatines intra-orally, or s/he may enter the nose and travel posteriorly between the inferior and middle conchae to directly relieve tissue strain affecting the foramen.

Along the lower intra-nasal access route, Barral describes a "vomeronasal organ . . . located a short distance from the opening of the nostrils on the antero-caudal aspect of the septum." This organ is described as a "diverticulum of the olfactory organ and is recognized as a small circular or oval depression on the septum. It plays a vasomotor and vasosensory role and participates in our sense of smell." Barral identifies the vomeronasal organ as a "vestige of our animal life when the sense of smell was essential in the detection of both enemies and sexual partners" and contends that stored psychological tensions may be relieved through its careful manipulation.<sup>13</sup> Further posterior along the lower access route, the practitioner can affect what Michael Murphy describes as a "mucosal bag"<sup>14</sup> containing not only a plethora of nerve, muscle, and vessel but also the pharyngobasilar membrane that attaches to a tubercle on the basilar portion of the occiput, thereby providing a rich opportunity for neural/visceral integration.

This author recommends that the reader self-experiment with intra-nasal work. A great deal can be learned by exploring one's own nasal cavity, not only about the sensation and topography of the nasal cavity but also how the tissues respond and the slow rate of entry that is required to affect change.

## Functional Integration

I will leave the reader with a simple breathing meditation. The practitioner may use it to guide the client, via breathing through the nose, to greater nasal awareness as well as awareness of his or her relationship to the gravitational field.

*Inhale through nose and pay attention to the breath as it enters this passageway. Notice the air as it passes over and is moistened by the inner nose, slow down and notice any stories in the tissues, that may or may not have any narrative attached. Notice your breath as it flows into and through the nasal cavity – is it sharp, sweet, irritating, expansive? Close your mouth and nose and suck the roof of your mouth upward, allow this upward sensation to extend through the crown of your head toward the heavens. Breathe. Swallow and follow your awareness downward through your throat, chest, abdominal space, and pelvic bowl. Breathe. Continue this awareness through your legs and feet,*

extend it deep into the earth. Now, from your nose, allow your breath to connect heaven and earth.

Rolf is said to have expressed concern that intra-nasal work would be the first technique Rolfers would drop after her demise.<sup>15</sup> This author is hopeful that practitioners will re-evaluate the potency and appropriateness of intra-nasal work for inclusion as part of their integrative practice.

*Dan Somers is a Certified Advanced Rolfer, a Certified Cranio-Sacral Therapist, a Licensed Social Worker (LSW), a Licensed Addictions Counselor (LAC), and a Hakomi Graduate. He would like to extend sincere gratitude to Dan Dyer, Jazmine Fox-Stern, Greg Perry, Jane Meyer, Michael Murphy, Jan Sultan, and Mike Waefler for their knowledge, expertise, and assistance with this article.*

## Endnotes

1. Barral, J.P., and Alain Croibier, *Manual Therapy for the Cranial Nerves*. New York, NY: Elsevier, 2009, pg. 62.
2. Personal communications, August 1995.
3. Rolf, I.P., *Rolfing: The Integration of Human Structures*. New York, NY: Harper & Row, 1977, pg. 272.
4. Personal communications, August 1995.
5. *Emory Anatomy Manual*. Retrieved May 25, 2012 from <http://www.emory.edu/ANATOMY/AnatomyManual/nose.html>
6. Gray, Henry, *Anatomy of the Human Body*. Edition from 1918. Retrieved on June 12, 2012 from <http://www.bartleby.com/107/223.html> and used with permission.
7. Personal communication, October 17, 2011.
8. Personal communication, June 5, 2012.
9. Upledger, J. E., *Craniosacral Therapy II: Beyond the Dura*. Seattle: Eastland Press, 1987, pg. 11.
10. Rolf, op. cit., pg. 257.
11. Ibid., pg. 257.
12. Barral and Croibier, op. cit., pg. 69.
13. Ibid., pg. 65.
14. Personal communications, June 7, 2012.
15. Michael Waefler, personal communications, June 5, 2012.

# Craniofascial Structure

## In Osteopathy, Dentistry, and Rolfing® SI

**By Olixn Adams, D.O., former Certified Advanced Rolfer™, Rebecca Griffiths D.M.D., and Anne Hoff, Certified Advanced Rolfer**

**Anne Hoff:** This interview originated from a comment that Olixn made quite a while ago on the Rolf Forum about Alternative Light Force® (ALF) dental appliances. Olixn, how did you meet Rebecca?

**Olixn Adams:** I was noticing that a lot of people who had received traditional orthodontic treatment, particularly in their teens, were exhibiting a lot of side effects that I believed were related to the compressive forces of traditional orthodontic mechanics – symptoms like headaches, scoliosis, sinusitis, allergies. So, I began exploring if there was another option for orthodontia and I came across literature about the ALF wire. I found Rebecca in Phoenix, Arizona, where I was living and completing medical school at the time. I started the work on my own body to experience it and we started referring patients and working together.

**AH:** Rebecca, tell us a little about yourself.

**Rebecca Griffiths:** I've been a dentist since 1982 and I've practiced non-extraction orthodontia since 1985. I'd had constant headaches myself for many years and TMJ problems after my third molars were extracted when I was eighteen. I had gone to several different practitioners over the years with no good results. I started treating TMD [temporomandibular dysfunction] patients after I was treated by, and subsequently trained by, Brendan Stack, D.D.S., M.S., a renowned orthodontist in Virginia, who has treated TMD for about forty years. His treatment resolved my headaches and TMJ disc displacement in less than two days. He and I were trying to effect positive cranial changes for our patients, like leveling the occlusal plane with mouth splints, but we weren't having a lot of success with the cranial aspects. We knew Darick Nordstrom, D.D.S., who invented the ALF appliances, and we received ALF training in the early '90s. By '93 I was using this appliance pretty much exclusively for my TMD and orthodontic patients and achieving excellent and stable results. It really rocked my world.

**AH:** Were you familiar with cranial osteopathy before you and Olixn met?

**RG:** After the ALF training, I signed up for the Basic Cranial Osteopathy course at the Cranial Academy because I perceived the power that the ALF had and I was afraid that I might actually hurt someone inadvertently with the appliance. I took the course, but it was taught using a disease-based paradigm, and I wasn't happy with that. It involved looking for a problem and then setting the intention to correct it. One day, I simply asked myself, "Who am I to decide what gets fixed in this body, in what order, and when?" I decided that it was not my right to treat this way, by trying to overcome the priorities and methods of the patient's body with my own. I continued to use the ALF, but I found myself during palpation just watching and waiting to be shown whatever the patient's body wanted me to see or feel. I always felt that my intentions were good; I was working from my heart in a pure belief that I could help these people, or I wouldn't take the case. After I met Olixn, he pushed me to take classes in biodynamics with Jim Jealous, D.O. I owe Olixn a debt of gratitude for that because it supported what I had felt about my role previously and expanded what I knew, or thought that I knew, intuitively. You do need to be able to palpate and to know what changes you're going to effect before you put the ALF in the patient's mouth and let him walk out the door. Even then there can be surprises sometimes. I really feel there is a prerequisite need for a strong background in osteopathy, neurology, and physiology in order to use this appliance properly, successfully, and without hazard for patients. There is a steep learning curve involved, you have to spend an appropriate amount of time with each patient at each appointment, and you cannot delegate the adjustments to assistants. So, you're going to have few practitioners that are willing to spend that kind of time doing this.

**AH:** ALF stands for Alternative Light Force appliance?

**RG:** Darick called it Alternative Lightwire Functional® therapy initially. To my knowledge, he never trademarked it formally, so I'm sure there are people that might be calling it other things.

**AH:** Was Darick aware of cranial movement?

**RG:** Oh yes, most certainly. He was way ahead of his time. He's brilliant.

**OA:** Tell us the difference between the ALF and the other palate expanders.

**RG:** I used most of the existing palatal expanders for almost ten years before I found the ALF. I used cemented-in ones and removable ones. The cemented-in Rapid Palatal Expanders (RPE) have a screw in the middle near the roof of the mouth which is adjusted with a key by patients about half a millimeter in the morning and a half a millimeter at night. Generally you'll hear a crack when the mid-palatine suture opens, and there'll be bruising from bleeding under the skin in the roof of the mouth. It's pretty dramatic. You could leave it in for retention as long as a year after you had finished adjusting it, but I found when you took it out you got collapse. In essence, this appliance forces the joint open, but it will not stay there supported by scar tissue. The other problem with the RPE and the removable functional appliances is that you get a 50% shift in either direction, but most patients are narrower on one side than the other. You might want 60:40 or 70:30, or maybe somebody is externally rotated on one side and you don't want to push that side out any further. That's where the ALF is superior because you can get asymmetrical changes and it's achieved with very light forces and works 24/7. I think of a high, arched, narrow palate as a folding table where the legs (alveolar bone with the teeth) are folded medially and the tabletop (hard palate) is arched superiorly. Other appliances don't correct that arch; they just push the two halves apart from each other. The ALF will upright those bones very slowly so that you get a lowering of the hard palate, an opening of the nasal floor, and widening of the dental arches.

**OA:** You're talking about a de-rotation of an internal rotation of the maxillae, right?

**RG:** Yes. You're achieving a level maxillary plane, which is very stable. The forces of occlusion, or chewing, bang up into a level plane instead of a canted plane. The ALF assists the body to upright and level the bones. I think our bodies have innate knowledge of how close bones (joints) should be to each other. Studying the sutures and their different types of designs shows you that the body has inherent intelligence, and it's not going to preserve something that isn't functional. The body will make compensations and adaptations to dysfunction, but it's not going to preserve dysfunction as a stable situation. One of the

first things Darick said to me was that he never gave patients orthodontic retainers following their orthodontia. He taught that if you help put things in stable positions that are highly functional, the body will maintain that. It won't have to work to maintain that, it will just be maintained. It is much more work for the autonomic nervous system (ANS) to create and maintain compensations and adaptations to dysfunction.

Maintaining a functional airway is the most important body function. The ALF opens the nasal airway. When it de-rotates the problems in the maxillae and premaxillae, the hard palate will level out and move inferiorly. The floor of the nose lowers and that opens up space for the ethmoid and vomer (nasal septum) to make some correction on their own. This also decompresses the venous and lymphatic drainage in the mid-face so that sinuses can drain properly – another airway consideration. A number of corrections in the mid-face are precipitated by the ALF; it unleashes the unused genetic potential for development. One of the most difficult cases to treat is the Class III patient whose mid-face is underdeveloped and the mandible looks prognathic. Few patients truly have a mandible that's too long or too big. It's the mid-face insufficiency that makes it look out of balance.

**OA:** The mid-face fluid fields didn't develop.

**RG:** The ALF works with that quite well.

**AH:** What does an ALF appliance look like?

**OA:** It's a thin wire that goes on the inside of the teeth. She makes some buildups on the inside for the wire to secure into, and the wire's like a gentle spring. She adjusts tension into the appropriate locations so she can create a diagonal tension, an ipsilateral tension, like she was describing earlier, and then she inserts that into the inner-upper palate and you have a mild tension in that area expanding outwards.

**AH:** Do you adjust it periodically, and how long does the process go on?

**RG:** I adjust the younger patients a couple times per week, but just really subtle changes. The children can move very quickly, although I treated a lady who was seventy-five and she moved quickly too. My out-of-state patients don't come every two weeks. I have some who come about every two months, and Darick had a patient from Germany who came once a year.

In my practice the active ALF phase generally is three months for someone who's very young, say under ten. An adult can take anywhere from six months to a year. Some patients may need multiple appliances because after I've adjusted them so many times I can tell by the feel of it that it's lost its resilience. Once the wire has lost its resilience, I don't want to use it anymore.

**AH:** Olinx, you went through this yourself? What's your experience been?

**OA:** Yeah, we haven't quite finished yet. We started when it was my last year in Phoenix, and we did about a year with the ALF wire upper and lower, and then I had to move. We're trying to figure out how to get together to finish the last phase of the work. I experienced very rapid and gentle change in the entire mouth, which had effects through the whole body. Opening of the palate and mid-face. Often after an adjustment I would feel a process we call "ignition," which we look for in osteopathic treatments sometimes. Sometimes we'd spontaneously get a process that we call "automatic shifting," which is a therapeutic fluid-fluctuation, that I could feel going on for several days to a week or more, whereby the fluid fields were correcting throughout the whole body. The most profound effects would be noticed in the mouth, face, and cervical region, but I could feel them down into the pelvis, knees, and feet sometimes. I experienced improved breathing through the nose – that's part of what I was looking for. I felt the traditional orthodontia that I had was not very good and not very good for my body, and I felt like I had had some side effects from it: I suddenly developed allergies, headaches, ADD-type symptoms from the time that I was fifteen, sixteen. Once I actually put it all together, it was right at the time that I was getting traditional orthodontia. As Rebecca corrected some of that with the ALF wire, some of those body memories were re-experienced – I could remember the oral trauma with the tightening of the wires, the angst my body would feel, and the headaches and symptoms that went along with that approach.

**AH:** People going through traditional orthodontia often have pain, headaches, discomfort from the appliances. Is that at all true with ALF?

**RG:** People will get slightly sore, but when they move into the final tooth-alignment phase with the braces, hands down they all ask "can't we just have the ALFs?" The



braces cause so much more soreness and discomfort because of each tooth being a joint unto itself with a system of ligaments and sensory nerves that don't respond well to inflammation and the movement that causes it. With the ALF, the forces are so gentle and you're working with bone. Of course the teeth are moving just because they're within the bones that are being moved, but you're not doing the same type of movement.

**OA:** We've found osteopathic treatments often minimize those effects quite a bit too, people are much more comfortable and they tend to change more quickly. It's sort of reciprocal. Sometimes we've had cases we were treating straight with hands-on osteopathy that for some reason we were at a sticking point or not making progress; we'll send them to Rebecca and all of a sudden huge changes start. And we've seen it the other way around where we're at a sticking point with the ALF, and a few osteopathic treatments and they're off to the races again.

**AH:** So you follow up the ALF with braces for straightening the teeth?

**RG:** In most cases I've had to do that because tooth positions are compensated to the relationship they had with previous bone positions, and changing the bone doesn't mean that the teeth are going to resolve spontaneously into their new and proper positions. I leave ALF wires in place as a stabilizing force and as a counteractive force to the traditional braces. It appears that no matter what type of braces you use, or how wide the arch wire for the tooth movement is, the orthodontia seems to collapse the arches. I'm trying to do more cases now without getting involved with the braces for a long period of time [e.g., two years]. Adults always want Invisalign®, which works to move things in the opposite direction from which the ALF works, and it does so very potently. So to use a conventional Invisalign after using an ALF is round-tripping the patient; basically you are taking them back from where they came. Invisalign as it stands does not work to finish those cases. A tooth positioner hand-made by a lab technician, and not made on a computer like Invisalign is, could work.

**AH:** So there's ways you can still do tooth straightening without putting the compressive forces back in?

**RG:** Yes, but it's very difficult and takes more time. You use extremely light wires, if you are using braces, with very wide arch

forms and those items are becoming more difficult to purchase. There are very few companies that make arch wires for braces that aren't shaped like dog (canine) arches – that's how narrow they are.

**AH:** How do you find a good practitioner?

**RG:** It isn't easy. This may become a dying art because of the amount of education that it requires and the time that it requires you to spend with each and every patient for the adjustments. I can't even find anybody to train. I would love to have someone to mentor and teach, because I think I could teach them in a relatively quick period of time – I could pretty much put in a nutshell what it took me years to uncover. The website [www.alforthodontics.com](http://www.alforthodontics.com) has a directory listing of practitioners for anybody who wants to work with a doctor who works with the ALF. It lists dentists, osteopaths, SOT [Sacro Occipital Technique] chiropractors, and labs. The problem with just picking somebody is you need to know how long they've been doing it, because the learning curve is not quick with this appliance. There are some bastardizations out there, people that are calling these heavy-wire appliances ALFs, and they are not. So you have to be careful. There's a similar problem finding TMJ practitioners; there are weekend seminars that provide a certificate stating attendees can treat TMJ problems after only a few hours of training and dentists just put them up on their websites as one of many services that they offer.

**AH:** Rebecca, how do you know when to send a patient to someone like Olinx?

**RG:** I can feel it. I have had many patients that I send for other bodywork prior to beginning with me. When I examine them, when I speak to them, when I put my hands on them, I get the sense there's another primary at play. What I would be doing for them certainly would be beneficial, but not addressing the primary problem. Since our bodies prioritize issues, and I respect that, that's when I make that decision.

**AH:** When would you refer to a Rolfer?

**RG:** I have had patients come in to me that go to a Rolfer, but I have not worked directly with one on cases. I'm open to working with Rolfers; I want to do whatever is going to get that patient better. I try to triage my patients in terms of who I feel they should see. I don't know many Rolfers. [I contacted Darick after this interview, and he said: "I think Rolfers might be interested in ALF practitioners' experience with spontaneous trauma

releasing as the ALF is properly placed and adjusted (not necessarily activated, since the tongue will often activate by nature of its attraction to the pre-maxilla by the ALF). This release phenomenon, which complements Rolfing® Structural Integration, is thought to be initiated through proprioceptive and primitive reflex triggers in the head and neck that are accessed by the ALF. Another reason to work in a team with a practitioner trained in treating old trauma is that there seems to be a window of opportunity often created when the ALF is placed or during an adjustment visit, when it activates an internal connection to an old somato-emotional trauma. When this feels like a miraculous uplift, it is important that the patient not just 'bask' in the good feeling, but be supported in recognizing and fully releasing and working through the associated trauma(s) that the body would previously not allow out due to its self-preservation. It can also feel like an unexplained resistance or reactivity to what should be an acceptable ALF activation; in this case, the ALF could be bringing attention to or magnifying an old trauma, and it is important to try to understand that trauma, and treat/support the whole body in working through it. In this second case, the body has come to the point where it is almost ready to work through the trauma, but can't find enough 'health' to get through on its own (like the previous uplift-type healing opportunity). If it is given understanding (of where it is with the old trauma, and the health that it can move into) and support (physical/emotional), to lower the threshold, it will be able to move through the healing process successfully.]

**AH:** Olinx, when do you know that somebody needs the ALF work?

**OA:** If I was living in the same city as Rebecca we would probably meet at each others' office once a month and cross-work with the more difficult patients. There are some osteopaths in bigger cities that do work with a dentist directly.

**RG:** I wish Olinx was nearby. We could do some excellent work together again. I've been able to get an SOT chiropractor to come into my office and we double-team a few patients. It has shaved as much as nine months off the treatment time of a few patients in their fifties and sixties.

**OA:** Rebecca and I have seen the potency when she adjusts the wire, and we do an osteopathic treatment right there or soon

after. We balance out the fluid fluctuations that may be going on from the adjustment. The patient feels a lot better and the changes happen much more quickly.

**OA:** I think there's another aspect to the ALF that might be interesting for Rolfers. Forward-head posture (FHP) can be a really difficult structural imbalance to help correct. Rebecca, you see that primarily as an adaptation to airway. Is that correct?

**RG:** Yes. When we move the mandible down and forward as a result of what we are doing with the ALF and the cranium, the airway opens. Time and time again, when we take our progress photographs of patients in profile, which is done about every two months at my office, we see them straightening up and the FHP going away. FHP is a compensatory mechanism to airway problems.

**OA:** That's a really important consideration in Rolfing work. They're trying to get the head up over the shoulders, aligned on the gravitational line. If they are having trouble, the ALF might really change that case quickly once the airway starts to change.

**AH:** Does it relate to the maxillae issue you talked about?

**RG:** If the mandible is positioned posteriorly and superiorly, it's because of what's going on in the cranial base with the maxillae. There are always maxillary reasons that will explain mandibular position. When the teeth are together and if the mandible is back and up, the tongue will obstruct the oral-pharyngeal airway. There are other things that happen cervically and the biomechanics are explained in Casey Guzey's "Quadrant Theorem." There's a direct and mathematical relationship between mandibular position and the upper cervical spine. When the mandible is posterior and superior, the cervical spine will compress, the atlas will be out of position and as it moves anteriorly, it decreases the A-P airway in the pharyngeal portion, and FHP results. Also, the person is constantly dropping the mandible down and forward to get the tongue out of the airway and will use the insides of the cheeks and the sides of the tongue to brace the mandible in that more open-airway position. This produces ridging on the lateral borders of the tongue and mucosa of the cheeks. The ANS drives those muscles into performing 24/7 function in order to maintain a better airway. Neurological disarray results because there are no rest periods for these muscles now and you get muscle splinting. You can see

what's happening to the airway if you take a lateral skull film with the patient's teeth together and look at the A-P pharyngeal airway. Then you compare it to a film taken with the patient open or biting on a block that brings the jaw down and forward. There's an immediate change in the airway. The ALF acts also on the pterygoid plates and that's where the posterior nasal airway can be improved as well. You can really see that you are getting the airway open with 3D CT scans of patients.

**OA:** The mandible is generally going to go where it can get the best occlusion with the upper molars, is that correct?

**RG:** True, but the anterior teeth also guide it on its closing trajectory, so if the pre-maxilla is detorqued or internally rotated, then the teeth are tipped inward towards the tongue, which forces the mandible to retrude upon closure. Typically, those patients have the gummy smile; when they smile widely you see a lot of gum tissue along with the teeth. The pre-maxilla is rotated inwardly, so it distorts the trajectory of the mandible on closure. The pre-maxilla is where your incisors are and there's a suture there called the premaxillary suture that runs transversely. This suture allows internal or external rotation of the premaxillae.

**AH:** What about TMJ and do patterns you see there relate to FHP?

**RG:** There may or may not be a relationship. I think that in the vast majority of patients you probably will see some sort of internal derangement. But if you have a Class III patient, with the prognathic lower jaw, there may not be a TMJ problem but you could still have an airway restriction that encourages the FHP.

**OA:** Where does forward tongue thrust play into that?

**RG:** Well the tongue thrust is a compensation for airway obstruction. The myofunctional therapists I've heard say that somewhere around age four the patient should have converted to an adult swallow, during which the tongue goes up into the roof of the mouth, and not towards the front of the teeth or between the teeth. The conversion doesn't happen in tongue-thrust patients. Supposedly, we swallow 2,000 times a day while awake and 1,000 times while asleep. That's a lot of repetitions and the tongue has been measured at being able to produce 500 grams of force. It takes about 2 grams of force to move a tooth, so you have this balancing act between the tongue and the

orofacial musculature, which I believe can exert 250 grams of force inward while the tongue is exerting it outward or forward. If you have a tongue that is shooting out between the front teeth instead of up into the roof of the mouth every time a swallow occurs, it's not going to take very long for the maxilla to manifest the results of that, which is narrowness bilaterally and then that bucktooth appearance. Or, a complete open bite can result from the tongue shooting between the upper and lower front teeth for so long that it depresses the development of the bone and the teeth in that area. When this patient bites on the back teeth there's an opening in the front where the teeth can't touch. He is unable to bite off food. Traditional orthodontists have attempted to correct tongue thrusts by using appliances with "tongue rakes." They're banded in the mouth and cemented to the molars. There's a wire that comes up behind the upper front teeth and sharp vertical spikes extend off that wire. The goal is that the tongue will learn by getting raked, every time it goes through that opening, not to go there. Well, that doesn't work because the patient is thrusting the tongue to keep it out of the airway during the swallow; yet if the airway has not been treated appropriately, the patient will simply convert from the anterior tongue thrust to a lateral tongue thrust.

