

Building the Research Base with the Rolfing® ‘Recipe’ for Reproducibility

By Karen S. Price, Certified Advanced Rolfer™ and Marie Terrill, Certified Rolfer

Introduction by Marie Terrill

Karen Price has been a Rolfer since 1979 and specializes in working with children, including children with spastic cerebral palsy (CP). CP is a neurological motor disorder. Some types of CP originate with an hypoxic injury (lack of oxygen) to the brain, either in the womb or shortly after birth. Although the original insult to the brain has been described as non-progressive, CP is developmentally progressive in that as the child develops, there is an increasing burden of neurodevelopmental disability with increasing motor severity. Although there are no cures for CP, new and effective therapeutic approaches are needed. Self-described as a ‘closet-scientist’, Karen recently had the opportunity to work with a research team led by Heidi M. Feldman, MD, PhD, Medical Director of Developmental-Behavioral Pediatrics at the School of Medicine at Stanford University, looking at the effects and benefits of Rolfing Structural Integration (SI) for children with spastic CP. The project took six years to complete and culminated in three seminal publications. The last one was published in 2015 in the journal *Frontiers in Pediatrics*. This research is discussed in a second interview with Karen on page 