**OA:** What's your approach to this forward tongue thrust?

**RG:** You treat the airway to get it open enough so it's highly functional. Then you need to retrain the tongue because it's a learned pattern and I've not found that it will retrain on its own. So, myofunctional therapy comes into play; there's an excellent seven-week program by Janet Bennett that you can buy from [www.ijustwanttocorrectmytonguethrust.com](http://www.ijustwanttocorrectmytonguethrust.com). One of my patients found it. She was completely open in the anterior. I had corrected her airway and orthodontically I could not get her anterior teeth to touch because she still had a tongue thrust that completely counteracted everything I did. The myofunctional therapist told her it would be a two-and-a-half year program and a couple of thousand dollars, but the patient's mother researched on the internet and found Janet Bennett's program. I could tell after only her second week of using it that her diction had changed, her enunciation had changed, and her lisp was going away. It took about six more months to close the open bite and during that period she had to



redo the program because she had relapsed. We're talking about a twenty-one-year-old girl here and the muscle patterns were pretty well-established, so she had to repeat the program a couple of times. However, I don't believe I would have been able to get the open bite closed in her case without the retraining.

**OA:** Interesting. With TMJ dysfunction, some dentists have a "recipe" [of what they do]. You are working more with each individual patient and how they are expressing, but there's probably going to be some principles that you work with?

**RG:** I have a specific diagnostic protocol that I do on every single patient, and that's the only place that I come close to "cookbooking" them. Most "TMJ doctors" don't bother with imaging protocol that includes MRIs of the joints. They'll do the 3D CT scans because they own the machine. The only way to see the discs and to diagnose properly what's going on in the joints is to obtain the MRIs. MRIs give you more information about the joints than the CT scan – with no radiation.

Patients are treated differently and according to the derangement that's present – is it a closed lock? Is it reducing? What's going on? And then you have to look at the causes – why is this functioning like this? You just keep asking why, why, why until you can't ask it any more, until you've got what you think are all the answers. And then of course you have to triage the patient too, because the lateral pterygoid muscle is totally capable of pulling the disk out of place in the joint even with someone who doesn't have a bad occlusion. Internal derangements can be caused by the mouth being open too long without rest periods during a dental procedure. Or maybe the patient had general anesthesia for third molar extractions and there was skeletal muscle relaxant in the mix, allowing hyperextension of the TMJs, and subluxation occurred that way. Because it's attached to the disc, spasms in the pterygoid muscle can certainly pull it out of place. You need to know what it is you're treating, and to just put a generic splint in everybody's mouth isn't the answer. Most times the splint isn't designed appropriately for the condition that exists. I've even seen splints that actually helped to push the mandible posteriorly and superiorly in a joint case, which is the worst thing you could do. You want to create joint space and you do that by moving the mandible downward

and forward, not shoving it up and back. I don't agree with upper splints. From an osteopathic standpoint, they're detrimental for the skull and for cranial motion.

**OA:** Yeah, I'm treating a lady right now who has had chronic migraines and she was wearing an upper splint for several years. We finally got it out of her mouth and she's doing a lot better.

**RG:** A lower splint, not designed properly (so that when the patient closes into it the acrylic wraps up and over the cheek-side cusps of the upper teeth), will have the same effect of locking up the cranium. There are other things that can cause TMJ problems. Maybe a patient's TMJ function is not ideal, but the body's working with it, and they're doing okay. Then they go and have some veneers or cosmetic dentistry done and the dental restorations are made a little too thick or a little too long. Now we have the same effect that the patient with the de-torqued premaxilla has; when the mouth closes the mandible is forced posteriorly and superiorly up into the temporal bones. Fixed bridgework that crosses the midpalatine suture can be a problem. I don't believe that a clicking joint or limited oral opening are ever "okay." Although, if a patient is asymptomatic other than the clicking and the choice is made not to treat, that's the patient's business. However, I think I have still the professional obligation to inform these patients that they may, or do, have an internal derangement and things are not what they should be.

**OA:** What other kinds of physiologic derangements have you seen as a result of either poor occlusion or poor alignment within the oral region?

**RG:** There are a lot of things that can happen. When you impact the trigeminal nerve, you're also impacting other cranial nerves. Drs. Stack and Sims wrote about ephaptic transmission in the brain in an article in the *Academy of Craniofacial Pain Journal*. They state that noxious input into the trigeminal nerve (CN V) can activate noxious input into the vagus (CN X), the facial (CN VII), and the glossopharyngeal (CN IX) nerves. That's pretty substantial nerve stimulation. We see people with sympathetic overload quite a bit, and those patients I refer out first for osteopathic or SOT work to try to get them quieted down before I start doing what I do. What I do can have such an impact on them, and if they're too far gone already, I don't want to push them over the edge.

**OA:** You've seen profound changes just by making a few buildups on the lower teeth and changing the occlusion with the mandible. Could you talk about that?

**RG:** A couple of pediatric cases come to mind. I had a four-year-old girl with constant headaches. Children generally won't complain of headaches; they're just miserable all the time and cranky because they hurt and they don't understand that they are supposed to feel any different. If they've had headaches since birth, they accept that as a normal day-to-day thing. The pain threshold elevates so they can take more and they don't complain. This child had had a history of a lot of ear infections too, and drainage tubes placed in her ears. She had a very deep bite and no spacing between the primary incisors, which is common but abnormal. We put some resin build-ups on her primary molars and opened her bite up to where she was almost in an open bite, where the mandible is positioned down and forward so there might be a slight gap between the lower front teeth and the upper front teeth; the lower front teeth would be down and forward to where they are pretty much even with the upper front teeth, instead of behind them. So, we opened her bite up this way and a couple of days later her mother called and told me that green stuff was coming out of her ears, eyes, and nose and the child was happy; all this drainage that was backed up was coming out. Another case was the son of one of my assistants. He failed his hearing test in third grade, and he had a very deep overbite. We put a removable splint in his mouth. This was before I was doing resin build-ups. We didn't even think he'd wear this thing. The mother called me up to say "I can't get him to take it out of his mouth to brush his teeth! He does not want to be without this appliance." When she took him back to have his hearing rechecked after a month, he was 50% better, and at three months they said to her, "Why did you bring him here?" His conductive hearing had been affected by the mandibular condyle seating too far up into the temporal bone. Pinto's ligament runs between the middle ear and the disc of the TMJ. If the disc is displaced, then it pulls on Pinto's ligament and you can experience conductive hearing loss. It can be reversed by getting the disc back in place.

**OA:** Did studying the biodynamic approach to osteopathy have an impact on how you worked with the ALF?



**RG:** It really did. My palpatory skills just went skyward. It really helped me in the sequencing of things. Now I had palpatory skills to back up what I was feeling intuitively. That made a huge difference.

**OA:** So you have a better sense of what the body is trying to prioritize in the treatment plan?

**RG:** Yes. I re-diagnose at every visit. At the end of the visit I'll make some notes on what I think I want to do the next time around, but often when you re-diagnose at the subsequent visit, you find that "Well, what I was going to do today isn't what I should do today." So I'm not going to do what I had planned earlier; I'm going to do what I should do, not what I thought I was going to be doing.

**OA:** Letting the mechanism guide the treatment.

**AH:** Olixn, how do you view the Roling Seventh Hour now after all of your osteopathic studies? Having gone to such a subtle approach with the biodynamics, how do you feel about something like direct fascial work with the pterygoids or in the nose? Do you think there's a time and a place for it?

**OA:** That's a big question, which we could dedicate an entire article to. First, I don't consider osteopathy or biodynamics to be subtle; when the long tide comes in sometimes it feels like a tsunami, the potency . . . all I can do is bow to it. But generally speaking, in an osteopathic treatment many of us are taught to listen to the mechanism and the tide, and we become more of a servant to the tide. Like Rebecca was saying, in osteopathy we can't come in with an agenda like "I'm going to do a Seventh Hour, I'm gonna do this, I'm gonna do that." We have to listen each moment along the way and see what the tide is trying to do, how the tide is trying to treat the patient, heal the patient, bring the patient to wholeness, and how can we support that process. That's a little different than coming in with a plan that I'm going to do a Seventh Hour today; it's fine to have a plan, but as a cranial osteopath, I couldn't really start that way and follow the tide as a principle of treatment.

As far as your question about direct fascial [work], yes there's definitely a place for it. There's direct-action technique – things like direct myofascial release, high-velocity low-amplitude adjustment, muscle energy –

and then there's indirect action where you stay out of the barrier and allow a potency to build and make the correction. There's a place for both of those approaches. One thing is certain – if you effect a big structural change from foot to neck, you have to have a way of effecting the same level of change in the cranium or problems are going to arise. Dr. Ida Rolf envisioned the level of change she thought was required in the cranium in part through intra-oral and intra-nasal work. Osteopathy has a long history of intra-oral and intra-nasal work and quite a few conversations about balancing the side effects of this work. Some osteopaths find they get better treatments and results by avoiding intra-oral and intra-nasal work and working with the embryological fulcrums for growth and development of the head and neck. There is a particular fulcrum that organizes the growth and development for everything from bregma to xyphoid. We will sometimes work with that fulcrum for ulcers, GERD, hiatal hernias, tonsillitis, and sinusitis, but it is a lot of years of study to work that way. In the biodynamic curriculum, that is taught at about year six or seven – that's six years of post-graduate study and practice, so maybe ten or twelve years into our osteopathic study and practice. Rolfers certainly need some means to effect change or create the potential for change within the cranium that matches what is going on in the rest of the body. Intra-oral and intra-nasal work is the means that is traditionally taught. I think we need to proceed with caution, really know our anatomy, study the effects, and study with a mentor, because it's very easy to lock up the mechanism with that type of work, particularly the mid-face fluid fields that Rebecca was talking about earlier. What looks like an underbite and a protrusion of the mandible is sometimes actually a loss of potency in the mid-face fluid fields – it hasn't fully developed, it isn't fully expressing. Is our direct action with nasal work going to support an opening of that or is it going to create a further lesion? This, I think, is a question we need to be asking ourselves. What amount of pressure is right, how do we evaluate?

Part of what Ida Rolf was after, I imagine – she may not have had this type of language – was creating the space and freedom for life to express through the mid face and lower face, but what was the quality of her touch when she went into the nose, where was the fulcrum of her intention? I never met her, so I don't know; we rely on the elders of the

profession to pass that kind of knowledge along. Embryologically there's three distinct regions in the face – upper, mid, and lower. The mid and lower can often lose vitality or experience a compressive force, either in childbirth or trauma during life. You'll see lack of growth and development and loss of function and physiology, it can look like and underbite when in actuality it is lack of expression and compression in the mid face. There's fluid fields all over the body; these in the face are three very dynamic and important ones. The upper one would be basically in the frontal region of the head, the mid-face field would be along the zygomatic arch region, and the lower face fluid field would be in to the mandible and hyoid region. These are approximate, not exact.

**RG:** It's the distribution of the three trigeminal branches; V1, V2, V3.

**OA:** Embryologically they are, you can trace it back. And then they kind of come together as a single fluid field that goes down into the brain stem and the cervical spine. So we begin to see embryologically the effects that Rebecca was speaking about earlier, where a change in the mandible or in the maxillary region has a profound effect on the cervical spine, brain stem, and ANS. It's a big deal, very powerful, very beautiful.

**AH:** Rebecca, can people contact you if they are interested in ALF work?

**RG:** I encourage that. I have people emailing me from all over the world that go to my website and I try to give them answers, even if I don't see them as patients.

**OA:** Rebecca's a great resource, she's really passionate about this work, and extremely knowledgeable. I think we just scratched the surface.

**RG:** Thank you, Olixn.

**AH:** Thanks to both of you for your time.

*Olixn Adams is a Certified Advanced Rolfer who went on to become an osteopath. He practices full-spectrum family medicine and traditional osteopathic medicine at Spanish Peaks Regional Health Centers in La Veta, Colorado, and Walsenberg, Colorado. (The hospital will soon be the first in the state to have a full homeopathic pharmacy.) Rebecca Griffiths has been a practicing dentist for thirty years, has treated TMD patients successfully for twenty-seven years, and has been an ALF specialist for twenty years. She is located currently in Phoenix, Arizona and her website is [www.tmjarizona.com](http://www.tmjarizona.com). Anne Hoff is a Certified Advanced Rolfer in Seattle.*

# Breathing Through the Whole Body: Toward a New Functional Definition of The Line

By Will Johnson, Certified Rolfer™  
© 2012

*Editor's Note: Will Johnson will be teaching the concepts of this article through a sitting meditation retreat next spring. A unique feature of the retreat is that practice will be enhanced by each participant receiving sessions of structural integration (SI) during the retreat. (More information can be found at the end of this article.) We plan to publish an article evaluating the impact this has on the overall retreat experience for both participants and practitioners.*

Even though Ida Rolf always presented "The Line" as the highest value to which the work can aspire, it remains the most neglected, and unexplored, aspect of the teaching as we have continued mostly to focus on the therapeutic applications of Roling® SI, rather than its evolutionary implications. In her more lyrical moments, Dr. Rolf would speak of Roling SI as a kind of handmaiden to the force of evolution that, if Darwin is correct, has kept propelling our species all these millennia to an ever more upright posture. My primary attraction to Roling SI was always as an experiment in the evolution of consciousness, and the understanding that I got from Rolf was that the two primary forums in which evolution can be observed to occur – body and consciousness – were deeply intertwined and appeared either together or not at all. The image that she used to express this potential for evolutionary growth in a human being was The Line.

The main problem with The Line, of course, is that no one was ever able to craft a workable definition of what it actually might be or what constituted its embodiment. As structural integrators, we understandably approached any discussions or exploration of The Line as a structural issue, but this single-minded insistence that The Line be explained and approached in purely structural terms has never proved satisfactory and, I would suggest, has even proved to be something of a red herring. Because no two bodies are identical, it simply isn't possible to craft a structural definition of The Line that is applicable to everyone. For The Line to indicate, as I believe it does, a path of

transformational practice that any body – tall or short, stout or slender, young or old – can explore and pursue, there needs to be a common denominator to its expression that applies to all bodies.

I would like to suggest that The Line is what happens when every joint of the body can remain in constant, subtle motion in resilient response to the force of the breath. The evolutionary practices of The Line, then, work to let go of restrictions to a whole-bodied breath through playing with balance.

Notice that I didn't say a thing about vertical alignment. Vertical alignment, the keystone of a purely structural perspective, is not alone sufficient to embody The Line. We can stand up quite straight and tall but still restrain the breath. We can't, however, experience breath moving through a body that is grossly out of alignment. In other words, by paying attention to the possibility of a breath that can move through more and more of the body, we have no choice but to become more structurally aligned.

The Line can never appear through the static. It's not like becoming a perfectly positioned fence post, but more like what happens when we ride a bicycle. It can only be approached through allowing constant, natural movement to keep occurring throughout the entire body, and the natural source of this constant movement in a relaxed body is the breath. Surrendering to the constant motion of the breath takes the body, and the consciousness

that it expresses, out of the static into the ecstatic (ex-static).

My continued inspiration for this understanding is Rolf herself. During my auditing class she responded to the question "how should a 'Rolfed' body breathe?" by suggesting that, in a truly balanced body, movement would be felt to occur at every joint of the body in natural, resilient response to the force of the breath (and she even went on to suggest that this movement could be experienced in the joints between all the small bones in the feet as well as in the sutures in the cranium!). I increasingly believe that this functional image of The Line works extremely well as a common denominator that applies to every body.

The contraction and relaxation of the diaphragm create a force that can be transmitted through every joint of a relaxed body, just as the force that creates ocean waves causes motion to appear throughout the entire body of water through which the wave is passing. As we all know, a body whose structure is grossly misaligned cannot relax its tensions because, if it did, it would simply topple over. Bring the body to greater alignment, and the body can start to relax and let go. For relaxation to continue, though, motion needs to keep occurring throughout its entire length in resilient response to the breath. If that motion ceases, we forfeit our relaxation and the myofascia gradually hardens. From this perspective, what the hands-on sessions of Roling SI can be viewed as actually working on are the fleshy holding patterns and tensions that are the result of resistance to the free flow of breath through the body.

Resistance to the transmitted motions of the breath appears as a purely physical phenomenon through freezing the tissues of the body at its joints. It also appears as a phenomenon of consciousness through its role in creating the quality of consciousness that passes as normal in the world at large, a quality in which there is often a great deal of semi-conscious thinking going on and very little awareness of bodily sensation. Within this essentially disembodied consciousness we identify with the speaker of the internal monologue (whom we name "I"), and the manifestation and nurturance of this "I" is best conducted through holding various

parts of the body still (the head freezes, the belly grabs, the legs become frozen stilts, and on and on with infinite, highly personal variations).

When everything in the body can start to move again, it's not just the frozen stillness in the soft tissues and energetic patterns of the body that starts melting. The internal monologue of the mind (that manifests as a litany of unbroken and unbidden thoughts) and the condensed and highly compacted sense of "I" that accompanies it can start melting away as well, revealing in their place a dramatically different perspective of consciousness – what the Buddhists describe as *sunyata* (open dimension of being) or *rigpa* (our natural state), and what the Sufis call *fana* (melting away). My strong sense is that the evolutionary effect on consciousness that Rolf seemed to imply might occur to someone exploring "Lined" states is wholly concordant with these descriptions.

When asked about his view of Western civilization, the well-known Vietnamese Buddhist teacher Thich Nhat Hahn simply responded "lost in thought." Check this out for yourself: when you become lost in thought (which, let's be honest, we all do on a maddeningly regular basis), doesn't the body become still and frozen and breath become restricted and limited?

Alignment allows the body to relax, and resilient motion throughout the body in response to the force of the breath allows relaxation to continue over time. If this constant motion ceases, the body forfeits its relaxation, and the consciousness-shifting effects of an exploration of The Line will also equally come to a stop.

To explore The Line and its evolutionary potential, I don't really see any other alternative to bringing periods of formal practice into our daily lives. We all need to find the practices that work best for us, but in my experience this has been best explored through meditating in a seated, but highly motile and resilient, posture and through spontaneous movement and dance. Ultimately, Rolf spoke of Rolfing SI as a "way of life," just as Buddhist teachers speak of mindfulness practice as a 24/7 occupation.

These are the questions that interest me:

- Where in the body do you hold yourself still when you breathe?

- Where and how do you inhibit and hold back the breath?
- What happens to you, at both the level of body and mind, when you let go and start allowing more movement to occur in response to the breath?
- The joints between the vertebrae of the spine are not unlike joints anywhere else in the body: they're designed solely for the purpose of movement. What happens when you pay attention to your spine, relax as completely as possible, and allow movement to occur between every vertebra as you breathe?
- By surrendering to the possibility that resilient motions naturally want to occur throughout the entire body in response to the breath, alignment and relaxation have no choice but to manifest. What happens to your sense of self when you let breath pass freely through you?

Rolfing SI has always had a shadowy corner of whispered murmurings and half-veiled suggestions that the work was not just about physiotherapy, but that a sincerely embodied exploration of its tenets amounted to entering into a sort of mystery-school (and indeed the human body is the mystery school campus par excellence). From a more purely physiotherapeutic perspective of the work, anything but the most casual discussion of The Line with our clients may come across as irrelevant, too much information, way too esoteric, or simply distracting, but from the mystery-school perspective of Rolfing SI, exploring The Line would be central to the intentions of the teaching. The Line tells us to play with balance and allow breath to pass through more and more of the body. Exploring this as conscious, intentional practice has a profound effect on both body and mind and leads us ever deeper into what has always struck me as the very strange and mysterious whatever-it-is at the core of embodied existence.

Let's head off some possible misconceptions about this functional approach to The Line. The Line is not some kind of goal to be attained and then maintained. Even to define it, as I earlier did, as a condition in which every joint in the body can move in response to the passage of the breath is misleading. It doesn't point

to a consummated condition. What it points to is a path (not a goal) of mystery-school practices, an attitude to embodied exploration in which we play with and explore conditions of upright balance while relaxing and letting go of the restrictions to a breath that wants to breathe through more and more of the body. The goal is not to embody some kind of perfected pattern of breath. The goal is just to do the practices, breath by breath, and see how they affect you.

The same can be said of balance as well. Balance is not a goal. We're not trying to arrive at some kind of consummate place of balance and hold ourselves there to experience the evolutionary shifts that Rolf intimated would occur. We're just playing with balance, one breath at a time, not unlike how a child plays with balancing an upside-down broom on an outstretched hand. Playing with balance in the context of surrendering to a breath that wants to breathe through more and more of the body is just that: it's what you play with, moment to moment, while exploring practices of letting go. Or, in the manner of a saying by Yoda, the sage from *Star Wars*, we might say: "there is no Balance; there's only balancing."

Rolfing SI as physiotherapy helps relieve the residual pain that has accumulated in a body's tissues, and the relief that we offer is, for most of our grateful clients, reward enough. The path of The Line is for people who want to further explore how playing with balance and relaxing the restrictions to the free flow of breath affect and alter their sense of embodied consciousness. We know that the force of evolution (which can be felt palpably as a deep energetic current) wants to keep propelling us to stand up ever straighter. My continued fascination in exploring what I've come to consider the practices of The Line is in how it's going to affect and influence who or what I experience myself to be, right now, in this moment. That's the mystery-school practice.

In the *Satipatthana Sutta*, one of Buddhism's most seminal texts, whose words are ascribed to the historical Buddha himself, the instructions on the awareness of breath culminate in the suggestion "as you breathe in, breathe in through your whole body; as you breathe out, breathe out through your whole body." Why do you think the Buddha wants us to do exactly what Dr. Rolf was also suggesting is possible?



Will Johnson is a Certified Rolfer and the author of a number of books about the role of the body in spiritual practices, including *The Posture of Meditation and Breathing Through the Whole Body: The Buddha's Instructions on Integrating Mind, Body, and Breath*. He will be teaching a sitting-meditation retreat in the

Buddhist tradition, focusing on the deeply body-oriented practices and perspective of this article, April 26 - May 3, 2013 in Crestone, Colorado. As an integral component of this retreat, and as direct support for the practice, he has assembled a team of structural integrators to participate, so that each retreatant will receive four SI sessions

during the retreat. Contact Will for more information, or register at [www.dharmaocean.org](http://www.dharmaocean.org). Also, anybody wishing to communicate with him about the functional exploration of *The Line* and its effect on consciousness may do so through emailing [will@embodiment.net](mailto:will@embodiment.net).

## Rolfing® SI and the Buteyko Breathing Method

By Robert Litman, Buteyko Breathing Association Educator & Trainer, and Helen Luce, Certified Advanced Rolfer™

The premise of this article is to demonstrate that true respiratory health facilitates structural change. As breathing rhythms return to their adaptable nature, structural changes of the connective tissue are easier to affect, reducing effort on the part of the Rolfer. Adaptable, fluid breathing rhythms facilitate both a balance of the respiratory gases and a responsive, relaxed body.

The Buteyko Method evolved from the scientific principle discovered in 1904 by Christian Bohr that subsequently became known as the Bohr Effect. This principle states that when levels of carbon dioxide in the blood become too low due to chronic over-breathing, blood pH becomes too alkaline (known as "respiratory alkalosis") causing the distribution of oxygen from the hemoglobin in the red blood cells to the tissue cells to slow down. As a result, the cells of the tissue switch from aerobic respiration to anaerobic respiration and lactic acid build-up begins, causing tissue acidity – also known as "metabolic acidosis." As respiratory gases become unbalanced, our organism operates on survival circuits due to a decrease in the flow of oxygen from the blood to the cells. This response causes deep organ distress and deterioration.

Let's take a look at how this works. The three primary respiratory gases that need balanced proportions within the organism are nitrogen, oxygen, and carbon dioxide. Most people assume that the need for oxygen drives the breathing rate and that when we feel we cannot get enough air we need to breathe more deeply. In actuality, carbon dioxide drives both the rate and depth of breathing. Carbon dioxide (CO<sub>2</sub>), often referred to as a waste gas, is actually a hormone, performing many

regulatory processes in the body. In the "old paradigm" thinking that CO<sub>2</sub> is a waste gas, it is then mistakenly perceived as something to get rid of – hence the frequently heard exhortations, "In with the good and out with the bad!" and, "Take a **big** breath in through the nose and then blow it all out your mouth!"

These instructions are actually dangerous. They invite people to release more CO<sub>2</sub> than the body intended. Think about someone terrified of public speaking as he stands behind a podium. You might see the person hyperventilating to the point that he begins to feel as if he might faint. If you know the old folk remedy, you will rush up with a paper bag and instruct him to breathe in and out into it, and soon he will start to feel better. What do you suppose really happens? This person, breathing in his own CO<sub>2</sub>, regains consciousness as CO<sub>2</sub> levels return to normal, causing an increase in oxygen distribution into the brain, clearly demonstrating the Bohr Effect.

CO<sub>2</sub> is also a poison, however. The respiratory center of the brain always monitors CO<sub>2</sub> to keep levels steady. It does this by setting the respiratory set point (rate and depth of breathing) in the brain stem. When more CO<sub>2</sub> is needed to be released it increases the rate of breathing, when less CO<sub>2</sub> is needed to be released our breathing slows down. Our bodies self-regulate these amounts properly if our breathing habits do not interrupt this process. Unfortunately, we all have developed survival skills that can limit the range of responsiveness in breathing, leading to a compression of structure. Since the tissues will not move, the brain accommodates by limiting respiration. Here

we are able to see the negative feedback loop: compressed structure = reduced respiratory adaptability = less breath = reduced requirement for adaptable tissue. The breathing rate locks into a very specific and non-variable frequency.

This perspective alters the paradigm from "symptoms cause breathing difficulties" to "stress disrupts breathing and produces symptoms." Dr. Konstantin Buteyko revealed over 150 diseases that are breathing-related. His scientific research validated this hypothesis and his method was accepted into the Russian medical system, becoming part of hospital protocols. In this scientifically-based paradigm, shifting a person's breathing patterns can ameliorate symptoms and alleviate the need for medications.

The most essential point that Buteyko makes regarding learning to breathe for optimal health is that *only* the nose is used, both in inhalation and exhalation, whenever possible – including during exercise. We also stress the importance of pacing your daily activity so that you can breathe through your nose most of the time. "Fight or flight" circumstances and moments of sudden excitement are exceptions to this rule.

Mouth-breathing triggers the sympathetic response for fight and flight. Nose-breathing regulates the nervous system to balance the parasympathetic ("rest and settle") with the sympathetic so that the organism spends more time settled and rested. This allows more sustainable resources in handling the stresses of everyday life. We develop a more responsive attitude to stress rather than a reactive one. Mouth-breathing, which keeps the nervous system in a high state of activation, then translates into a state of anxiety in our organism. We are capable then, of inducing our own anxiety simply by the way we breathe! There are some forms of exercise, i.e. yoga, Pilates, etc., that use mouth breathing to create specific results, and these are also exceptions to the nose-breathing rule. Neither yogic nor

## Reasons to Nose-Breathe

© 2012 Robert Litman

### Breathing through your nose:

- Warms the incoming air to body temperature, the optimal temperature for the lungs.
- Moisturizes the incoming air, providing the lungs with approximately a liter of moisture per day.
- Filters the incoming air through the hairs and mucous membranes that line the nose to remove particles.
- Stimulates secretion of healthy mucous to help keep the airways moist, preventing coughing and throat-clearing.
- Regulates the direction and velocity of the air stream to maximize exposure to the protective nasal mucosa, whose blanket of cilia provides a protective barrier against bacteria, chemical, or gaseous stimuli.
- Keeps your sinus membranes lubricated and functioning well, lessening the chance of stagnation that can lead to sinus infections.
- Facilitates the production of nitric oxide, an essential bronchodilator that also sterilizes the air in your sinuses on the way to your lungs.
- Triggers the release of immunoglobulins (anti-bacterial molecules) that help to clean the incoming air and increase the functioning of your immune system.
- Creates pressure differences between your lungs and nose, assuring the flow of air and oxygen to the heart and lungs.
- Imposes a resistance to the flow of air that results in 10% – 20% more oxygen uptake, helping to maintain elasticity of the lungs and ultimately the effectiveness of the heart.
- Minimizes loss of CO<sub>2</sub> during exhalation, thereby allowing CO<sub>2</sub> to do its job of reducing constriction in your airways and blood vessels, facilitating the release of oxygen from your red blood cells, and thus maximizing oxygen delivery to the other cells of your body.

### In addition, breathing through your nose

- Heightens your sense of smell, linking it to the limbic system – the seat of your emotional body – to allow you to make more choices about how you feel about things you encounter in your immediate environment.
- Maintains your sense of hearing by cleaning the environment around the inner auditory tube at the back of the upper throat, to keep it free from stagnating debris.

### Regular nasal breathing helps keep the nasal passages open for all the benefits on this list. It also:

- Brings air into your sphenoid sinuses to cool your pituitary gland and help regulate your body temperature.
- Regulates sleep by reducing CO<sub>2</sub> emissions, helping to keep your nervous and cardiovascular systems' chemistry in balance.
- Activates turning of the head and body from one side to the other during sleep, ensuring maximum rest and possibly reducing symptoms of backache, numbness, cramps, and circulatory deficits that can occur from sleeping in only one position.
- Activates healthy movement at several head and neck joints: the atlanto-occipital joint, the atlanto-axial joint, the sphenobasilar joint, and sutures of the facial and head bones – nourishing your central nervous system and helping to relax your neck and shoulders.
- Moves the air past your nasal septum, slowing the movement of air and facilitating a more complete integration of the process of ventilation with other biological processes.
- Provides any excess tears a clear passageway for drainage.
- Channels the air past the structures that mark the center of your head, helping to keep you balanced and centered.
- Reduces snoring.
- Stimulates formation of sinus growth in childhood through the movement of air.

### And lastly – and maybe most importantly – breathing through your nose:

- Reduces anxiety by regulating the speed of respiration and encouraging maximum inflation of your lungs, producing a calming effect.
- Deepens your connection to yourself and helps bring your attention to the present moment.
- Facilitates meditation and allows you to tap into your innate sense of well-being.

Pilates breath techniques were intended to be used in normal, everyday situations. Nose-breathing during other forms of exercise increases performance due to the above-mentioned increase in oxygenation. Nose-breathing, with its numerous positive physiological benefits therefore becomes a mandate for everyday living (see the sidebar Reasons to Nose-Breathe on p. 23.)

By teaching clients to understand the science and art of breathing, we empower them to permanently self-correct their breathing style. As blood chemistry is balanced, mutability and adaptability return, oxygenation of the body's tissues returns, and fluidity of movement once again becomes possible. This is the interface of Rolwing Structural Integration (SI) and the Buteyko Method. Rolwing SI prepares the body to accommodate the various changes in air volume that represent healthy breathing, which in turn facilitates deeper structural change due to the increase in tissue oxygenation that practicing the principles of Buteyko makes available.

The implication for Rolwing SI goes deeper. CO<sub>2</sub> in its role as a hormone (regulating oxygen distribution from the red blood cells to tissue cells and mitochondria) also dilates smooth muscle. It relaxes the breathing airways and the vessels of the circulatory system, as well as the connective tissue. The recent discoveries that smooth muscle cells populate within the connective tissue has implications for the pliability of the connective tissue as well as the ability of Rolwing SI to effect change.

As connective tissue moves into a more receptive and relaxed state due to the dilating effect of CO<sub>2</sub>, the Rolfer finds the tissue more responsive and capable of sustaining the changes that a good Rolwing series can produce. Teaching clients to track their own breath during sessions can bring an enormous sense of aliveness and excitement to the work. Rolfers have a great opportunity to educate clients in the single most powerful resource they have available to them: their own respiration, and its ability to heal, inform, release, and energize every cell of the body. I (Helen Luce) have experienced numerous cases of clients who are, in their own words, terribly anxiety-ridden, nervous, or in a constant state of ill health report within a *session or two* that they already feel like a "new person" – noticing a substantial decrease in their nervous symptoms, better sleep, sharper thinking, etc. Thanks to my study of

the Buteyko Method I have been able to help clients stop an asthma attack in less than two minutes – without use of an inhaler!

The Rolfer's work is less effortful overall, as both the client and practitioner are breathing in a healthy, sustainable manner during the sessions. The positive entrainment that occurs when the Rolfer her/himself demonstrates in every moment what healthy breathing looks – and more importantly *feels* – like, is a beautiful experience. Understanding respiratory physiology enhances every aspect of a Rolfer's work and, I believe, made a huge difference in the well-being of all my clients.

If this brief article has sparked your curiosity and you would like to learn more about the Buteyko Method, you can contact Robert Litman and Helen Luce at their respective email addresses: robert@thebreathablebody.com or helen@thebreathablebody.com. You can also take a look at the Buteyko organization's website, [www.buteykoeducators.org](http://www.buteykoeducators.org) or the following books: *The Carbon Dioxide Syndrome* by Russell and Jennifer Stark (Australia: Buteyko Works, 2002) and *Breathing Free* by Theresa Hale (New York: Three Rivers Press, 2000).

*Robert and Helen teach many Buteyko Method classes each year, both in Tucson, Arizona and around the world. They are also available for*

*private sessions, Skype sessions, and classes for other types of educators interested in learning these techniques.*

*Robert Litman is a Buteyko Breathing Association Educator and Trainer, Authorized Continuum Movement Teacher, and Duggan/French Approach to Somatic Pattern Recognition Practitioner. For the past twenty-five years, he has been teaching people about the connections between breathing, movement, and health while maintaining a private practice in Tucson, Arizona. His websites are [www.asthmafreearizona.com](http://www.asthmafreearizona.com) and [www.thebreathablebody.com](http://www.thebreathablebody.com).*

*Helen Luce was trained twenty-nine years ago as a Rolfer and got her advanced certification six years later. She has been practicing primarily in Tucson, Arizona. Helen has been a student of Angwyn St. Just in Trauma Energetics, and has studied extensively with Emilie Conrad, Susan Harper, and Hubert Godard. She has also studied craniosacral therapy, visceral manipulation, the Buteyko Method, homeopathy, and herbal medicine. Her Rolwing SI is deeply informed by all the influences of her years of passionate study, but most especially by the sensitive and fluid touch of Continuum and craniosacral work. Her sessions always include much attention to the client's perceptual field and breathing patterns, in addition to structural and movement patterns.*

## Middendorf Breathexperience Work

**By Judith Mayanja, Certified Advanced Rolfer™ and Middendorf Breathexperience Practitioner**

I remained ambivalent for months as to whether I should contribute an article about Middendorf Breathexperience Work (MBW) to *Structural Integration: The Journal of the Rolf Institute*®. Then I read a quote attributed to the Dalai Lama. It is said that when he was asked what surprised him most about humanity, he answered, "Man. Because he sacrifices his health in order to make money. Then he sacrifices money to recuperate his health. And then he is so anxious about the future that he does not enjoy the present; the result being that he does not live in the present or the future; he lives as if he is never going to die, and then

dies having never really lived." The impact from his last sentence catapulted me out of my ambivalence. ". . . and then dies having never really lived." If one could thwart such a pitiable end, it would be of infinite value.

I sent this quotation to a breath colleague of mine, inspired by the Dalai Lama's insight. Her reply to it was, "Wonderful! At least we have breath and knowledge of how to be in the moment. I'm learning more and more about that." Living, breath, and the present are inextricably connected, and if I could contribute to even one more person learning about and/or possibly trying this somatically oriented style of breathing work



known as Middendorf Breathexperience Work, it would be worth it.

One might say, "In regard to the breath, what is so original about breath bringing people to the present moment?" Generically speaking, this is not a unique attribute of breath work. No one breath style holds a monopoly on this attribute. Meditation has utilized this vehicle as a guide for eons. So, why MBW? What is its distinction in the family of breathing practices? Why would it be of interest to Rolfers?

Before launching into what distinguishes MBW from other types of breath work, I'd like to take a moment to describe the origin and background of the work. Germany has been gifted with a particular, abiding curiosity and sustained interest in the natural breath, which has existed for over two hundred years. Professor Ilse Middendorf was graced to have been born German, thereby allowing her to take advantage of this rich environment.

Her interest in the breath came from a childhood experience at the age of eleven. She had been looking up at the sky with raised arms, as if to fly away into the ethereal blue, and on one particular occasion, while making this gesture, she heard a voice from inside her say, "You must breathe." This early intuition inspired her to follow the path of breath and what it had to teach her.

The meaning and remembrance of those words echoed through her adult life and professional development. She became a teacher of gymnastics (in the European sense), which explored body consciousness through various schools of movement and exercise. (One of the schools Ilse studied from was the Mensendieck School which, by the way, also had an influence upon Dr. Rolf and the value she later came to place on movement work.) Although accomplished as a gymnastic teacher, dissatisfaction remained with the depth of these methods – the way they emphasized will power, leaving little room for the direct essence of breath involved with human reality. Around this period she found a mature dance teacher, Ewe Warren, with whom she learned about the unity of expression by means of movement, breathing, and meditation.

Ilse's breath exploration took its final thrust toward its full creative bloom and independence from Cornelis Veening,

a member of Carl Jung's circle and a practitioner of breath-therapy. She eventually gained a professorship at the Berlin Music and Drama Academy, a college for higher education of music and the performing arts. She went on to establish her own school, The Institute for Breath-therapy, in Berlin. It was through the hand of friendship from the Feldenkrais® community of San Francisco that her work came to be embraced in this country.

Ilse passed away recently at the age of ninety-eight. With well over sixty years of breath experience she had the ability to sense an imbalance of breath signaling the onset of illness. She could then go within to restore her breath balance. I think it was not an accident that she was long-lived. It was not the number of years alone that made her life impressive, but the quality of her life, which came from her exploration of the breath. Her work is carried on by her former student, and consummate disciple/teacher in his own right, Juerg Roffler, director of the Middendorf Institute for Breathexperience (MIBE) of Berkeley, California. He states:

Through the allowing of the breath to come and go on its own, the source that holds essence and the knowledge about oneness becomes accessible. The sensation of the movement of breath identifies this source, this way it becomes a reality in our body and we can experience, sense our truth. Our participation presence in this, integrates this process.<sup>1</sup>

So, why would MBW be of interest to Rolfers? In a word, the *body* – something both schools hold with highest regard. MBW magnified my experience of my body beyond a mere mechanistic sense to include the greater sensitivities of being human. Here is where it is more useful to go directly to the words of Ilse from her book *The Perceptible Breath: a Breathing Science*. She articulates, far better than I, with words that have been informed by years of experience with the breath:

The human body is often "discovered" by subjecting it to specific physical exertions, in the hope of revealing its secrets by these clumsy external means. The body is sought by supposed "methods of research" that in the end do not take the body into consideration at all.<sup>2</sup>

The reason why there are so many different keys to corporality are because the body "carries everything in itself," since life and soul, mind and body form a whole. How strong has our discernment to grow, until we are able to realize, what this marvel, "the body" is, and judge it in terms of its overall importance! How often, even in our own times, is the body looked upon and judged as an object. But how could reality develop in human life, in the Now, without the reality of the body?<sup>3</sup>

I am not the only Rolfer or Rolf Movement® Practitioner to embrace MBW; I am in the company of several others in the breath community, both Rolfers and Rolf Movement Practitioners alike. Many times, I would find myself exploding with joy and excitement at the revelation that certain Roling SI principles and goals were being achieved without any external influence – most often the revelation coming during a breath and movement class. "Look, Ma, no hands!" Roling SI results could be achieved through the breath, results associated beyond meditative awareness.

Interaction and exploration with the breath take place in three dynamic modes and this, too, may be of interest to Rolfers (I use the term inclusive of Rolf Movement Practitioners as well). They are: 1) breath and movement exploration; 2) vowel space exploration; and 3) hands-on exploration of the breath addressed to the individual through a breath-dialogue with the hands of the Middendorf teacher and the breath and body of the client lying on a massage table.

MBW is work for the mature adult. Listen to the words of Ilse that help us understand the nature of the unconscious breath and the importance of getting to know it in an unforced way:

The natural breathing movement that you can see in very small children has been reduced to a minimum. Because unconscious breathing is unconscious and also *reacts* unconsciously, we must consider this function as one of the most precise instruments that nature has given us which could bring our life to flower, if it were not fought against throughout our lives, by our thinking consciousness,

movements, and many other influences.<sup>4</sup>

. . . *the unconscious function of breathing* reacts most sensitively to any influence. By supporting all the other functions, it balances all the fluctuations in one's life, as long as "tensions," "limpness," and "congestions" do not predominate.<sup>5</sup>

However strongly we may want to, there is no way to improve (the) unconscious mode of breathing as long as we do not get to know our breathing. But if we employ our *will* the breath becomes conscious and does not reach the profound layers where an effective change in the mode of breathing has to start, and so to start and change bad mental and physical posture at its root.<sup>6</sup>

Voluntary breath is ruled by the mind. It is directed to a special purpose and depends on the way you look at it. . . . these ways of breathing always serve one goal and they make an impression on me, my soul and my spirit *from the outside inward*, they are impressed on, put on, forced on. . . . this doing and making enables you to reach only certain parts of your complex body structures and you cannot judge where, or how this deliberate, chosen breathing is good or bad for you, since your "inner voice," which is a most particular bodily sense, is rooted in body-soul-and-spirit and is eliminated or at best, stays unconscious [italics added].<sup>7</sup>

Examples of voluntary breath include: deliberate deep breathing, professional techniques and methods used by singers, narrators, and newscasters, as well as its use in all kinds of sports, guided movement, and yoga. So, the movement work of MBW is an unfamiliar approach to movement, which differs from the customary goal-oriented mode of our conditioning, particularly in Western culture. It is not uncommon to grapple with periods of frustration, but with patience one eventually comes to befriend this unconscious breath. In Ilse's words, this "perceptible breathing is a centre-core happening, concerning the body-soul-spirit unity of the human being. Once developed and matured it moves from the inside outward, pervading the Self as well as the body and awakens its power. It

clears, orders, harmonizes, heals and finally becomes a *profound joy* [italics added].<sup>8</sup>

Breath and movement work help the breather become aware of the three major breathing spaces, the inner and outer breath, and also to become acquainted with the uprising, descending, and horizontal powers of breath. The three breathing spaces refer to three bodily distinctions and do not refer merely to the respiratory apparatus in isolation. According to Ilse, "the breath opens up three important spaces in us, corresponding to such layers: the lower space consisting of the pelvis and the legs, the middle space from the navel to about the 8th rib (middle of the thorax), including the diaphragm, and the upper space consisting of the shoulders, neck, head, and arms."<sup>9</sup>

Ilse developed the vowel space work by following the development of breath through breath and movement work. It sprang from wanting to help a student recognize the sensitive moment in breath-therapy by seeing if he could "*participate* in the moment of his inhaling breath without reflecting upon it rationally or interfering with it."<sup>10</sup> Again, back to Ilse:

This moment is of extraordinary significance for the entire breathing therapy. Nevertheless, there are many difficulties arising, especially when you try to become aware of your breathing, while it flows in without using your will, but when we succeed in becoming part of this event we shall be aware of our breathing coming of its own accord. We become conscious of our bodily, as well as spiritual (psychic) way of Being, which is crucial: *we have learned to wait*. [italics added]<sup>11</sup>

The vowel space work is less active bodily than the breath and movement modality and demands more of us emotionally to be with the breath movement and space. Different vowels have their breath spaces, or home (when breath process becomes more transparent or unhindered throughout the body), in different bodily spaces.

The vowel space work is an example of how the breath "not only reaches our inner world and moves us, it connects us to the world outside. It brings us closer to each other and breaks down our sense of isolation."<sup>12</sup> Language is the vehicle we ordinarily associate as being the bridge to one another, lessening isolation. Yet, how

often do we consider the breath that powers that speech? The vowel space work dissects language, in a way, into its incremental components of vowels and consonants until we can build back up to words and full-sentence use with the bodily awareness of breath, which is largely unconscious in normal language usage. This is a sensitive and wonderful exploration of our humanity.

Hands-on breath treatment is the third modality of MBW. Generally, breath and movement work and vowel space work take place in a group class setting. A hands-on breath treatment addresses breath to the particular individual. An individual breath treatment augments the group learning.

One of the reasons I enjoy receiving a hands-on session, even though I may be educated to the same lesson of breath from class, is the way it affords me the luxury of greater receptivity to my breath. Even with the best of intentions, in the sitting stool work or standing work, my "doing" unknowingly has crept into play. At the same time, the receiver comes to learn that it is not the hands of the practitioner that make something happen. Rather, there is an independent responsiveness of readiness by the breath in hands-on dialogue either by active offer or by being from the practitioner's hands that can best be described as the wisdom of the breath.

A person wishing to reap the full reward of this self-healing art form must come to take responsibility for his breath. Each of us has a way that our breath is developing towards balance, particular to the individual's body and being. The nature of the breath is trustworthy; breath is something that can be relied upon not only by the breather but also by the practitioner. This makes for a level of honesty that is refreshing, and at times challenging and demanding of respect. The breath simply will not respond to force because of its inherent knowing. This dialogue is composed of a very simple, yet not to be underestimated, profound conversation between the practitioner's hands and the receiver's breath of "yes, I will develop" or "no, not in this way" – or "no, not now."

The intrigue and appeal that this aspect of MBW may have for the Rolfer, as it did for me, is to be relieved of a touch that is communicating the unwanted intention of agenda. The education that comes with the use of the hands from MBW will unequivocally convince the

Rolfer that effectiveness can be achieved through gentleness. There may be periods of frustration that one goes through from the habituated use of the will through the hands, but just as one eventually opens to consciously sense the unconscious, natural breath without the use of the will, so one can learn, in time, the same with the use of the hands. This is a great liberation for ourselves and a kindness to our clients.

Breath, ultimately, remains a mystery beyond our comprehension. I feel quite certain in saying I did not make my breath; breath is a gift beyond my understanding. There is a scriptural reference with the most passionate theology that articulates my sentiment about breath. This is expressed by a Jewish mother who has just witnessed the death by torture of her seven sons. To remain true to their faith they accept death rather than break the law by eating pork under duress. I regard this as a proper perspective of the hierarchy and order in distinction between the Giver of breath and breath in the creature. She exhorts them with these words to encourage them in accepting their noble deaths. "I do not know how you came into existence in my womb; it was not I who gave you the breath of life, nor was it I who set in order the elements of which each of you is composed. Therefore, since it is the Creator of the universe who shapes each man's beginning, as he brings about the origin of everything, he, in his mercy, will give you back both breath and life."<sup>13</sup>

To further investigate Middendorf Breathexperience Work, please visit <http://breathexperience.com>. To view a short video of Ilse Middendorf please visit [www.youtube.com/watch?v=i7Ys151xqhg](http://www.youtube.com/watch?v=i7Ys151xqhg).

*Author's Note: The use of italics in Ilse's quotations was added by me and was not in her original text. If Ilse's words seem cumbersome it is due to the translation from the original German. This article came about from a lengthy paper I wrote entitled "My Work Philosophy." If anyone is interested in reading this lengthier version where I refer to the influence of Middendorf Breathexperience Work on myself, I would be happy to send you a copy; contact me at [judithmayanja@yahoo.com](mailto:judithmayanja@yahoo.com).*

## Endnotes

1. Personal communication from Juerg Roffler.
2. Middendorf, Ilse, *The Perceptible Breath: A Breathing Science*. Paderborn, West

Germany: Junefermann-Verlag, 1990, (translation by Gudula Floeren and Dieter Eule), pg. 9.

3. Ibid., pg. 10.

4. Ibid., pg. 24.

5. Ibid., pg. 25.

6. Ibid., pg. 26.

7. Ibid., pg. 25.

8. Ibid., pg. 29.

9. Ibid., pg. 33.

10. Ibid., pg. 60.

11. Ibid., pg. 60.

12. Middendorf, Ilse and Juerg Roffler, "The Breathing Self: The Experience of Breath as an Art to Healing Yourself." The Middendorf Institute for Breathexperience of San Francisco, December 1994.

13. 2 Maccabees, 7: 22-23.

# The Breath That Breathes Us

**By Carol A. Agneessens, M.S., Certified Advanced Rolfer,™  
Rolf Movement® Instructor**

*Listen – Are you breathing just a little and calling it a life?*<sup>1</sup>

Mary Oliver

Breathing: life's most vital function. Countless writings and techniques, from ancient Sanskrit texts and yogic practices to innovative holistic therapies and medical interventions are devoted to the cultivation, understanding, and repair of respiratory physiology. Every physical, psychological, and emotional problem is to some degree connected to a lack of oxygen and the interruption of full breathing cycles. Yet how many individuals pay attention to their personal respiratory habits? Or notice how respiratory health affects the depth and fullness of their breath and life? What happens to the breathing cycle when stressful events occur?

Too often breathing is taken for granted. Mistakenly, we assume that this function will always be working. Developing a kinesthetic awareness of breath broadens and expands our conscious participation in living. To breathe is to live, and respiratory freedom is a measure of life's potency. Maternal waves of breath transport the growing embryo from its miniscule genesis at fertilization through the birthing process. The first inhalation ignites a continuum of breaths; the last exhalation dissolves individuality into "the eternal mystery" at life's end.

At one time or another, you've probably experienced the sudden and shocking realization that you've been holding your breath during a stressful encounter, high-action thriller, or while waiting or anticipating news. Once you feel you

haven't been breathing, do you ravenously grab for oxygen? How many reminders have decorated your desktop, refrigerator, bathroom mirror, or the dashboard of your car reminding you to "breathe"? Recall the clients who describe their breathing as shallow or those who experience limited sensory awareness of the movement of their diaphragm and rib cage. With patience and guided kinesthetic directives, they may quickly begin experiencing greater excursion of their ribs and the impact that easier and fuller breathing effects in their lives. Through anatomical illustrations and directed touch, practitioners ignite a clients' felt sense of the expanding dimensions of their thorax, the depth and reach of their lungs, and the ease beneath their exhalation. We may work with athletes or singers whose beliefs about "how to breathe" actually complicate their quest for a fuller inhalation and passive exhalation. Or perhaps it is the child, teenager, or adult whose nervous system and breathing patterns carry the fight/flight/freeze imprint of birth trauma or the hypervigilant attitude of an early home environment lacking predictability and safety.

The respiratory control center within the brain stem demands oxygen, and respiration is triggered. However, bracing, slumping, accidents, injury, faulty education, or longstanding beliefs can undermine the ongoing and involuntary nature of breathing. As a longtime swimmer, I used to think that getting to the end of a



twenty-five-meter lap on one inhalation was success. I had no idea the goal was to breathe while swimming and that breathing rhythmically would increase both endurance and speed. Alone divers know the risk of diving deep without an air supply. The body commands inhalation even when deep beneath the waters. To breathe is to live.

This article weaves together four areas currently igniting my interest in the movement of breath:

- The embryological underpinnings of respiration.
- The interrelationship of perception, vision, and breath.
- Carl Stough and his innovative work called Breathing Coordination™.
- An inquiry into the field (breath) that is breathing us.

In addition, there are somatic explorations to deepen the reader's sensory experience of the four areas of inquiry.

## The Diaphragm: The Embryological Seed of Life

All mammals emerge from a single fertilized egg cell or ovum. Wholeness is our underlying nature and is the ground of health, adaptability and connectivity to self, other, and the environment. The varying physiological systems and densities of our bodies arise from this beginning of "one-thing-ness." Dr. Erich Blechschmidt, embryologist, introduced a novel way of viewing embryonic development. He felt that at every moment of differentiation, the embryo is functioning from a state of wholeness. The embryo is in relationship to its surrounding uterine environment and the fluid fields metabolizing and directing its growth. All tissues and functions arise from an origin of perfect wholeness. The embryo does not become human; it is human from the very beginning.

"Embryology does not stop at birth; we have the potential for change all along. In a sense we are embryos through our lifetime."<sup>2</sup>

The embryo grows through a process of in-folding and unfolding, rhythmic oscillations, centralizing fulcrums, and lengthening midlines. These expressions of form are shaped and directed by fluid gradients and metabolic forces in which the embryo is embedded. These suctioning,

compressing, stretching, separating, dissolving, and germinal fluid forces shape both function and structure.

In the embryo, what emerges as the respiratory diaphragm begins development by the third post-fertilization week. Initially, the diaphragm arises as a tissue called the septum transversum. The seeds of the diaphragm are carried by mesenchyme, undifferentiated mesodermal tissue, spreading through the entire embryo. Mesenchyme is embryonic inner tissue derived mainly from mesoderm (which eventually forms connective tissue and blood). The embryonic mesenchyme reaches and merges with the potential coccyx. Take a moment and imagine the fertilized ovum as a sphere of diaphragms breathing in synchrony with each other and responding to the bellows-like pressures of a suctioning field. The action of the suction field is the major metabolic process shaping the fertilized egg. The kinetic motion of the embryonic suction field underlies the bellows-like movements of respiration.

An understanding of metabolic fields, and specifically the suction field, arises out of Blechschmidt's extensive and detailed research. Blechschmidt identified epigenetic forces, which he understood to shape and direct embryonic development. He called this epi-genetic movement: the biodynamic and biokinetic forces of embryonic development. He states, "Biodynamic refers to the dynamic features of development of the organism manifested in submicroscopic developmental movements. Biokinetic refers to the kinetic (spatiotemporal) forces acting on the developing organism."<sup>3</sup>

These metabolic forces of fluid intelligence permeate and direct the development and differentiation of the embryo. An understanding of metabolic fields arises out of a quantum approach to understanding the interrelationship and penetration of forces of consciousness directing development rather than a Newtonian cause-and-effect universe holding genetic determinism as the overriding rule.

Suction is one of the primary metabolic movements or fields directing embryonic formation. In the development of the diaphragm, the ascent of the brain and the descent of the viscera ignite two-directional lengthening. The rapidly enlarging brain demands nourishment (oxygen and nutrition), carried through

the emerging blood vessels of the aorta and its branches. These arterial branches reach posteriorly and intertwine with the budding spinal nerves tethering the heart in place as the brain continues to grow. The connecting stalk anchors the embryo to the uterine wall at its caudal end.

Emerging between the polarity of a rapidly enlarging brain, lengthening spinal cord, and descending viscera is the diaphragm. As the neural tube grows, ascends, and begins to fold due to the massive growth of the brain, the future diaphragm becomes folded underneath the developing heart at the level of the cervical vertebrae. Innervations from the adjacent spinal nerves of C3, C4, and C5 are drawn into this moving potential, forming the precursor of the phrenic nerve. You've probably heard this sing-song rhyme repeated in anatomy classes: "C-3-4-5 keep the diaphragm alive." Blechschmidt writes, "the descent of the viscera is closely coupled to the development of the diaphragm. The diaphragm is attached to the liver posterior (and) to the heart and arches high into the thorax. The inferior end of the diaphragm extends almost to the inferior end of the vertebral column. The segment between the growing heart and the enlarging liver becomes compressed and taut, so that here it will be thin and tendon like".<sup>4</sup> (This refers to the central tendon of the diaphragm.)

### Somatic Inquiry:

#### The Body As a Continuing Diaphragm

##### Part I:

*Sit in a comfortable and upright position, with your feet on the floor. Ask yourself, "Is my breathing supporting me in sitting and exploring? . . . What body-centered information emerges in response to this question?"*

*Notice your breath. Sense the excursion of your thorax on inhalation and the passive release on exhalation. Imagine your lungs extending beyond your back. Notice the movement of your whole body in response to breathing.*

*For the next few minutes just breathe, sensing the dimensions of your breath without control, effort or intention to change anything.*

##### Part II:

*Sit with your feet on the floor or stand in a comfortable position. Inquire: Is my breathing supporting the opening of the diaphragm of my feet to the life and breath of the ground?*

*Sense the arches of your feet opening to the living planet and soils of "earth." Allow a softening through your feet, as your awareness*

*of the connection to earth touches the soles of your feet.*

*Become aware of your contact with the breathing, living ground in relationship to your breathing body. Earth's field does not stop at our feet but rises up around the body. Notice: how far around and through your body space do you sense earth's field?*

*Inquire: Does my breath support this relationship to earth?*

With any activity you are engaged in, feel and listen to the support your breath is giving you. The simple question can be repeated: Is my breath supporting me as I work, sit, walk, or study?

## Perception, Vision, and Breath

Imagine for a moment walking a miles-long ocean shoreline, hearing the thundering waves and sensing the pull of powerful currents. This meditation has nourished many twilight reveries. Walking barefoot on tide-washed sands offers a kinesthetic understanding of both the weight and ground of exhalation and the spacious lift of inhalation. The spectrum of breathing is fortified as visual senses open to include the vast horizon. The expanse of the sea, possessing unobstructed vistas, is nourishment, feeding sensibilities and imagination. The visual continuum of spaciousness births the physiological health of balance, adaptability, and gravitational security. Sensing and knowing the horizon is at the root of vestibular acuity. The secret is that you do not have to "go out" to meet the horizon; the horizon is always there to meet you.

Imagine the horizon is like a diaphragm – extending its horizontal reach in 360° around you. Imagine yourself as the central tendon! Sense the vestibular shifts affecting your movement, rhythm, balance, and alignment as neurological intelligence attunes to the expansive environment enwrapping you. For moments at a time, depth perception can shift – the near, far, and wide of the surrounding waters and sand embrace the body in motion. A dynamic core of awareness is enlivened. Become aware of the physical shifts within your body as your "central core" relaxes and you begin to breathe in the openness of this vista. The horizon touches you as you rest into this awareness. Sea air resuscitates a vital breath; as vision expands, auditory senses become heightened to the language

of the waves; balance shifts as the dynamic relationship with gravity alters with every step on the uneven shore. The sensorial memory of our deeply rooted indigenous nature – alive, breathing, vital, and perceptually aware – rejuvenates blood, breath, and body. Sensing the horizon is key to a respiratory and spacious rejuvenation of the psyche.

The philosopher Baruch Spinoza realized that "the human mind could never be reconciled with the human body unless intelligence was recognized as an attribute of nature in its entirety."<sup>5</sup> Whole-body perception of the horizon broadens a kinesthetic vocabulary, whether we are viewing the ocean's distant edge, admiring a mountain-top vista, or perceiving the horizon enclosed in the four walls of an office. Our vestibular system is constantly seeking the horizon whether we are aware of it or not. Yet because of the context, psychologically, emotionally, or environmentally, we limit our senses, impeding the expansiveness of our perception as well as becoming more focused in one-pointed attention. In an overly focused state, it is easy to lose touch with the presence of the horizon and the breathing expanse in which we are intimately embedded.

Our industrial western culture promotes the supremacy of the rational mind and an emphasis on the intellectual process associated with the physicality of the material world. Very little attention now orients to the invisible dimensions of intuition, spirit, instinct, and perceptions which cannot be quantified yet are inherent in the make-up of the human being. Laurens Van der Post, author, educator, explorer, and observer of the African bushman, wrote about anthropological concepts that have played an important role in our understanding of health and disease in society. He understood that every human being has an ancestral and instinctual spirit within himself. If this million-year-old spirit is lost, modern man loses his real roots, and the source of health and wholeness.

A whole-body sense of the horizon went hand-in-hand with the evolution of the upright stature. The ability of early man to turn his head in a 180° radius, freed from limiting musculature, allowed him to scan the horizon for food, prey, or enemy. The function of the vestibular system was ignited. Imagine the "aha" moments when primitive man saw the expanse of land before him, informing his actions for

hunting or running toward safety. Walking upright in gravity marked a bifurcation place in human history – from arboreal clamoring to the evolution of visual and language skills.

Cultivating perception of the horizon supports a balancing sense of ground for our exhalation in relation to the spacious vastness of inhalation. Even if we cannot see the horizon, the deeply primal nature of our organism's vestibular system senses it as we cultivate its presence as a resource in our lives.

## Somatic Inquiry: Breath and the Horizon

### Part I:

*Sitting comfortably upright, notice your breath; the rhythm and ease of your diaphragmatic movement on inhalation and the ease of exhalation. Yield into the support of your chair, and the support of your feet on the floor. Follow your breath through a deeper, longer exhalation – pausing for the automatic triggering of inhalation.*

*Place your focus on something in your very near field of vision. Let your vision narrowly focus, seeing only this object. Notice any changes in your breathing, its ease or excursion.*

*Now, imagine the 360° expanse of the horizon around you. Let the focus you are holding soften as you sense the walls to either side of you and behind you. Does your breathing change?*

### Part II:

*Repeat this exercise as you are moving about somewhere in nature. Notice your breathing ease or tension as you focus on an endpoint or goal (what you are moving toward).*

*Now allow the inclusion of a whole body sensing of the horizon, trees and nature around you. Does your breathing change as you include the support of the horizon and its impact on your vestibular system?*

Breathing changes with whatever activity we are doing. If we are hiking, biking, or climbing, breath responds. If we are hurried or confronting a difficult task, our breathing responds to accommodate. Breath is our ally; our breath is always there. The cycle of our breath is nurtured by sensing the expansiveness of the horizon and the ground beneath our feet.

*"The clouds overhead are not plunging westward as the planet rolls beneath them . . . they themselves are part of the rolling Earth . . . And we, imbibing and*



strolling through that same air . . . are enfolded within it, permeated, carnally immersed in the depths of this breathing planet.”<sup>6</sup>

## Breathing Coordination: The Work of Carl Stough

*Life begins and ends with the exhale.*<sup>7</sup>

*A cold stethoscope on the flesh of my rib cage signals “take a deep breath.” I inhale, noting the effort involved in following this directive as quickly as I can. Breathing on command is never easy.* Directing a client to quickly take a breath usually does not support the full excursion of inhalation or passive expanse of an exhalation. Breathing is mostly an involuntary action – we don’t have to think our way into breath. Being directed to breathe fully often interferes with a relaxed cycle. However, in order to gain access to “full and easy breathing,” a multitude of breath-related therapies have come to the fore. All of these focus on breath as the primary mover of life – from Carola Spead’s straw technique to soften the exhale to Charlotte Selver’s powerful meditations in sensory awareness to Buteyko Breathing Therapy (among others). Innovative techniques for resuscitating the breathing cycle have exploded in the alternative health field. However, it is the work of the late Carl Stough and his emphasis on the phrenic nerve and a relaxed and effortless exhalation that piqued my interest.

Stough was a singing teacher, yet because of his gift as a breathing coach in the mid 1960s he was given access to the pulmonary ward of a military hospital, working with terminally-ill men dying from emphysema. Using a new technique called cinefluography, he was able to record the rise and the fall of the diaphragm and the changes to the excursion of the diaphragm through his compassionate and gentle technique called Breathing Coordination.<sup>8</sup> His work at an East Coast hospital was the basis for the first major clinical study of diaphragmatic development in history. Together with his wife Reese, Stough cultivated an approach that restores diaphragmatic action and fullness of breath by skillfully encouraging a fuller and effortless exhalation and consequent toned stretching of the phrenic nerve.

## Refining Respiratory Understanding

Breath underlies full-body awareness, orgasmic sensation, and living with

conscious presence in this three-dimensional body of flesh and blood. A fundamental knowledge of the physiology of breathing is part of a bodyworker’s education. The active and passive nature of the breathing cycle, as well as an understanding of blood chemistry and circulation, is essential.

Our breathing, as well as the quality of air that we are breathing, effects changes in our respiratory rhythm’s depth and activity. During normal breathing, inspiration is an active muscular process. Expiration is passive and relies on the natural elasticity of the tissues to deflate the lung. The most important muscle for inspiration is the diaphragm. The diaphragm is supplied by the phrenic nerve, which is formed in the neck from the spinal nerves exiting the cervical vertebrae at C3, C4, and C5. The intercostal muscles are supplied by the segmental intercostal nerves that leave the spinal cord between T1 and T12. Any disease that affects the efferent or motor pathways from the respiratory center in the brain stem to C3, C4, and C5 and the path of the phrenic nerve to the diaphragm inflicts difficulty in breathing. Trauma to the spinal cord above C3 is normally fatal.

The diaphragm descends on inhalation and ascends with the passive movement of exhalation. The heart sitting above the diaphragm and the liver below it are intricately woven into the tissues of the diaphragm. With each inhalation or exhalation, these organs are massaged. One of the principles the Stoughs elaborated was that all respiratory problems were the result of high residual volume. (Residual volume is the amount of carbon dioxide-laden air left in the lungs at the end of exhalation.) With skill and attention, Carl Stough would have his patients count from one to ten repeatedly, increasing the duration of their exhale with each successive out-breath *while not engaging any muscular force*. Oftentimes, the emphysema or asthmatic patient would only be able to vocally count to two. Yet gradually, with the strengthening of the diaphragm via this exercise, the count would increase. His patients at the military hospital showed improvements including vocal strength, gaining muscle mass and weight, and the ability to lift themselves out of their wheelchairs. All this was accomplished with an emphasis on the exhalation, vocalization, and gentle stretching of the phrenic nerve by gaining a fuller diaphragmatic excursion and the restoration of tonus and strength in this muscle.

Another principle the Stoughs highlighted is the diaphragm as the main muscular organ of the body. The heart’s movement is secondary. The heart beats via its neurological pacemaker and is carried on the wave of the diaphragmatic movement. By strengthening this muscle, supporting a fuller exhalation and inhalation, there is a boomerang-like action that occurs through these muscular fibers; the tonus of the phrenic nerve is repaired as it stretches with diaphragmatic movement, and effortless breathing emerges.

## Somatic Inquiry: Breathing Coordination<sup>9</sup>

*Lie on your back with pillows beneath your knees and under your head. Realize that breath is an involuntary action and that you do not need to effort while inhaling or exhaling. Let your jaw and throat be relaxed.*

*As you begin to exhale make an audible sound (ah . . . ) or begin to count 1-2-3-4 . . . Allow your exhale to be easy as you count quietly until your inhale becomes a reflex.*

*The point is to extend your exhale as long as possible with sound but without effort. This should become a relaxing exploration.*

In the words of Charlotte Selver, “the total person is involved in the new air being welcomed, penetrating, doing its job, and then letting out what has been used. The exhalation is one of the most important things to have . . . to feel the going out to the very last.”<sup>10</sup>

## The Breath Breathing Us

With a discussion of breath, we have to acknowledge death. Death is the uninvited guest shadowing every breath we take. According to some ascetic yogis, we are given an exact number of breaths – no more and no less. How many breaths are we given in a lifetime? Have you ever lain with an ill partner, parent, or beloved pet, waiting with vigilant attention for the sound of his or her breath to resume after a longer-than-usual pause? Breath is the sign that life continues.

Our culture shies away from acknowledging the inevitability of extinction. But as Jim Morrison said, “no one gets out alive.” And it is the reality that someday, we too, will die, which is easily yet boldly denied. Our culture has made dying into a tidy experience. We remove ourselves from death’s smells, sounds, and visuals. A death mask appears on a loved one’s face – showing a visage of peace or fear as the



"border-crossing" nears. On a breath, he or she is lifted away from earthly endeavors, sufferings, and joys, dissolving forever into spacious blue. We enter on the wings of a life-giving breath, and we are borne from this life on our last breath. During the bedside vigil for my mother, I found my breathing synchronizing with hers. My exhalation lingered in the pause between breaths. My heartbeat and her still-beating heart became one. I experienced a kind of electromagnetic field of pulsation, an ancient and archetypal umbilical connection between us. I did not know if this was the gravity of our beating hearts, strengthened through the loving field we shared, or the unfathomable intensity of the weeks' long vigil nearing its end, or the state of mind required for sitting quietly in the presence of death.

We shared a womb of passage, the timelessness of the in-between pauses, and the beauty of delivery into the mystery beyond. For one last treasured moment, she was here; yet as her exhalation lingered and merged with the vastness of dissolution, I realized she had passed through death's portal and was gone. The slower-than-slow primordial breath carried her through the sheer membrane between living and whatever the mystery holds. Silently, peacefully, the cycle was complete. My mother witnessed my first breath and I witnessed her last. She birthed me through struggle and pain. I became a midwife for her dying.

Being immersed in this cycle has deepened my personal inquiry and process, reorienting my own expansion, curiosities, and creative momentum. The spectrum of life, imprinted with its heartbreaking losses, finds solace in the many gifts and blessings filtering through the ethers, beyond the earthly breath, showering joy and laughter in the hallows of life. During this bedside vigil, I began appreciating more fully the gravitational weight of grief suctioning my exhalation, as well as moments of rising joy within my inhalation. Both ends of this emotional spectrum flowed through my senses.

A deeper exhalation supports the spontaneity of a fuller breath. As I fell into the sorrow of loss, "sensing-feeling" the fathoms beneath the depths, I would just as suddenly be "spit out" into a state of expansion and light. Breath moves and guides me through a jungle of intertwined emotional, physical, spiritual, and other-

dimensional realities permeating my living breathing existence.

*Our life is a faint tracing on the surface of mystery.*<sup>11</sup>

## The Breath of Life

William Sutherland is credited with using a term from Genesis "The Breath of Life," in describing the primary ignition that sparks the motor of life. He explained this *breath* as something that is not material and that cannot be seen.<sup>12</sup> In applying this scriptural phrase, Sutherland thought beyond current understandings in physics and chemistry and pioneered a novel approach to understanding the craniosacral system. This phrase underscores the genius of David Bohm and his theory of the "implicate" and "explicate" order and aligns with Rupert Sheldrake's theory of morphogenetic resonance in which fields of information are transmitted through time and space. Sheldrake's holographic understanding of resonant fields, carrying both potential and memory, corroborates with the understanding Blechschmidt brought to the fore regarding metabolic fields and rhythms that are shaping the embryo.

Intelligent and dynamic forces breathe shape, position, and form into all of life. These biodynamic fields carry the blueprint for development and are an undiminished matrix of information. They are not energy fields. This is the quantum fabric of wholeness, the implicate movement that Bohm described as the implicate order, and possibly the space-time dimension that Einstein imagined. The therapeutic forces of nature, shaping the embryo, continue to shape and sustain the health, adaptability, and wholeness of the adult.

We are not only intimately immersed within the intelligent wholeness of nature, but the elements, minerals, and molecular bindings make us who we are. Skin is more like a membrane than an armored barrier. Our bodies, embedded in the natural world, share the intimate dance of breath with all living things. We are being breathed by the function of life infusing whole-body sensing and perception. Possessing and evolving a sensory knowledge of this implicit and natural connectivity to all that surrounds us sustains and evolves the space of "being" within the human "be-ing."

The breathing sensing body draws its sustenance and very substance

from the soils plants and elements that surround it . . . so that it is very difficult to discern, at any moment, precisely where this living body begins and where it ends.<sup>13</sup>

*Carol Ann Agneessens, M.S., has been practicing the art of Rolfing® Structural Integration and Rolf Movement Integration for over thirty years. She serves on the faculty of the Rolf Institute®. Her passions include the study of embryology and a biodynamic approach to craniosacral therapy, painting, and walking the shores of Monterey Bay. She is the author of The Fabric of Wholeness (Quantum Institute Inc., 2001). This article is written in loving memory of her mother, Dorothy Agneessens, who passed away on May 28, 2012.*

## Endnotes

1. Taken from <http://www.goodreads.com/quotes/3241-listen--are-you-breathing-just-a-lit>.
2. Shultz, Louis, Ph.D. and Rosemary Feitis, D.O., *The Endless Web*. Berkeley, CA: North Atlantic Books, 1996, pg. 3.
3. Blechschmidt, Erich and Raymond Gasser, *Biokinetics and Biodynamics of Human Differentiation*. Springfield, IL: Charles Thomas Publisher, 1978, pg. 270.
4. Blechschmidt, Erich, *The Ontogenetic Basis of Human Development*. Edited and translated by Brian Freeman. Berkeley, CA: North Atlantic Books, 2004, pp. 176-178.
5. Quoted in David Abram, *Becoming Animal*. New York, NY: Pantheon Books, 2010, pg. 109.
6. Ibid., pg. 101. Abram adds the letter 'i' to our planet's name in order to remind us that "air" is entirely a part of the earth, and the 'i', the I or self is wholly immersed in that fluid element.
7. Stough, Carl, Dr. *Breath: The Story of Breathing Coordination*. New York, NY: The Stough Institute, 1981, pg. 172.
8. *A Guide to Breathing Coordination* (CD). New York, NY: The Stough Institute, 2001.
9. Adapted from the Stough approach to strengthen the diaphragm and responsiveness of the phrenic nerve. See *A Guide to Breathing Coordination*, op cit.
10. Selver, Charlotte, *Breathing and Full Reactivity*. Except from audiotape, Sensory Awareness class, July 28, 1992.

11. Annie Dillard quoted in *A Caregiver's Guide*. Manual from Hospice of Santa Cruz County, CA, 1998.

12. Sutherland, William, D.O., *Contributions of Thought*, second edition. Fort Worth, Texas: The Sutherland Cranial Teaching Foundation, 1998, pg. 147.

13. Abram, David, *The Spell of the Sensuous: Perception and Language in a More-than-Human World*. New York, NY: Pantheon Books, 1996, pg. 47.

# Mental Health Is in the Body

By Karl E. Humiston, M.D., Certified Rolfer™

Have you ever wondered whether, as a trained and experienced Rolfer, you can properly deliver a normal Roling® Structural Integration (SI) series to a client who appears to have mental or emotional problems? The answer is *yes*, especially if you understand the true basis of mental health, which is in the body – a realm in which you have much to offer that client. I say that from my background as a practicing clinical psychiatrist.

Since finishing medical school in 1955, I knew my life's calling was to help others to mental health. In 1959, at the University of Washington in Seattle, I completed the training required for board certification in psychiatry. Even then, I saw that I did not yet have what was needed to help my patients as I wished to; and two years later I went off to Scotland, to the University of Glasgow, for another year of psychiatric training. My eyes were opened further, as I saw that the interestingly different British approach to psychiatry came no closer to my dream than did the American. As valuable a credential as my 1964 board certification was, I knew by then that the orthodox practice which it represented was like a slow inner death for me.

No longer willing to follow the crowd and do what most other psychiatrists did, I trusted the adage "Seek and ye shall find." I kept seeking, and found part of what I sought in family therapy and Gestalt therapy. That excited me to find more. In 1968, I went to Esalen Institute, where I took a "Body Awareness" workshop with Ed Maupin. He had recently trained with Ida Rolf, and each time he mentioned Roling SI, I felt an inexplicable excitement. When I went through the Roling series with Ed, it changed me so much that I knew I had to become a Rolfer. In 1971, I resigned my career position as the director of a state hospital psychiatric residency training to be trained myself by Dr. Rolf.

Perhaps the highest compliment of my life was Ida telling me, "Karl, you are one of the seeing ones." I guess I must have been; that's how I got there, to her training. I was able to see instead of to explain, diagnose, analyze, and medicate people. Unfortunately, most practitioners in the mental health field misperceive the nature of mental illness. As a result, most mental health treatment is inadequate.

Over the years, I have become convinced that the essential cause of mental and emotional difficulty is disconnection from our conscious sensing. We have senses that should connect us to external phenomena (e.g., vision, hearing, touch); but especially important for mental and emotional health is to connect to visceral and other internal phenomena. In the mentally ill person, the movement and flow of sensory energy is blocked from his consciousness. "Chemical imbalance," while it does at times accompany some mental illnesses, most certainly is not the cause of any of them, and interminable treatment of mental patients with drugs profits everyone but the patient. Similarly, psychotherapy is so much less effective than we wish it could be is simply because of what it is – a method to better organize the client's thoughts, when what is needed is to better organize the client's bodily structure, energy flow, and awareness. While there are many treatments for mental health problems, in my experience the only ones that lead to healing are those that restore lost awareness of these connections. Keep in mind that a poorly connected client's bodily awareness might be blocked by toxins, such as drugs, ambient chemicals, or even yeast<sup>1</sup> metabolites. The presence of toxins will limit clients' ability to connect with their senses – and with your ability to work with them.

What can you do, during a regular Roling session, to support your client's healthy inner sensory connectedness? First, when it feels right to you to do so, suggest that

the client notice where in the body he feels something – *where*, not *what* – and simply allow the feeling to continue. This alone will do more good than one might expect, as most people automatically (without really paying attention) try to escape much of what they start to feel in their bodies. Second, do the same yourself. It's catching. Your clients (like your children) are more likely to do what you do than do what you say.

As F. M. Alexander said, "You can do what I do if you do what I did."<sup>2</sup> After forty-five years' practice on myself, more happens when I instruct others to locate and allow their bodily sensations than when an inexperienced person offers the same instructions. In other words, the essence of helping in this dimension is wordless; as with Roling SI, our best work is the result of silently communicating patterns of energetic and structural organization from within our own bodies.<sup>3</sup>

Of course, our work is effective only to the extent that the client is available. If a client expresses great interest in the work, but fails to finish a basic series for no obvious reason, let him be. Often, these clients desire the benefits of Roling SI but are not ready to receive the full inflow of energy and feeling that can and should come with it. Just as no client can be required to yield to your touch and follow the lead of your fingers, no one can be required to look for his own internal feelings and choose to endure them to the end – the way that some of the greatest blessings come. Yet, as many of you already know, there is no satisfaction greater than helping a suffering person to healing, using your hands and consciousness to lead them toward that bodily blueprint of perfection – including mental health – where he was always intended to be.

*Karl Humiston is and has been for eight years the chairman of the Rolf Institute's Ethics and Business Practices Committee. This article is based on his presentation at the Rolf Institute's October 2011 Membership Conference.*

## Endnotes

1. The best information source I have found regarding the effective clearing of yeast toxicity is [www.candidamd.com](http://www.candidamd.com). (Disclosure: this is my son's website, but it is not out of family allegiance that I recommend it.)
2. Quoted in *The Resurrection of the Body: The Writings of F. Matthias Alexander by Edward Maisel*. New York: University Books, 1969, page xxix.

3. Anyone who wishes my help to improve his skills in this area is welcome to join my online coaching classes. No payment is required for participation. Register at [www.HumistonWellness.com](http://www.HumistonWellness.com).

# The Case Study Method: Year Two of the ABR/Uniitalo SI Postgraduate Program

## *Scientific Exploration of Roling® SI in the Holistic Paradigm*

By Pedro Prado, Ph.D., Advanced Roling and Rolf Movement® Instructor

Perhaps the greatest challenge for the scientific investigation of our work is its essential holism: the multi-dimensional and holistic attributes that give structural integration (SI) its conceptual richness also complicate the scientific assessment of its results. Segmentation of reality and isolation of phenomena, often used for controlling multiple variables, in our context pose the risk of losing the whole, of overlooking the essence of the work. What we need is a scientific approach consistent with our paradigm.

To meet this challenge, the ABR (Brazilian Roling Association), in partnership with Centro Universitário Italo Brasileiro (Uniitalo), São Paulo, Brazil, created a postgraduate program for Roling SI. This program is open to students in the last stage of their professional certification training (Unit III), as well as to practicing professionals. Program participants take university courses in scientific methodology and pedagogy and apply what they learn in the execution of formal case studies on the process of a class client or client in a practitioner's clinical practice. Those who complete it are awarded the equivalent of a master's degree.

The thirteen participants in our first class, which began in 2010, investigated topics running the gamut from the effect of Roling SI on low back pain or adhesive capsulitis (frozen shoulder); to how Roling treatments might contribute to the management of

chronic diseases such as bipolar disorder and multiple sclerosis; to the nature of the Roling process as a therapeutic event which, like psychoanalysis, requires cooperation and participation between the client and practitioner as co-responsible agents. The 2010 studies were discussed in detail previously.<sup>1</sup> Here, we present the abstracts of the case studies from the second class, which began in 2011.

The case studies for our postgraduate program are far more extensive than those of the basic certification training at the Rolf Institute®. At Uniitalo, the student researches a specific problem by engaging potentially useful theories, raising questions, developing hypotheses, and seeking methods to investigate them. The student then presents and discusses the outcomes according to accepted scientific parameters. The case study is both a method of investigation and the investigation itself. In both scope and level of effort required, the post-graduate program case studies are comparable to any other master's thesis.

As the case studies show, their authors have accepted the challenge of employing a scientific approach consistent with our holistic paradigm. Each found a focus, defined a theme, and investigated a problem; and from this focus, observed correlations among the multiple dimensions of Roling SI and its taxonomies of access (structural, functional, psychobiological, and energetic). Even as they employed

impeccable scientific methodology, they displayed an embodied holistic attitude, one congruent with the philosophical stance and conception of the human being that are fundamental to Roling SI. These researchers walked their talk, showing by example that science and holism can coexist, and that there can indeed be a science regarding a holistic activity.

The 2011 program participants and abstracts of their inquiries are set forth below. The full case studies are available in Portuguese (with abstracts in English) at the Ida P. Rolf Virtual Library for Structural Integration ([www.iprlibrary.com](http://www.iprlibrary.com) or [www.pedroprado.com.br](http://www.pedroprado.com.br)); at the ABR's library; and at Uniitalo Library's special collection of postgraduate program papers.

### **The contribution of Roling SI toward postural equilibrium, ease of locomotion, and quality of life in an adult with cerebral palsy**

*Investigated by Rosângela Maria Baía, Certified Rolfer™, Rolf Movement Practitioner*

This case study investigated how Roling SI, a holistic approach of reorganizing human structure in the field of gravity, might help functional adults with spastic cerebral palsy (CP). Our hypothesis was that by organizing muscular tonus, we could improve the subject's balance and locomotion, thereby allowing the subject the possibility of a revised perception of her own movement – which might, in turn, enable better movement. CP patients have often carried since childhood a body image constrained by their diagnosis, and even by the very name of their disorder. We expected that a revised body image would allow the possibility of better postural habits, refined anticipatory motor activity, and improved motor skills – as well as produce an overall better quality of life.

The subject, an active fifty-two-year-old woman, received twenty-two sessions of combined myofascial manipulation (light to moderate touch) and movement education.



In each session, the practitioner sought to observe and track, and ultimately to guide, the subject's movements in such a way as to redistribute body tonus. With more balanced tonus, the subject experienced less tension, spasticity, and movement inhibition, and seemed less susceptible to injury. She also reported an overall improvement in her quality of life.

We measured the outcome of the treatments with the questionnaires developed at the Center for Treatment, Research and Education in Roling SI (NAPER, São Paulo, Brazil)<sup>2</sup>; the WHO-QOL survey (short form in Portuguese)<sup>3</sup>; observation of the subject in routine activities; and analysis of still photos and videos. The findings of this study and others like it might allow those treating functional CP patients to integrate Roling SI into a multidisciplinary protocol to improve both motor activity and emotional health.

## **The contribution of Roling SI to the treatment of chronic pain associated with non-structural scoliosis**

*Investigated by Adriana Toyoko Higa, Certified Rolfer, Rolf Movement Practitioner*

This case study examined the effect of Roling structural and functional integration on a subject with non-structural scoliosis (i.e., non-ideopathic scoliosis attributable to patterns of body use) to test the hypothesis that the treatments would reduce the degree of scoliosis, mitigate the associated chronic pain, and enhance the subject's overall quality of life. The subject received both Roling SI (systematic myofascial release) and Rolf Movement functional integration (in this case, to enhance the subject's attunement to sensory perceptions from sight, hearing, touch, smell, taste, and proprioception). The subject was taught to use the senses both to find support for the head and to perceive opposing forces both upward (lift) and downward (support) acting on the body. While this sensory and kinesthetic awareness gave the subject an enhanced sense of verticality, which helped her to maintain an upright posture, both the subjective discomfort and objective degree of the scoliosis diminished.

Following a series of ten structural and five functional treatments delivered over a period of three months, both quantitative and qualitative data were gathered. The quantitative data, consisting of radiographic assessment of the COOB angles before and after the process, revealed a reduction in

the degree of scoliosis. Before the process, the scoliosis was measured as a leftward dorsal (thoracic) convexity of 12° and a rightward lumbar convexity of 17°. After the process, the scoliosis was measured as a leftward dorsal (thoracic) convexity of 5° and a rightward lumbar convexity of 7°. The qualitative data confirm less subjective pain, with the reported pain level reduced from '10' to '3' on the Visual Analog Scale. The subject experienced improved quality of life as measured by the WHO-QOL questionnaire. Finally, the subject reported gaining a sense of verticality. The data support the hypothesis that Roling structural and movement integration can effect positive changes in persons with non-structural scoliosis, and further studies of additional subjects should be made in order to validate the hypothesis more generally.

## **Roling SI in the treatment of limited range of motion in the shoulder following radical mastectomy for breast cancer**

*Investigated by Maria Ayako Sakuraba, Certified Rolfer, Rolf Movement Practitioner*

Many mastectomy patients suffer diminished range of motion at the shoulder on the side of the surgery, which leads to functional limitations and diminished quality of life. In this case study, we tested the hypothesis that Roling SI might restore range of shoulder motion to such a patient, and thereby reverse the functional limitations and improve the patient's quality of life. The subject, a fifty-six year-old woman, suffered pain and dysfunction in her left shoulder following a radical mastectomy (left breast) for ductal breast cancer.

The subject received a ten-session series of Roling SI according to the protocol commonly known as the Roling "Recipe." Data regarding the subject's shoulder pain and dysfunction before and after the series consisted of still photographs, the subject's reports of pain on a numerical scale of 1-10, and goniometry to assess the amplitude of joint motion. Data regarding the subject's quality of life before and after the series were gathered through the EORTC-QLQ-C30/BR23, a questionnaire designed specifically for breast cancer patients.

The data indicated improved range of left shoulder motion in flexion, extension, and abduction, better overall postural alignment, reduced pain, and significant improvement in quality of life. This supports the hypothesis that Roling SI

can be a valuable therapeutic technique to restore range of shoulder motion to mastectomy patients, and thereby reverse their functional limitations and improve their quality of life. The positive results presented here suggest that this study should be expanded to a larger and more meaningful sample.

## **The benefits of Roling SI for adult victims of childhood sexual abuse**

*Investigated by Rúbia Sayuri Takashima, Certified Rolfer, Rolf Movement Practitioner*

The sexual abuse of children is increasingly recognized as an important social problem. Recent studies have reported that perhaps 20% of women and 10% of men suffered at least one episode of sexual abuse as children. This case study describes the discomfort and dysfunction of one childhood incest victim, whose symptoms included muscle pain, difficulties in relationships, low self-esteem, feelings of guilt and anger, and distorted body image. The study documents the effects of thirteen sessions of Roling SI, consisting of systematic myofascial release combined with movement education emphasizing the subject's sensory perceptions.

During the Roling series, the subject gained access to memories of the sexual abuse, which memories allowed the subject to better understand current relationships with others and with the environment, and to recognize that current bodily tension, fear, and insecurity were related to the past abuse. Because attention to perception about the body was a key component of the Roling work, this case study suggests that it might have been the subject's heightened and acknowledged perception that allowed the subject access to the memories of childhood abuse and indicates the potential benefits of further research to isolate as a variable this particular component of Roling SI.

## **Roling SI and the concept of "singular experience"**

*Investigated by Maria Lucia Moreira Merlino, Certified Advanced Rolfer, Rolf Movement Practitioner*

Roling SI integrates the human structure and retrains the proprioception through a system of connective-tissue manipulation and somatic and movement reeducation. Persons who experience Roling SI commonly report heightened physical

and emotional sensations, and also that they sense possibilities for new ways of using, moving, and being in their bodies. This study investigates the relevance of *singular experience*, as a pedagogical concept, to the Rolwing process. This concept was developed by American philosopher and educator John Dewey. It is his term for the personal experience of satisfactory completion of a process, such that the person recognizes the process as a contained and unique event amenable to acknowledgement, description, and reflection. The pedagogy of Rolwing SI is unlike that of other forms of training, the former being more of an art than a technique. Integration of the structural changes requires some time for relearning, as the sensorimotor system adjusts.

However, we hypothesize that for the subject to retain and not discard the insights of a singular experience, both the insights and the sensations that facilitated them must be recognized and their importance acknowledged. The two case studies document the occurrence of singular experience and how it was addressed in order to advance the subjects' processes during their Rolwing series. Each subject received fifteen sessions of Rolwing SI. Outcomes were evaluated based on before-and-after questionnaires, the researcher's notes during the series, and the subjects' own summary accounts of their experiences. The data indicate that Rolwing SI can help subjects to build, recognize, and appropriate new internal bodily coherences, as well to observe and acknowledge the importance of bodily sensations as guides for actions and physical attitudes. In addition, the data substantiate the importance of the singular experience in self-recognition. Finally, the researcher identifies some approaches for facilitating the emergence of this quality of singular experience during Rolwing sessions.

*Author's Note: Special thanks to Heidi Massa, Certified Advanced Rolfer, for her collaboration on the conception and preparation of this piece.*

## Endnotes

1. The case studies of the first Uniitalo class were described in an earlier article entitled "The Case Study Method: Scientific Exploration of Rolwing® SI in the Holistic Paradigm" in *Structural Integration: The Journal of the Rolf Institute®*, December 2011 (Vol. 39, No. 2), pp. 33-35.

2. Development of the NAPER questionnaires was a tentative opening of the field of inquiry

and the start of an arduous task of creating documentation tools for our empirical studies. The continued development and refinement of the questionnaires became a collective task spanning several years, in which the NAPER practitioners created the documentation protocols we now use in clinical practice. For a discussion of how these protocols were developed, see Prado, P., "The Making of a Science of Rolwing: From an Individual Path to a Collective Activity," *Structural Integration: The Journal of the Rolf Institute®*, December 2007 (Vol. 35, No. 4), pp. 22-25. The protocols themselves are available as, Prado, P., *Documentation for*

*Clinical Practice and Research*, published at [www.iprlibrary.com](http://www.iprlibrary.com) or [pedroprado.com.br](http://pedroprado.com.br).

3. In addition to the NAPER questionnaires, some years ago we began using the WHOQOL-BREF questionnaire, a psychometrically valid tool for assessment of the subjective experience of quality of life across multiple dimensions of being. For a discussion of the WHOQOL-BREF as a research tool for structural integration, see Prado, P., "Does Rolwing® SI Enhance Quality of Life? – A Pilot Study," *Structural Integration: The Journal of the Rolf Institute®*, December 2010 (Vol. 38, No. 2), pp. 43-47.

# Rolwing® SI and the Brain

## An Interview with Kevin Frank

By Sabine Weis, Certified Rolfer™

### Introduction

*I interviewed Rolf Movement® Instructor Kevin Frank to discuss a working model from neuroscience that supports Rolwing Structural Integration (SI) with a credible explanation and story – why it works.*

*As background, let me share a part of my story. The Rolf Movement aspects of my basic Rolwing training completely changed my way of perceiving and using my body. As a teen-aged athlete it had seemed to me that the most effective thing was to "work harder" in order to get stronger, faster, and fitter through weightlifting and countless repetitions of the same kinds of exercise. In Rolf Movement, I was faced with very different concepts that I could not wholly grasp, but started playing with. For example, at thirty I started dancing salsa. After very few months, I stopped taking lessons and instead applied ideas like changing my space and ground capacity, developing a better sense for my inner line during spins and turns. Also, I experimented with inherent movements during freestyle and connection to my partner with orientation exercises. My dancing improved dramatically.*

*Despite the improvement, I never really managed to articulate what I was doing. In my Rolwing practice, I also find it quite challenging to speak about the work other than through personal experience or case studies, and I see this issue troubles some of my SI colleagues as well. I believe it is our job to communicate clearly to*

*support our credibility. Outside of Munich and Boulder, we face a public unaware of Rolwing SI. A market survey in Germany (commissioned by the European Rolwing Association to develop our PR strategy) showed that "the man on the street" does not know anything about what we do or how it can be of benefit. Even people who have experienced Rolwing sessions make vague statements – "esoteric," "very painful," or "strange but helpful bodywork." We know that Rolwing SI is not just another bodywork method, but do we manage to convey this? Yes, the gravity story does make sense to many people, but dealing with posture does not generate much excitement. We might want to consider finding another story to reinvent ourselves.*

*During a Rolf Movement workshop with Kevin in 2010, I felt a "click" in my mind about how body movement affects the brain. That inspired a year of self-study and application. There might be potential to explain our work anew – and more accurately – through neuroscience. In this light, I interviewed Kevin, who has taken ideas from scientific studies, especially from neuroscience, and connected the findings to what we do as Rolfers. In my interview with Kevin, I was particularly interested in how to translate these conclusions for other medical professionals and for laypeople.*

**Sabine Weis:** Over several years, Rolfers and the Rolf Institute® of Structural Integration (RISI) have become more and more interested in science. Some possible explanations of how and why the Rolfing process works have been found. Kevin, why are Rolfing SI and neuroscience a good team?

**Kevin Frank:** Luckily for us, science, especially neuroscience/brain science, seems to suggest that the brain is formed on an ongoing basis. Researchers keep finding more evidence supporting this view. Structural integration is likely to be an example of this ongoing formation.

**SW:** But science takes time, and if we wait until our concept is supported we all might be very old. So what can we do until then?

**KF:** We can point to analogous processes that are well-studied, ones in which behavioral changes and brain changes are correlated. We hitchhike on these studies. It's now quite plausible.

**SW:** The concept seems complicated, even for health experts and doctors. How did you become interested in neuroscience?

**KF:** First, I agree that we need ways to ground the abstraction of brain plasticity and postural plasticity in simple examples; otherwise the "new explanation" will not help. To answer your question, it was a natural progression that started with satisfaction about the experience of receiving, observing, and beginning to do the work, but great dissatisfaction with the story we were told about what we are doing and why it worked. Ida [Rolf] said that fascia is plastic and therefore body posture is plastic. Attractive notion. As so well summarized in Robert Schleip's writing [see bibliography], the fascia is much more likely a conduit of information to the brain about movement and position than it is a set of guy wires that hold it in a certain position. Hubert Godard's work demonstrated that what we call "structure" can change in a few seconds or minutes before our eyes and then often change back again. He showed how the fault is often not the tissue but the way tissue is orchestrated. Suddenly we are left with a great new idea: posture and coordination are the product of our way of perceiving and making the world up in our imagination. Wow.

**SW:** Do you ever expose your clients to this insight – we make the world up in our imagination?

**KF:** We must first re-define the word "imagination." We think of imagination, generally, as just making things up or pretending something that is not real. That is imagination that belongs to the thinking process. Imagination is the foundation of much more than thought. In fact the world is something we "imagine" in order to perceive it. That's a way of describing the mechanism behind what we call experiencing the world. And the way we perceive the world shapes our body and our movement. Conversely, how we imagine our body affects how we see the world and how we move as well. We are usually somewhat stuck in our ways of imagining the world and our body. Because our perception tends toward what Gibson calls "invariant" versions of what we see, even if the world around us changes, we tend to feel the world is constant, but it's our perception that is. Our imagination can be plastic. Ideas about the world, about our body, are based on what we have been told or what we learn from our family, school, and training. Some of these ideas lead to body dysfunction. And our work is an effective approach to evoking plasticity in the ways we imagine our body.

What I am describing are the layers of "body image" that are associated with restriction. If a person is told to position [his] pelvis in a certain way, for example, this is a way of imagining the body – we are steered by automatic images within our subconscious. What we are doing in structural integration is helping people feel how imagination can liberate us from unhelpful images. For example, learning to arouse a palpable feeling of omnidirectional space surrounding the head is a way of using conscious imagination to support orientation to space. The latter form of imagination uses an image to arouse native motor intelligence. I describe this to clients by distinguishing imagination that speaks to the thinking brain versus imagination that speaks to the "movement brain" or the sensorimotor system, [which] is a place where our conscious awareness can affect the parts of us beyond our conscious awareness.

**SW:** How do you raise the topic for new clients?

**KF:** Beginning with the first phone conversation, I introduce what I would call the "new story." That's what's exciting: we have a new story that is going to be quite different from the P.T., the D.C., the M.D., the massage person, or the traditional

structural integration story. The story is about how coordination gets shaped, how it isn't meant to change casually but we have a combination of things that help it happen. According to what the person can understand the explanation differs. And I offer concrete examples of how coordination becomes corrupted, over time, or during some incident, how we (appropriately) need to resort to effort, and how compensatory patterns of motor control can often fail to reset, leaving the body functioning in an efforted state. What does an efforted state look like? It is the body working against its own inhibition. It's the body using last-line-of-defense muscles first and first-line-of-defense muscles last. It's a state of motor-control confusion and we see it everyday. The fascia story was convincing until it became obsolete. Now the fascia-as-plastic theory is both incomplete – because it really doesn't describe why posture changes – and unfortunately it is also more and more physically improbable.

**SW:** Probably not all Rolfers think the fascia story is obsolete. What made you stop using it? Do you think both fields could complement somehow?

**KF:** We really don't know if some aspects of the fascia-as-plastic story are true or not. I keep waiting to hear something definitive but I don't hear it yet. Schleip's writing is pretty convincing. I don't know how many members of our community have necessarily read it or integrated his thinking into the teaching. Most SI people usually talk about fascia being plastic. My official position is that I will not say it's false until proven one way or another, but in the meantime it's not a smart way to talk about our work. What sours me is the following: First, it lumps us into the basket with all myofascial therapies, which are proliferating, and I think SI is not myofascial therapy. Second, it lets our clients off the hook before we even start. The fascia story says all we have to do is unglue the tangles and stuck places in the fascia and life will be just fine. I think fascial mobilization will have a much greater effect when we enroll clients in the process, in participating in lasting coordinative change. Posture is a coordination. While fascial mobilization is a great input to change motor-control patterns – coordination – we want clients to understand that what they do with their minds and how they approach movement is every bit as important.



**SW:** What is the possible connection of neuroscience to our work?

**KF:** It's not that neuroscience explains it directly, but it's now very close. You take what we know about fascia, motor control, perception, and pre-movement and you observe changes in coordination before your eyes and draw the conclusion that fascia must be a great way to inform the motor-control system about better choices.

This means that what we call the functional and structural taxonomies collapse as being one and the same thing. We can continue to argue for teaching fascial mobilization skills, a taxonomy of manipulation perhaps, and a taxonomy of coordinative education, but really fascial work is probably going to turn out to be more about education and less about repairing fibrous fixations. Schleip's writing is quite effective in this regard. Then we laboriously read about perception and motor control in the articles that Godard seems to effortlessly digest. They all pointed to this new idea being a very smart idea, but the picture didn't come together as neatly until functional MRI (fMRI) work propelled neuroscience into a new field in which the brain's plasticity could be observed directly.

Blakeslee and Doidge, and many others, saw this as a huge journalistic moment to summarize. Now, it's quite easy to put the pieces together. Rather than research articles with often difficult-to-discern implications for our work, we have story after story describing amazing tales from clinical practice, that are then related to how brain changes accompany the improvement in function. It's easy to get carried away with "brain plasticity" as the explanation for everything. It has become a bit of a fad. Still, the basic message has been revolutionary: behavior changes the brain, if the behavior is sustained. And we have the tools and the understanding to make this kind of lasting change in the brain mapping of our clients. We have ways that people can feel how the body behaves suddenly in ways of greater ease, greater length, greater spaciousness in the face of demand.

**SW:** What does a person "on the street" know about neuroscience? Why would he be interested? What do you say to describe Rolfing SI and what you do?

**KF:** It depends on the person but some version of: "The programs that run our movement are full of corrupted code, like computer viruses. We clean up the code

with two powerful forms of education: fascial mobilization and perceptual and coordinative guidance. Our work systematically and comprehensively restores the body's native movement intelligence." People need some simple examples to explain motor control, or coordination. They want to make a connection to what you know is great stuff but to their ears sounds a bit abstract and different from what anyone else is telling them – therefore suspect. Our trump card is that we know a lot about orientation and a lot about foundational orientation, which is orientation to gravity. This is the place where biology, physics, and existence come together. When we enroll a system in working with this level of response we find greater plasticity to posture and coordination. We can demonstrate how weight and space orientation changes everything, and makes it fun at the same time.

**SW:** And imagine you only have thirty seconds. . . .

**KF:** I give them the brake-and-gas-pedal-glued-together story. It's clear and anyone can imagine it. Unglue the two and life is better. If they give me five minutes, I give them some more based on what they already want in their life. I take the predicament they offer me and explain how it could change based on things like how one prepares to move, or based on habit patterns based on dealing with overload at some point in life. Or I tell them that they may be using secondary stability muscles before they use primary – that's an expensive choice they are making every day without knowing it. I use different stories, all based on motor-control models that are corroborated by various pieces of research.

**SW:** What do physicians and psychologists know about neuroscience? How do you connect to them about what we do?

**KF:** I am likely to talk about posture and lasting changes in posture derived from better mapping at the sensorimotor level. I also would add the business about primary, secondary, and tertiary stabilization. I also might speak about preparation to move and the manner in which this relates to stability. We are always wise to find out what interests them before launching into a lecture, and to give them a very specific concrete example. In person, I have them push on me and I respond with a defensive strategy and contrast it with a strategy

built on perception and orientation. That's the best illustration – what you can show them in your movement. People can see it right away. With psychologists, it's useful to make the bridge between psychological security and subcortical security based on gravity orientation and orientation to "where" as opposed to "what." The "where and what model," well described in Pailliard's writing for example, shows that our sensorimotor brain is mostly concerned with "where" questions while our cognitive brain is concerned with "what" questions. "Where" information makes the body and sensorimotor system happier than "what" information – it provides the security at a deeper level, below thought. The "where" and "what" model does a good job of fleshing out Rolf's claim that structural integration gets below the level of conventional psychology.

**SW:** Which models are your favorites when referring to the body map and related subjects?

**KF:** No one in the field of neurophysiology is going to hand us a new model on a plate. What we can do, however, is look at models of brain maps of the body – sensory maps, motor maps, even language maps – and see that much of what we are doing is about refreshing or reviving or enhancing maps so the brain can make better choices. Further, we can look at the various ways that the brain has been divided into cortical and subcortical processes, or "where" and "what" processes, and see that is very attractive to speak about structural integration as being a way of speaking to subcortical processes, the sensorimotor side of the equation. Now we are doing what Pailliard was advocating: we are bridging the chasm between psychological approaches to human improvement and neuroscience. Further, we have authors such as Daniel Siegel who tell stories about how he and his colleagues worked for a long time to find acceptance in the medical world for the idea that behavior changes the brain. So he helped to convince doctors that how we meditate, how we process (things like Somatic Experiencing® for example), lead to integration of experience and then changes in brain activity. What we add as structural integrators is a package of tools that speak to the sensorimotor brain, to the subcortical processes that lead to lasting shifts in posture and movement strategy. Bodies behave as if "hungry" for better information at this level.

**SW:** How would you explain the concept of “body maps”?

**KF:** You start by helping people realize that their brain map of the body has gotten a bit generalized and vague. You bring alive a sensory distinction and you tell them, “Now your map has a clearer distinction, a clearer location of this part of the body. That leads to better movement choices than before.” The map story can accompany the visual anatomy model and skillful fascial touch. Also useful are stories about “where” and “what” – the story about Ian Waterman who lost his proprioception (no where and substitute of what to make up for it), and the blindsight phenomenon (all “where” and no “what”) in which a person cannot consciously see an object but walk around it to avoid walking into it; these are dramatic illustrations that ground the topic very succinctly. A great book that illustrates “where” and “what” differentiation is *Vision and Art: The Biology of Seeing* by Margaret Livingstone. She shows, for example, how skillful artists build coded messages to our “where” brain. This gives the painting impact in ways we feel without knowing why at a conscious level.

**SW:** Terms like “sensorimotor control” and “secondary stabilization” sound quite theoretical. Which concrete examples or stories do you use?

**KF:** “Sensorimotor” means the [“movement brain,” the] part of the brain that doesn’t require conscious thinking, that acts automatically, faster than we can think. You feel [its] intelligence when you tie your shoes in a flash. But there is much more to the sensorimotor brain than just little coordinative patterns. It is the subcortical part of the equation for keeping us upright and for perceiving what our body needs to know, but we don’t notice it consciously. “Secondary stabilization” is about using the auxiliary muscles before we use the ones that are for normal levels of stability. It’s very “expensive” for clients – they lift a jug of milk [and] squeeze the abdomen and clench the pelvic floor, either because some well-intentioned but misinformed exercise teacher told them to, or because they had an accident and never stopped bracing, or because they are in some state of fear or defensiveness all the time. For whatever reason, they are using a motor pattern that should be saved for loads that are very large and in which the primary stabilizers turn on first.

**SW:** Does neuroscience offer any explanation about the relevance of instincts or automatisms? And how would you link this to Rolfing SI?

**KF:** I think neuroscience and developmental psychologists have been trying to figure out what is “hard wired” and what is learned for a long time. The current thinking, as I understand it, is an example of dynamic systems process. Anatomy predisposes us to movement that we learn more or less inevitably if given the opportunity to play and explore as children. We develop automatic subroutines that save the brain the trouble of making it all up from scratch each time a similar movement is called for. People often live with the assumption that you can train to learn a new movement. But Rolfers help people as much to unlearn expensive automatic routines, learned during moments of pressure or overwhelm, or just plain unhelpful guidance from well-meaning educators.

**SW:** How do you guide clients to easily follow your suggestions?

**KF:** How do we help people find ease in learning new simple things that, at first, make them feel stupid? You want to start with slowing down the learning process; figure out the learning style of the client, make success easy at the beginning and refer back to that baseline. Teach the skills that precede learning movement such as sensory awareness, conscious awareness of orientation, conscious awareness of felt sense. You want to make the process fun. We learn most when we are having fun.

**SW:** How would you guide clients when they ask “What am I supposed to feel?” or “What does this have to do with my pain?”

**KF:** Start early with teaching the client the authority of his experience and [noticing the] contrast between doing some simple movement from effort and from ease. Make it very simple so there is no question of skill. For example, “push my hand like you want to do a good job of pushing; now let go of the good job, and feel your skin as you push.” [Look] for, [coach] for, responses that involve length rather than contraction, the capacity to grow more spacious in the face of demand. Learn what the client likes. Help clients build a vocabulary of experience and remember that what resources there is the path to finding ease and flow and often relief from pain.

The body learns new coordination by repetition. It’s that simple. We are mostly helping the person to interrupt the old pattern, by stopping, by slowing down, by inhibiting the old one, with sufficient support and safety so it’s not overwhelming. Then we teach what to pay attention to as the initiation of the movement begins. Each time the old pattern shows up, we stop and go slower and find better resource. In the absence of the effort pattern, the automatic system can have a chance to manifest ease. The body automatically repeats what it likes and likes what feels easier, all other things being equal. But we often need to support people to do that because all things aren’t equal. People have been taught to struggle and work harder, right?

**SW:** Sure. That is what most of us learn at school, from our parents, and what we assume is expected by bosses at work. One question [clients have] about what is achieved during Rolfing sessions is “will it last?”

**KF:** New posture and new movements last when the client likes it and on reflection can allow it, meaning it is not in conflict with some aspect of the psyche. One needs to help the client find the secondary benefit of the former pattern; that is quite important and part of the ecology of change. Then the client needs to find the new coordination, using his own cue, not yours necessarily. And then the client needs to find ways to integrate the new movement into life at times and places that feel safe and easiest. And clients need to talk to us about all of this, to have us listen to what has worked and what hasn’t so they can organize their experience. And self-care exercises are important, ones done in small doses that feel good to do. If we change coordination, we assume this will be lasting.

**SW:** The model, here, is about coordination and communication working together, instead of in conflict. It takes time to grow into thinking that way; creating stability constantly and speaking about actual body experience. Going into the experience can also be tricky. What do you say to guide [that]?

**KF:** I attempt to get people used to tracking and being tracked in their sensory experience. This is not unique to my work of course. But it’s a huge way to “guide” either verbally or nonverbally by following the rhythm, sensory experience, and meaning impulses of the client. Often just listening

is the best guidance because it supports the self-regulatory and self-discovery process of the client. As one tracks the client, one tracks one's own body experience. This develops a co-resonant state in which the patterns that are no longer needed tend to be the most willing to release. I think this reinforces the mapping process in the brain, by the way.

**SW:** Thank you very much, Kevin. I feel excited that a bit of your experience can be presented here to make sense of this fascinating field of neuroscience. I see this as great opportunity to keep up with academic developments, as well as valuing even more the Rolfing work.

*Sabine Weis is a Rolfer in Frankfurt, Germany. Kevin Frank is a Rolf Movement Instructor with a practice in Holderness, New Hampshire.*

## Bibliography

Blakeslee, S. and M. Blakeslee, *The Body Has a Mind of Its Own*. New York: Random House, 2007.

Doidge, N., *The Brain that Changes Itself*. New York: Penguin, 2007.

Gibson, J., *The Senses Considered as Perceptual Systems*. Westport, CT: Greenwood Press, 1966.

Livingstone, M., *Vision and Art: The Biology of Seeing*. New York: Harry N. Abrams, 2002.

Pailliard, J., "Sensorimotor versus Representational Framing of Body Space, A Neural Basis for the Distinction Between Body Schema and Body Image." In H. de Preester, *Body Image and Body Schema: Interdisciplinary Perspectives on the Body*. (Amsterdam: John Benjamins, 2005).

Siegel, D., *The Neurobiology of "We"* (audio recordings). Louisville, CO: Sounds True, 2008.

Schleip, R., "Fascial plasticity – a new neurobiological explanation." Part I and Part II. *Journal of Bodywork and Movement Therapies*, April 2003, pp. 11-19 and 104-116.

# Conceptual Housekeeping

By Jeffrey Maitland, Ph.D., Rolfing® Instructor

In a complex and evolving inquiry standpoint such as Rolfing Structural Integration (SI), it is sometimes useful to perform what could be called "conceptual housekeeping." Its purpose is to examine the fundamental concepts that define our work in order to determine whether they are still viable in light of new developments. Interestingly, two recent articles, written independently of each other and appearing in the June 2012 issue of *Structural Integration: The Journal of the Rolf Institute®*, attempt to perform just this kind of housekeeping. Chris Hayden wants to add more paradigms and Kevin Frank wants to get rid of some taxonomies. When you consider how well the concepts in question have continued to serve us, we should be careful about prematurely refurbishing, adding to, or retiring them. To make sure that these suggestions are not leading us in the wrong direction, this article will be devoted to examining the merits of these two attempts at conceptual housekeeping.

## Adding Paradigms

Let's begin with Chris Hayden's modest proposal. He says, "students of Rolfing SI might be served by an additional set of paradigms, which would mentally organize the variety of functional approaches used during sessions . . . It would help the beginner to understand the array of options available in the service of our Rolfing SI work."<sup>1</sup> Hayden divides these approaches into three groups, which he calls the three functional paradigms: the fixing paradigm, the exercise paradigm, and the exploratory paradigm.

If his proposal could make it easier for the beginning student to grasp and use the many functional approaches at his disposal, it is worth looking into. The major problem with Hayden's way of grouping these functional approaches is that he sent his housekeepers to organize the wrong room. He sent them to the paradigm room when he should have sent them to the taxonomy room. In general, the taxonomies help organize our thinking around various aspects of our work. Relevant to this discussion is how they organize our thinking around the kind of approaches, interventions, or techniques that are

available to us. But isn't this feature exactly what Hayden is trying to accomplish with his three "functional paradigms"?

We already have a way to categorize interventions and techniques by means of the structural, functional, energetic, and psychobiological taxonomies. Hayden's three functional paradigms are not paradigms. Rather, they are subcategories of the functional taxonomy. Calling his tripartite categories "paradigms" only adds confusion to the mix. Also, what he calls "fixing paradigm" sounds too much like a variation on the corrective paradigm and only obscures further the difference between paradigms and taxonomies. But when we make it clear that Hayden's project is aimed at organizing aspects of the functional taxonomy, there may be merit to his proposal.

## New Message

Frank begins his housekeeping proposal with an observation. Since so many practitioners these days practice some form of fascial mobilization, we can no longer claim this approach as uniquely ours. It also turns out that our gel to sol explanation of fascial plasticity is suspect. He also warns us that our holistic approach may not survive unless we improve on how we describe our work. To deal with these difficulties Frank recommends that we tell a more complicated story about how Rolfing SI works, one that is not limited to fascial manipulation but acknowledges the many new ways we have developed for achieving the goals of Rolfing SI. Frank is especially interested in adding and integrating into our thinking the theory and practice of restoring normal motor coordination.

As Hans Flury often reminded us, the goal of SI and fascial manipulation is functional economy. Clearly, Frank's suggestion is a variation on the theme of functional economy and completely in keeping with Dr. Rolf's use of the term. Since the point of SI is normal function, normal coordination can easily, and probably should, be added to the functional taxonomy in order to broaden our inherited concept of functional economy. But even more intriguing is his suggestion that we represent our work not just as fascial manipulation, but "as a



package of educational interventions that span multiple dimensions of person's being . . .<sup>2</sup> This point has merit and deserves to be considered.

But when we turn to Frank's recommendations for retooling our taxonomies of assessment and retiring a number of them, his logic is less clear. Without doing violence to his meaning, I hope to bring his argument into better focus by summarizing its bare bones and filling in the details later. But first, in preparation for the ensuing discussion, I want to make a few remarks about the logic of identity.

If you hear someone say that X is not identical to Y, you likely assume that he is talking about two separate objects. But that is not always the case. For example, although a woolen sweater is not identical to the wool of which it is made, it is not other than or separate from the wool. To see why, imagine that you pick the sweater apart and make a pair of pants out of the wool. If you are tempted to think that the sweater is identical to the wool, you would have to conclude that the pants are also identical to the same wool. And by the law of identity, you would also have to conclude that the sweater is identical to the pants. But clearly, the sweater and the pants are not identical. We can express this relationship by saying that the sweater is not identical to the wool, but the sweater is not other than or separate from the wool. Sweater and wool are distinct (i.e. they can be distinguished from each other), but not separate.

## The Retirement Argument

Here is a distillation of Frank's rationale for retiring the "functional" and "structural" taxonomies:

1. Depending upon whether you are dealing with living bodies or mechanical things, there are at least two ways to understand structure.
  - a. With respect to living bodies, structure and function are two sides of the same coin – distinct but never separate.
  - b. With respect to mechanical things, structure means an assembly of parts (Implied in the mechanical meaning of structure is the idea that structure and function are both distinct and separate).
2. Since these two uses are often conflated, the mechanical version of structure insidiously seeps into our thinking and

significantly obscures and undermines how we understand and communicate our work.

3. When structure and function are elevated to the level of taxonomies of assessment, they are (necessarily?) conceptualized as separate thereby implying the mechanical perspective.
4. Therefore, since the mechanical understanding of structure as an assembly of parts undermines and obscures our work, these two taxonomies need to be retired.

## Filling in the Details

In order to fully appreciate this argument, we must look more closely at Frank's treatment of structure. He distinguishes between two concepts of structure: structure as an assembly of parts (what I am calling mechanical structure) and structure as a biological activity. In support of his view, Frank quotes Bertalanffy's well-known definition, "What are called structures are slow patterns of long duration, functions are quick process of short duration." But notice how Frank changes the meaning slightly when he refers to the distinction. He introduces Bertalanffy's definition with the statement that structure means a "function that persists over time."<sup>3</sup> To be consistent with Bertalanffy's characterization, shouldn't he say that structure means the activity of a process or pattern that persists over time? Frank continues by saying that "the measure of the structural changes are reliable change of function over time,"<sup>4</sup> and that "structure means something that functions in a certain pattern."<sup>5</sup> Again, isn't the point that structure is a pattern that endures – not some sort of function? Also, structure is not something that functions in a certain pattern, it is a pattern. In contrast to the above characterizations, Frank correctly says that structure and function are two sides of one coin<sup>6</sup> and that most interventions are both structural and functional at the same time.<sup>7</sup> But what are we to make of Frank's tendency to use the word function where Bertalanffy uses the word pattern? Is it just a loose way of talking or does it imply that structure is reducible to function? We will return to this question below.

The core of his argument seems to be something like this: when structure and function are made taxonomies, their inseparability gets lost. As a result, a

false separation infects us our thinking with a view of mechanical structure that obscures how we understand, teach, and communicate our work. It especially obscures how we understand restoration of normal motor coordination. The mechanical view of structure is inappropriate for understanding the living body, and is antithetical to the holistic character of our work, because it falsely envisions the body as an assemblage of parts. When the body is conceived as a kind of machine, it makes our work seem like repairing a bridge or a car, instead of restoring normal motor coordination. Therefore, we need retire (or retool) these two taxonomies.

## Must We Mean What We Say?

This argument is just a little bit off-center. It rests on the assumption that once the distinction between structure and function becomes enshrined in the taxonomies, the distinction also becomes a separation in which structure is conceived as an assembly of parts. But, surely no such grammatical transformation and separation is necessitated by making structure and function taxonomies.

Imagine you are partial to a word that has two meanings. The first fits your intentions and the other is misleading. When you use this word you will mean it in the first sense, not the second, and you will let people know that you are using it that way. You will not retire the word. The same applies to the word structure. Structure has at least two meanings, as Frank points out. One meaning applies to our work (enduring pattern) and the other (assembly of parts) obscures it. As with many technical concepts, we must specify precisely the meaning we intend. Thus, when we say structure we must mean it in the sense that applies to our work and inform our listeners about which meaning we intend.

When I formulated the taxonomies of assessment I did not think of them as separate. I understood very well that structure and function were implicated each in the other. In other words, they are distinct, but not separate. I also understood that a structural intervention has functional ramifications and a functional intervention has structural ramifications. I tried to capture their inseparability by saying that SI and functional economy are logically equivalent, which is just a fancy way of saying a change in one shows up as a change in the other. Today I would temper

that claim a bit by saying that a change in one taxonomy often shows up as a change in every taxonomy – but not always.

Once you realize that Frank's argument rests on the assumption that there is something inherent in the idea of a functional and structural taxonomy that necessitates conceiving of them as separate (hence, conceiving structure as mechanical, that is, as an assembly of parts), you realize the answer to his argument is simple. Since there is no inherent necessity to think about the structural and functional taxonomies as separate, don't think that way. Just think of the taxonomies as distinct, but not separate. There is no need to retire two taxonomies when simply defining your terms will do the job.

### But Is It Meaningful?

After all his efforts to reform and expand how we talk about our work by providing a new way to think about structure and function, Frank makes a claim that threatens to undercut his entire project. He claims "the domains can be distinguished but there is no meaningful division between structural and functional in styles of intervention."<sup>8</sup> He limits his claim to styles of intervention. But if the distinction is meaningless with respect to styles of intervention, then it would have to be meaningless in any context relevant to our discussion. As we have already seen, he gathered support for his view about structure from Bertalanffy. Surely, he must have thought the distinction was meaningful at the time – otherwise why appeal to it? But, almost in the next breath, he says that the distinction is not meaningful. Why does Frank now believe that the distinction between "slow patterns of long duration" and "quick processes of short duration" is not a meaningful distinction? Clearly, the distinction cannot both be meaningless and meaningful.

Here is the crux of the difficulty. Much of Frank's project is a critique accompanied by recommendations, both of which depend upon reforming how we talk about structure. If the distinction is meaningful, then the valid aspects of Frank's project can and should be embraced and pursued. If it turns out that the distinction is meaningless, Frank's project is self-defeating. What would be the point of refurbishing a meaningless concept? Let me speculate a bit about what might be going on here. Recall that where Bertalanffy uses the words "slow patterns" Frank uses

the words "slow function." Perhaps Frank is just speaking loosely. Or perhaps in his zeal to establish the importance of normal motor coordination and the "new message" he went too far and concluded that structure is just a variation of function. But the idea that structure is nothing more than a variation of function is simply incoherent. You cannot have function unless there is some kind of structure. Structure and function are two sides of the same coin, as Frank himself correctly noted.

It is important to realize that reducing structure to function would make absolutely no sense to Bertalanffy. As one of the seminal thinkers responsible for the creation of general systems theory, he was concerned with articulating a holistic inquiry standpoint capable of understanding boundary-maintaining, organized, living wholes in relation to their embedding whole or environment. Thus, one of the keys to his approach is an emphasis on structure and function, which he interprets holistically within the holistic framework of general system theory. He does not try to get rid of structure by reducing it to function, as Frank seems to do. Reducing structure and function, besides being incoherent, would systematically undermine his approach. To appreciate Bertalanffy's way of drawing the distinction, you must recognize that he is a holistic thinker. As such, he marks off the difference between structure and function in terms of the activities of slow patterns and quick processes, rather than in terms of isolated things.

Given the progress that Frank made in clarifying these issues, it is odd that he would flirt with reducing structure to function and end up saying that the distinction is meaningless. Was he predisposed all along toward seeing structure as a variation of function? In any case, it is clear that the distinction is not meaningless.

To carry our speculations about what is behind this claim one step further, perhaps Frank is thinking that because structure and function are inseparable and because it is not possible to drive a hard and fast line between them, no meaningful distinction can be drawn. Remember, structure and function are inseparable, but distinguishable. Because they are inseparable, no hard and fast line can be drawn between them. Yet we can and do meaningfully distinguish between them all the time. Think of the analogous difficulty of trying to mark out a precise

division between bald and non-bald men. How many hairs must be missing in order to qualify as being bald? It's a ridiculous question, to be sure. But it illustrates the point that meaningful distinctions can be made even though the dividing line will never be clear. The same is true for the distinction between structure and function – the dividing line will never be clear but the distinction is meaningful. Perhaps Frank should have said there is no clear division between structure and function, not that there is no meaningful division.

Frank goes on to assert, "the taxonomic labels give the impression that the 'real' event is mobilization of tissue rather than revival of native movement intelligence . . . because the assumed definition of 'structure' or 'structural' reverts to 'body-as-soft-machine-thinking' which leads to education that fragments the holistic nature of SI."<sup>9</sup> This way of thinking is certainly problematic. But the solution to the difficulty is not found in retiring taxonomies. The solution is actually quite simple and much more straightforward: don't define structure mechanically.

Considering this often-posed question, "Do I see a structural issue or a functional one . . . ?" Frank says, "The question behind the question is really, 'Will I get better change from mobilization of tissue, or mobilization of other dimensions of the client's being (such as perception, coordination or meaning)?' The second question has merit. The first question is a faulty choice."<sup>10</sup>

The first question is a faulty choice only if you assume that structure and function are separate. If you assume they are separate, then you are forced to choose one or the other. But thanks to Frank's analysis we know they are not separate. As a result, when we ask whether an issue is structural or functional, it becomes a matter of emphasis. You could say that we are asking whether the issue is weighted more toward the structural or more toward the functional. If we ask whether it is structural as opposed to or versus a functional issue, then we are more than likely assuming that structure and function are separate. But, as long as we are clear of what meaning of structure is in play and that there is no hard and fast division between structure and function in living beings, there is no problem whatsoever in asking whether an issue is (weighted toward the) structural or (emphasizes the) functional.

Continuing his reformation, Frank suggests that we substitute a “manual-mobilization” taxonomy for the structural taxonomy and a perceptual/coordinative-education taxonomy for the functional taxonomy. He also suggests the same substitutions when we talk about faculty. “To talk about a structural (Rolfing) faculty versus functional (movement) is a bad use of language. Would it be better to speak about fascial- or tissue-mobilization faculty and perceptive/coordinative faculty?”<sup>11</sup> In response to the observation that the majority of what we do belongs to a functional taxonomy, Frank says “it’s an interesting observation, but perhaps an inevitable result of a flawed premise, that structural and functional are separate taxonomies . . .”<sup>12</sup>

But as we have just seen, at both the ordinary and taxonomic levels, the structure of a living being is not necessarily opposed to or necessarily separate from its function. If we want to avoid the pitfalls that Frank delineates, then all we need to do is clarify our terms. If we specify that we mean structure as it applies to living beings, where structure and function are never separate, then there will be no cause for amusement or accusations of bad language usage mentioned above. Notice, the bad usage of language Frank refers to hinges on just one little word, “versus.” If we watch our language usage and avoid saying phrases that imply that structure and function are separate (such as structure “as opposed to” function or “versus” function), then we will not be forced to choose one over the other. As a result, we can rest secure in the knowledge that our choices and premises are not faulty after all. And best of all, as we do our work, it is still perfectly legitimate and correct to explore whether we are dealing with a structural or functional issue. Thus, we can easily see that no retirement of the structural and functional taxonomies is required.

Before we leave the discussion of the taxonomies, I want to make sure that it is clear what the taxonomies are, because Frank somewhat misstated them. They are Structural/Geometric, Functional, Energetic, and Psychobiological Orientation (Intentionality). The biomechanical designation is a taxon that finds its place under the structural taxonomy. It is a taxon not a taxonomy. Depending on whether you count the structural/geometric as one or two, there are four or five taxonomies.

### *Develop or Retire?*

The issues surrounding Rolfing SI and energy work are complicated and important. One response to Frank’s desire to retire the energetic taxonomy might be a rather long article. I would like to save that possibility for another time and just make a few comments about this issue. Let me remind us of what every Rolfer™ knows: Dr. Rolf was passionately interested in coming to terms with the energetic dimensions of her work. As a result, the pursuit of energy is rooted deeply in our tradition. There have always been those colleagues among us who had been quietly exploring what energy is and how to use it as a tool for assessment and intervention. Today, their numbers are increasing as more and more practitioners find themselves naturally drawn to energy manipulation.

After years of investigation, many of us are now in a position to coherently talk about energy, create ways for most people to perceive it, and use it as a consistent tool of intervention in the service of Rolfing SI. Contrary to Frank’s sense that the energetic taxonomy spawns confusion, we are not confused. We are actually more confident than ever about our understanding of energy and how to use it as a tool in the service of Rolfing SI.

The energetic taxonomy exists because it is a legitimate part of our tradition, because there is growing interest in it, and because having a taxonomy helps organize our thinking about which areas need or do not need further development. If we recognize that a taxonomy or one of its subcategories is important to our work and it is muddled and confused, we do not retire it. We investigate, clarify, and develop it. Retiring concepts does not advance our work. Developing them does. The existence of an energy taxonomy has greatly stimulated the development of our understanding of energy to where some of us are teaching it in our classes. Parenthetically, I should add that teaching Rolfing energy work probably should be reserved for the advanced student, not the beginner.

Retirement is not an answer to the advancement and evolution of the work. Retire the energetic taxonomy and you stifle the development of something important. Retiring the energetic taxonomy is tantamount to burying our creativity and the further development of our understanding of energy and its role in our

work. In light of great progress we made, we need to embrace the energetic taxonomy. Now is not the time to bury or set it aside leaving it to others to do our job. If you want to read more on the nature of healing and the place of energy, see my latest book, *Mind Body Zen*,<sup>13</sup> especially the last two chapters.

### **Conclusion**

Although the energetic taxonomy requires more work and exploration, we can conclude that no additions to the paradigms or retirement of taxonomies are necessary at this time. Even though both proposals had problems, both also had merits. Above all, we should not lose sight of Frank’s call to reform and expand how we talk about our work by conceiving of it as a “package of educational interventions that span multiple dimensions of a person’s being.” In order to carry out this project, Frank and his colleagues need to articulate in detail the theory and practice of restoring normal motor coordination. Fortunately, it looks as though that is exactly what they are doing. Since the structural and functional taxonomies do not need to be retired, normal motor coordination can be considered a taxon falling under the functional taxonomy.

I agree with Frank’s comments about the importance of examining word usage. Concepts are critically important to our work. Why? Because the clearer our concepts become, the better our work becomes. By distorting the words of Kant a bit to make a point, we can say that concepts without intuitions are empty and intuitions without concepts are blind. Knowing what you are doing is every bit as important as feeling/intuiting what you are doing. In order to see why this is so, let me give you one rather remarkable example from my book, *Spinal Manipulation Made Simple*. It is called the Rumpelstiltskin effect.

Knowing what you are releasing in a client’s body adds to your clarity of purpose and actually makes you a more effective therapist. If you know what it is that needs to change, then the techniques you apply will be more effective than if you don’t know precisely what you are releasing. This characteristic of the somatic manual arts reminded my wife of the psychotherapeutic setting where, metaphorically, you must name your demons if you want to get rid



of them. She calls this phenomenon, "The Rumpelstiltskin Effect."

As strange as it may sound, I am convinced that your recognition of the fixation is more than just an intellectual accomplishment that happens to accompany your application of a technique – it is actually an important part of the technique itself. Before I knew how to tell the difference between [sacral] shear and torsion, I had developed the techniques . . . for releasing torsion. During the time I was reading about and trying to understand shear, I was working with a client who had what I believed was a posterior torsion in which the right base was posteriorly fixed. For a number of sessions I had applied my technique for posterior torsion. I was able to give him some relief from his pain, but I couldn't get rid of all of it. My client told me at the beginning and end of every session that even though the other pains around his low back area had gone away, the pain in his butt never went away . . . When I finally got clear about how to tell the difference between shear and torsion, I . . . discovered that he had a right posterior sacral shear. Adding this recognition – that his sacrum was actually in posterior shear, not posterior torsion – to the very same technique I had used when I believed his sacrum was posteriorly torsioned fully released his sacrum for the first time. And for the first time the pain in the right side of his buttocks disappeared.<sup>14</sup>

When all is said and done, clear concepts make for better Roling SI.

## Endnotes

1. Hayden, Chris, "Three Functional Paradigms." *Structural Integration: The Journal of the Rolf Institute*®, June 2012, pg. 20.
2. Frank, Kevin, "Body as a Movement System – Part 2." *Structural Integration: The Journal of the Rolf Institute*®, June 2012, pg. 7.
3. Ibid., pg. 7.
4. Ibid., pg. 7.
5. Ibid., pg. 8.
6. Ibid., pg. 8.

7. Ibid., pg. 9.

8. Ibid., pg. 8.

9. Ibid., pg. 8.

10. Ibid., pg. 8.

11. Ibid., pg. 8.

12. Ibid., pg. 7.

13. Maitland, Jeffrey, *Mjnd Body Zen*. Berkeley, CA: North Atlantic Books, 2011.

14. Maitland, Jeffrey, *Spinal Manipulation Made Simple*. Berkeley, CA: North Atlantic Books, 2001, pp. 88-89.

# An Excellent Adventure: Poster Presenting at the Fascia Research Congress

By Karen Sallovitz, Certified Advanced Rolfer™

Every once in a while something comes along that changes the parameters of what we imagine to be possible. Roling® Structural Integration did that; it forever changed the prevailing notion that bodies follow an uninterrupted spiral towards decrepitude. It introduced the concept of connective tissue as a mutable, plastic medium, and we, as Rolfers, have enjoyed sixty years of exploring the possibilities of plasticity.

But then there is that point, that hard edge one runs into where the question arises: what to do when plasticity has fled the scene, when in spite of your best efforts the connective tissue is unyielding and intractable? We all push that edge in different ways. Our research group experimented with pushing it by directly altering the biochemistry of connective tissue. (Purists avert your eyes.) We used an infusion of glutathione delivered via I.V. push syringe during the connective-tissue manipulations. We presented our findings at the Third International Fascia Research Congress in March 2012 in Vancouver, Canada.

Glutathione is a substance that can be found in every cell of the body but is manufactured primarily by the liver. It is found in great abundance in healthy bodies, and in diminished amounts in challenged organisms. It is a powerful antioxidant composed of three amino acids: cysteine, glycine and glutamic acid. In spite of the fact that people have been studying glutathione since 1921, no one knows precisely how it works – which made this project all the more compelling

and challenging. But, unquestionably, it does work. We were able to produce results in seemingly intractable situations; most notably we found that we could thaw frozen shoulder and produce significant changes in post-surgical scar tissue. The effects were sometimes jaw-dropping.

We presented at the conference, not because we had compiled such convincing statistical data – we hadn't; we were there because we had happened on to something that was too good to keep under wraps. We presented initial findings laid it out quite simply: what we did, how we did it, who it worked for, and how to duplicate the results. We went to the conference with the clear intention of connecting with other people who were using glutathione for similar purposes, to connect with people who knew how to gather data and assess findings. We hoped to find someone who had a lab and lots of mice and testing equipment, to find someone who knew how glutathione actually works. That didn't exactly happen, but we did make valuable contacts.

The conference provides a crucible, a place to collide with people on similar or opposing trajectories. One fellow walked into our booth and said, "I do this same thing in my clinic in Scotland" and then he told us about a myometer called a MyotonPro for capturing precise connective-tissue measurements. He is part of the same research group as Robert Schleip and was at the conference to promote this new device. Another exciting connection was a conversation with a molecular pharmacologist. I inquired about the possibility of a transdermal form of

glutathione (using an I.V. is very effective but inconvenient and expensive), and he thought he might have a base stable enough to suspend the fragile glutathione molecule.

I estimate that 400-500 people saw our presentation, and while we didn't get the response we imagined, we did pique quite a bit of interest. We lost count of how many people walked up and asked, "Can I come to Santa Cruz to try this – I've got this shoulder problem . . . ."

This project was started in 2010 by a Feldenkrais Method® practitioner, Nancy MacAllister, and a naturopathic doctor, Tonya Fleck-D'Andrea, as a cooperative approach to frozen shoulder. Early on the project hit a snag, and I was called in to assist with the tissue mobilization. Left to my own devices I suspect I would have never found my way into a research project, but things take a course and suddenly I was deeply captured. A year later I was writing an abstract and designing a poster presentation. This project is an ongoing inquiry. Currently there are three naturopathic doctors, two Rolfers, and one Feldenkrais practitioner in the research group. We welcome comments, clues, connections; anything to speed the glacial pace of research.

## In Memoriam

*Structural Integration: The Journal of the Rolf Institute®* notes the passing of the following members of our community (in alphabetical order):

**Jim Fiorino,**  
Certified Advanced Rolfer™

**Ed Jeheber,**  
former Rolfer

**Steve Moore,**  
Certified Rolfer

# Ida's Imprint Holds for Life

## *The Passing of Ed Jeheber*

By Anne F. Hoff, Certified Advanced Rolfer™

Back in the spring, my friend Ursula told me that one of her hospice patients on Maui, Ed Jeheber, wanted to meet me. Ed was dying of cancer. Ed had studied Rolfin® Structural Integration (SI) with Ida Rolf, and he knew my name from when I used to live on Maui. Ursula told me that he'd been homeless for many years, but throughout that time had been practicing mindfulness and awareness and presence.

The next time I was heading to Maui, Ed's request to meet me came again, through my friend Wayne, who had known him for twenty-some years. He said Ed wanted a Rolfin session, wanted to talk; for whatever reason, that was very important to him as part of his process. He apparently had been thinking about this for years, and now as life was coming to an end, there was the urgency to reach out. I arranged to visit him at the house of the family who had taken him in for the period of time he had left. The house was decorated with many of Ed's vivid paintings of Maui.

Ed was mostly bedridden at this point. We talked. He spoke slowly, but burned with an intensity, struggling to articulate questions that were at the forefront of his mind. There was a story about time in India, where it sounds like he had been practicing Rolfin SI until something really intense happened that made him stop the work, but not forget about it. He wanted to know what was up with our Rolfin community, was the conversation as it had been back when he was involved? Did we still talk about "the Line"? He wanted to know was Emmett still around, was Mary Bond still around? . . . . It was very important for him to know that the ideas of Rolfin SI were still alive and well. I was very touched to see how profoundly the Rolfin worldview had imprinted his being, and how much it was in his thoughts and wishes at this end stage of life. I did my best to ensure him that, yes, we still cared about the same things.

His body was frail, but his hands were big and still looked strong. He told me he had given a session to the woman who had taken him in – he wanted to see if he could still do it. He confided that he had done a Second Hour without doing a First,

and wondered if it were a heresy. (Was I his confessor?) I told him that this was occasionally done, in cases where support was needed before opening breath, that I'd done it myself and it was well within our purview.

Ed wanted a session; he really wanted to experience Rolfin touch again and to bring more uprightness to a body that was being torn down. I sensed to reinforce what was known and familiar to him, so I had him stand briefly for an assessment. I decided to do some work on his legs to enhance a sense of ground (in his homeless years, he was a familiar figure walking up and down the highway, and had once been struck by a car and badly injured; I could see the damage and scar tissue), and then to create a bit of length up the front. I worked on him carefully – there was not too much of him left – and with a keen awareness to not taxing his resources. A little input would be enough for him to get the familiar touch and give his body something to work with. As Wayne had told me to expect (and to accept), Ed insisted on paying me from his meager resources. He asked me to find him another Rolfer on Maui in case he wanted more work when I wasn't there. Not long after, a couple of weeks maybe, I heard from Ursula and Wayne that he had passed.

I wanted to include Ed in our "In Memoriam" section of this Journal. Some early records had gone to the Guild for Structural Integration, where Susan Melchior confirmed that "Eddy" had trained with Dr. Rolf in 1969. I was happy she remembered him. Recently, I got another phone call from Wayne on Maui: could I assist with Ed's final wish that his ashes be scattered in Scotland. (We don't know why; Ed was American, but he had his eccentricities.) Perhaps there was a Scottish Rolfer who could help? Indeed, I found James Howard through the ERA web site, and hearing Ed's story and this unusual request, he was also touched by this member of our tribe, and will happily take his ashes to a place of rest. Wayne said it was perfect, that a Rolfer fulfill Ed's wish.

Ed's story speaks of just how powerful a transmission he received. He was not one of

our celebrated members – he did not teach or write about Rolfing SI, or even hardly practice – but he carried the Rolfing lineage in his being. Despite being incommunicado from our institutions and community for years, what he wanted to embody and remember as the end approached was the wonder of this work. I imagine that many of us carry a similar imprint.

## SI Articles Published in The Journal of Alternative and Complementary Medicine

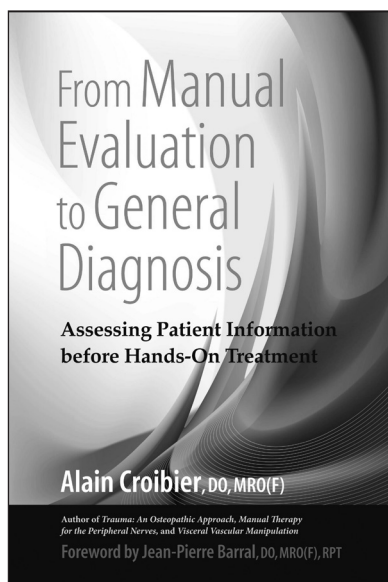
The Rolf Institute® is pleased to announce that Certified Advanced Rolfer™ Eric Jacobson Ph.D. had two articles on structural integration (SI) published in *The Journal of Alternative and Complementary Medicine* last year. The first, "Structural Integration: Origins and Development," appeared in the September 2011 issue (Volume 17, Issue 9, pp. 775-580). The second, "Structural Integration, an Alternative Method of Manual Therapy and Sensorimotor Education," appeared in the October 2011 issue (Volume 17, Issue 10, pp. 891-899). Abstracts can be viewed and full text downloaded at the Journal's website <http://online.liebertpub.com/loi/ACM>.

## Reviews

### *From Manual Evaluation to General Diagnosis*

by Alain Croibier D.O.  
(North Atlantic Books, 2012)

**Reviewed by Allan Kaplan  
Certified Advanced Rolfer™**



I've been waiting for a book on manual evaluation from the French osteopathic perspective for quite some time, so when I heard that Alain Croibier D.O. had produced such a book, I was quite intrigued. And while *From Manual Evaluation to General Diagnosis: Assessing Patient Information before Hands-On Treatment* is not a concentration on the manual and listening techniques used in this tradition, it is a formidable book, nonetheless.

For those who don't know of him, Alain Croibier is a protégé of Jean-Pierre Barral, D.O., the popularizer of modern visceral manipulation; he co-teaches with Barral and has coauthored many of Barral's books on the subject. In person, he is a very pleasant, quiet fellow. As this book demonstrates, he is also very thoughtful and has a lot to say. It is clear that he is as conscientious about his book as he is with his work: it is well-organized, well-presented, comprehensive, and abundantly illustrated with figures, charts, diagrams, and photographs.

As the book's subtitle emphasizes, it is concerned with "assessing patient information before hands-on treatment" and is very thorough in pursuing this goal. In its four-hundred-or-so pages, Croibier investigates and outlines a thorough assessment of the client, not only on the physical level, but also (unexpectedly for me) on many others; there are chapters on the intake interview, physiopathology, posture and morphology, "biotypology," and psychology, to name only some of the subjects. Really, this book is packed with a tremendous array of things to consider in terms of getting to know the client on multiple levels, as well as the expected physical evaluation. Some of the text on physical examination incorporates Barral's general and local listening methods, but there are many more tools described for the joints, tissues, and cranium.

While Croibier's background is as an osteopath, it's important to note that European osteopaths are not medical doctors and are not licensed to practice medicine – unlike osteopaths in the U.S., they are strictly manual therapists and work with tissue. It's this bias, similar to ours, that makes the majority of the information

contained in his manual applicable for Rolfers. There is actually remarkably little in the book that is not within the scope of things that the average Rolfer might utilize in practice, and what is left is informative, and hopefully enlightening.

Croibier sets the stage by defining and describing osteopathy and the osteopathic paradigm, and things don't sound *that* alien: structure, function, superficial, deep – it's not unfamiliar terrain. He sets the stage by presenting a broad picture of what shapes health, and what can knock it out of balance. I find this refreshing for two reasons: for one, I find it very rare for someone to present such a broad perspective of influences on us, as organisms, within our lives, and the weight these influences can place upon ourselves; second, it causes me to pause and consider how easy it is for practitioners to lapse into varying degrees of complacency and myopia and lose a questioning, inquiring presence for their clientele. For me, Croibier presents the opportunity to do a self-check to see both how I'm performing, and on what other dimensions I might expand my perceptions and expertise.

While Croibier approaches his diagnoses from the perspective of a manual therapist, manual evaluation is truly only one aspect of his inquiry. He begins his general diagnosis with an extensive interview, and his outline of questions, goals, and guidelines for how to question incorporates thirty pages, and is something that will benefit any practitioner. Following is the general evaluation, concerning signs and symptoms (sixty pages), posture and balance (thirty pages), individual "nature" (body types and psychology, another sixty-five pages), and then the manual diagnosis



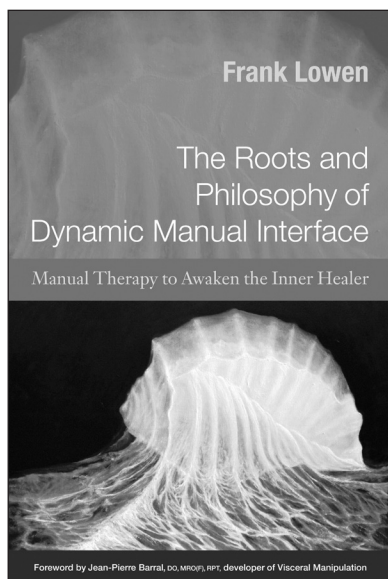
(another sixty pages). Even though these sections may sound lengthy, they are very approachable and really only starting points for the dedicated sleuth. Again, the author has presented a wide-ranging array of approaches and techniques to create as complete a picture of the client as possible; only once he has accumulated information through such a broad investigation can a process of differential diagnosis finally be attempted to distill the information through a more detailed sequence, leading to a specific diagnosis.

Croibier's conclusion sums it up: "The different themes developed in this book should never make you forget that an osteopathic diagnosis is not intellectually contrived . . . it is established from *perception* and becomes *known*, not the reverse. In no situation can speculation and intellectual construction augment deficiencies in perception . . . It is in this sense that the diagnosis constitutes true *knowledge*." *From Manual Evaluation to General Diagnosis* has a wealth of valuable information for any practitioner, and is a particularly valuable handbook for Rolfers and other manual practitioners.

## *The Roots and Philosophy of Dynamic Manual Interface*

by Frank Lowen  
(North Atlantic Books, 2011)

**Reviewed by Allan Kaplan**  
**Certified Advanced Rolfer**



Frank Lowen has written a book of a somewhat different sort than Croibier with *The Roots and Philosophy of Dynamic Manual Interface*, titled after a method he has created from his studies and experience. Whereas Croibier has produced a comprehensive manual, Lowen's book presents his ideas within the context of an autobiography to lay out the development of his system.

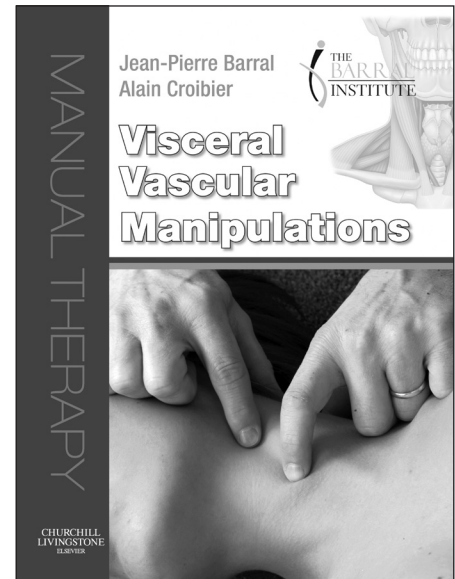
Lowen has a solid background, having studied craniosacral work extensively with and become an instructor for John Upledger, D.O., and later doing the same with Jean-Pierre Barral. This was after having traveled the world and spending time with many other teachers. It was during his tenure with Barral that Lowen finally decided he needed to separate and pursue concepts that he had been formulating, based on observations and experiences from his own practice. Through his clinical experiences he developed "maps" that he uses to do his assessment – what he calls his "cranial map," which resembles a foot reflexology chart transposed onto the cranium, and a few other similar maps that overlay the spine, sacrum, and ribcage. Lowen also explores relationships within the body, and develops various techniques that he uses in treatment.

One trap of writing an autobiography is that an author can get quite wrapped up in his own story and self-worth; I am happy to say that Lowen has been pretty successful at avoiding that pitfall. While navigating his life's story, he has done a very good job of keeping the narrative pertinent, while interspersing and describing concepts of anatomy and physiology, the cranial and visceral systems, and ways of working with them along the way. His writing is friendly, and his discussions are clear and easy to follow. On the whole, I found Lowen's book interesting and thought-provoking, yet the section where he speaks to his own system seemed like its weakest part. In an effort to describe Dynamic Manual Interface, he gets a bit bogged down and distracted by the history of its genesis. I think he wants to give the reader an idea of the system without turning the book into a text, but in doing so, things get a bit vague for my taste. Lowen also includes some of his anatomical drawings, but even though they're very nicely drafted, some don't seem relevant to the text, and others are reproduced partly out of focus, which is a shame. However, this shouldn't dissuade one from purchasing the book, as it is an illuminating read.

## *Visceral Vascular Manipulations*

by Jean-Pierre Barral D.O and Alain Croibier D.O.  
(Churchill Livingstone Elsevier, 2011)

**Reviewed by Jim Allbaugh**  
**Certified Rolfer**



*Visceral Vascular Manipulations* by Jean-Pierre Barral, D.O and Alain Croibier, D.O. [his colleague in the development of visceral manipulation (VM), neural manipulation and global joint treatment] is a welcome addition to the library of those Rolfers who practice visceral manipulation. It is both thorough both in its description of anatomy and physiology and its exploration of various techniques and methodology. Visceral vascular manipulation is still considered visceral manipulation, just expanded. Barral continues to incorporate other systems of the body into his work; not too long ago it was nerves, and with visceral vascular manipulation, it is the cardiovascular system. General listening and local listening still apply. Now, however, you might be drawn to an artery or vein rather than an organ, membrane, or suspensory ligament. A common thread throughout visceral vascular manipulation is the importance of proper blood flow to the internal organs.

The book starts with a general overview of the cardiovascular system, beginning from the macro – the heart – and then they end their exploration with the micro level of arterioles, venules, and capillaries. As a Rolfer, I am always antsy to get to the meat

of the matter, the techniques or the “how” of effecting change. That said, I appreciated the rich exploration of the cardiovascular system’s anatomy and what it is exactly we are working on, and how it works. Not to mention that it is wonderful to simply be in awe of the body’s inherent complexity and beauty.

Next, Barral and Croibier discuss the physiology, homeostasis, and pathologies of the cardiovascular system. All three chapters help de-mystify the healthy inner workings of the cardiovascular system as well as its common pathologies. In their descriptions of physiology, Barral and Croibier lay out in easy-to-understand terms both the sympathetic and parasympathetic regulation of the cardiovascular system. It doesn’t take long to grasp the toll a highly charged sympathetic nervous system will have on both the heart and circulation in general. Their chapter on pathology is particularly helpful to identify deeper problems beyond our scope of practice and also when manual therapy might be contraindicated.

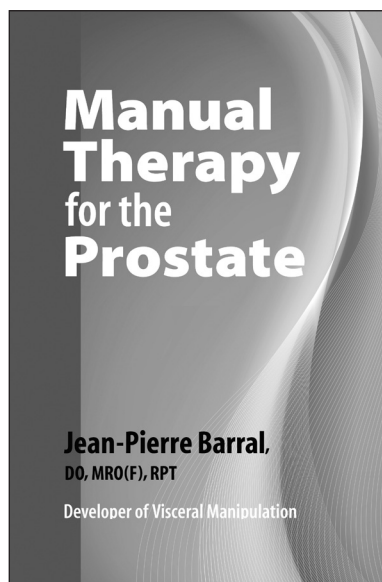
Finally we get to the principles and practice of VM. Here, once again, I tip my hat to Barral and Croibier for creating a book with such splendid and easy-to-read illustrations that make life much easier for practitioners. There is plenty to explore and learn, and not having to decipher black-and-white scribbles for illustrations is a great help. The authors discuss a variety of techniques that address a myriad of different anatomical landmarks: on one end of the spectrum we learn techniques that affect the sizable aortic arch, and at the other end they teach treatment of the petite posterior auricular artery of the ear. Barral seems to get more and more creative with his techniques, which invites us to be innovative and efficient in our practices as well.

In some ways, I wish Barral and Croibier would go into even greater anatomical detail, yet, it’s important to remember that *Visceral Vascular Manipulations* is but a springboard for us to explore and co-create this fascinating modality.

## Manual Therapy for the Prostate

by Jean-Pierre Barral  
(North Atlantic Books, 2010)

Reviewed by Jim Allbaugh  
Certified Rolfer



Many Rolfers use visceral manipulation (VM) as developed by French osteopath Jean-Pierre Barral to help their clients find structural integrity. VM helps the body find functional and structural homeostasis by addressing dysfunctions in the body’s visceral, nervous, vascular, urogenital, digestive and respiratory systems. In *Manual Therapy for the Prostate*, Barral lays out a very concise and thorough description of the prostate—its anatomy, pathology, and possible treatment. His viewpoint is that of an osteopath. He considers structure, but his emphasis in this particular book is primarily with the renewed health and vitality of the prostate, and not necessarily structural integrity per se. Nevertheless, there are things I found to be of value.

First off, the illustrations are descriptive, accessible, and contain a great amount of detail. (For readers who are familiar with earlier editions of Barral’s VM books, say *The Thorax* or *Urogenital Manipulation*, I want to note that the illustrations in his more recent publications are far better.) Besides describing the anatomy of the prostate, Barral also goes into great detail

about neighboring structures, whether they are arteries, nerves, or other organs. Those familiar with Barral’s work will understand the importance of an organ’s neighbors and their functional and dysfunctional relationships. Barral makes it clear in this book and others that he is not a fan of practitioners specializing in one area of the body over another. With *Manual Therapy for the Prostate*, I once again appreciate his holistic approach to manual therapy. Even though Barral looks at various pathologies of the prostate, his main focus is on the enlargement of the prostate itself, and the somatic symptoms that may follow. In treating the prostate, Barral does not claim that the size of the adenoma can be reversed, but notes that the dysfunctional effects of an enlarged prostate possibly can be. His goals and intentions are noble. How can the enlargement of the prostate be addressed without necessarily utilizing surgery? It turns out that addressing the pathologies of the prostate can be . . . tricky. Most of the techniques described in *Manual Therapy of the Prostate* utilize the rectum for access, and as Rolfers we are ethically and legally bound not to utilize such techniques.

That said, Barral does provide some methods that are well within our scope of practice as structural integrators. External techniques are discussed that address other structures around the prostate, thus indirectly affecting the prostate itself. These structures include the kidneys, obturator and gemellus muscles, sacrospinous ligaments, the bladder, and the lumbar spine. In understanding these structures and their relationship with the prostate, we can perhaps use “long-lever” techniques to affect the prostate itself. Utilizing motility of the prostate is also discussed.

Near the end of the book, Barral also discusses how emotions affect organs and vice versa, which I greatly appreciated. I hope he does this more often with future publications.

Perhaps Barral will write more books that focus primarily on other particular organs—liver, kidneys, lungs, heart, etc.? That would be wonderful.

# Congratulations to the New Graduates

U.S. – May 2012

**Faculty:** Ashuan Seow (Instructor), Keith Economidis (Assistant)

**Students:** Lauren Gee, Steven Geer, Chelsea Heath, Nicholas Mandryk, Belle Marsh, Kathryn McCarthy, Masaki Miura, Nobuhiro Miyahara, Mircea Pinzaru, Kia Satterfield, Paul Sherman, Akiko Shiina, Katherine Stevens, Troy Taylor, Sarah Zumwinkel

U.S. – August 2012

**Faculty:** Kevin McCoy (Instructor), Juan David Velez (Assistant)

**Students:** Kellie Anderson, Megan Craig, Tina Green, Akinori Itoh, Ryu Koyama, Gary Mock, Keisuke Okubo, Terence Olliviera, David Rodriguez, Adam Tanner, Wynona Wensley

ERA – August 2012

**Faculty:** Pierpaola Volpones (Instructor), Fuensanta Munoz de la Cruz (Assistant)

**Students:** Britta Brechtefeld, Sabine Dorner, Christine Ernst, Ralph Hekmat, Michael Hertrich, Raphael Oberhuber, Lisa Praller, Carla Sambrano, Cheryl Schon Aubert

## Class Schedule

### BOULDER, COLORADO

#### *Phase I: Foundations of Rolfing® Structural Integration*

**January 21 – March 4, 2013**

Coordinator: Meg Maurer

**June 10 – July 22, 2013**

Coordinator: Adam Mentzell

**September 2 – October 14, 2013**

Coordinator: Michael Polon

#### *Phase I: Accelerated Foundations of Rolfing Structural Integration*

**March 10 – March 23, 2013**

Instructor: Suzanne Picard

**July 28 – August 10, 2013**

Instructor: John Schewe

#### *Phase II: Embodiment of Rolfing Structural Integration & Rolf Movement® Integration*

**November 26, 2012 – January 31, 2013**

• **Part 1 – November 26 – December 20, 2012**

• **Part 2 – January 7 – January 31, 2013**

Instructor: Kevin McCoy / Michael Murphy

Principles Instructor: Jane Harrington

**April 1 – May 23, 2013**

Instructor: TBA

Principles Instructor: Jane Harrington

**April 1 – May 23, 2013**

Instructor: Thomas Walker

Principles Instructor: Mary Bond

**August 19 – October 10, 2013**

Instructor: Thomas Walker / Michael Murphy

Principles Instructor: Carol Agneessens

**October 21 – December 19, 2013**

Instructor: Bethany Ward

Principles Instructor: Jon Martine

#### *Phase III: Clinical Application of Rolfing Theory*

**February 4 – March 29, 2013**

Instructor: Ray McCall

Anatomy Instructor: Juan David Velez

**June 17 – August 9, 2013**

Instructor: Kevin McCoy

Anatomy Instructor: Jon Martine

**October 21 – December 20, 2013**

Instructor: Larry Koliha

Anatomy Instructor: Michael Murphy

#### *Advanced Training*

**May 27 – June 14, 2013**

**August 19 – August 30, 2013**

Instructor: Ray McCall w/Jon Martine

### LOS ANGELES

#### *Advanced Training*

**November 4-21, 2013**

**March 10-27, 2014**

Instructor: Jan Sultan w/Lael Keen

### SOQUEL, CA

#### *Rolf Movement® Certification: Perceptive Core Stability*

**March 16-22, 2013 (no March 19)**

Instructor: Kevin Frank w/Per Haaland

### HOLDERNESS, NEW HAMPSHIRE

#### *Rolf Movement® Certification: Rolf Movement Teacher Practicum*

**July 16-22, 2013 (no July 19)**

Instructors: Kevin Frank/Gael Ohlgren

#### *Rolf Movement® Certification: Orientation, Perception, and Resonance*

**August 22-28, 2013 (no August 25)**

Instructor: Kevin Frank

### BALI

#### *Phase II: Embodiment of Rolfing Structural Integration & Rolf Movement® Integration*

**May 6 – June 27, 2013**

Instructor: TBA

#### *Dual Training Phase III: Clinical Application of Rolfing Theory & Rolf Movement Certification*

**October 7 – December 12, 2013**

Instructor: TBA

### BRAZIL

#### *Unit III w/ Rolf Movement Integration*

**March 4 – May 9, 2013**

Instructor: TBA

### GERMANY

#### *Phase I*

**July 7 – August 17, 2013**

Instructors: Rita Geirola, Konny Obermeier, Giovanni Felicioni

#### *Phase II*

**October 7 – November 29, 2013**

Instructor: Paola Volpones

#### *Phase III*

**February 10 – April 3, 2014**

Instructor: Harvey Burns



# Contacts

## **OFFICERS & BOARD OF DIRECTORS**

Kevin McCoy (Faculty/Chairperson)  
(262) 337-1530  
bodfaculty1rep@rolf.org

Peter Bolhuis (At-large/CFO)  
(303) 449-2800  
bodatlarge2@rolf.org

Audrey McCann (Eastern USA/Secretary)  
(443) 850-2728  
bodeasternrep@rolf.org

Nicholas French (Western USA)  
(214) 357-7571  
bodwesternrep@rolf.org

Benjamin Gunning (Central USA)  
(414) 336-8107  
bodcentralrep@rolf.org

Michael Murphy (Faculty)  
(650) 559-7653  
bodfaculty2rep@rolf.org

Maria Helena (Lena) Orlando  
(International/CID)  
+55-11 3819-0153  
bodinternationalrep@rolf.org

Hubert Ritter (Europe/Past Chair)  
+49-30-4435 7473  
bodeuropeanrep@rolf.org

Wanda Silva (At-large)  
(904) 294-3335  
bodatlarge1@rolf.org

## **EXECUTIVE COMMITTEE**

Peter Bolhuis  
Kevin McCoy  
Audrey McCann

## **EDUCATION EXECUTIVE COMMITTEE**

Valerie Berg, Chair  
Duffy Allen  
Ellen Freed  
Russell Stolzoff  
Rebecca Carli, Rolf Movement Faculty  
Sally Klemm, Advanced Faculty  
Ray McCall, Interim FDRB Liaison  
Michael Murphy, Faculty Rep to the Board  
Suzanne Picard, Phase I Faculty  
Pierpaola Volpones, ERA

## **THE ROLF INSTITUTE®**

5055 Chaparral Ct., Ste. 103  
Boulder, CO 80301  
(303) 449-5903  
(800) 530-8875  
(303) 449-5978 fax  
www.rolf.org  
info@rolf.org

## **ROLF INSTITUTE STAFF**

Diana Yourell, Executive Director  
Jim Jones, Director of Education  
Vanessa Gordillo, Assistant to Education  
Heidi Hauge, Manager of Membership  
Gena Rauschke, Accountant  
Trace' Scheidt, Enrollment Manager/  
Financial Aid Officer  
Ray Viggiano, Clinic Coordinator  
Linda Weber, Office Manager  
Carah Wertheimer, Admissions Advisor  
Susan Winter, Manager of Marketing & PR

## **AUSTRALIAN GROUP**

Su Tindall, Administrator  
c/o The Rolf Institute  
5055 Chaparral Ct., Ste. 103  
Boulder, CO 80301  
USA  
(303) 449-5903  
(800) 530-8875  
(303) 449-5978 fax  
www.rolfing.org.au  
info@rolfing.org.au  
membership@rolf.org

## **BRAZILIAN ROLFING® ASSOCIATION**

Dayane Paschoal, Administrator  
R. Cel. Arthur de Godoy, 83  
Vila Mariana  
04018-050-São Paulo-SP  
Brazil  
+55-11-5574-5827  
+55-11-5539-8075 fax  
www.rolfing.com.br  
rolfing@rolfing.com.br

## **EUROPEAN ROLFING ASSOCIATION E.V.**

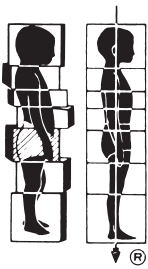
Patricia Pyrka, Executive Director  
Saarstrasse 5  
80797 Munchen  
Germany  
+49-89 54 37 09 40  
+49-89 54 37 09 42 fax  
www.rolfing.org  
info@rolfing.org

## **JAPANESE ROLFING ASSOCIATION**

Keiko Segami, 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

## **CANADIAN ROLFING ASSOCIATION**

Kai Devai, Administrator  
615 - 50 Governor's Rd.  
Dundas, ONT L9H 5M3  
Canada  
(416) 804-5973  
(905) 648-3743 fax  
www.rolfingcanada.org  
info@rolfingcanada.org



# Rolf Institute<sup>®</sup>

OF STRUCTURAL INTEGRATION

5055 Chaparral Ct., Ste. 103  
Boulder, CO 80301

Non-Profit Org.  
U.S. Postage  
**PAID**  
Boulder, CO  
Permit No. 782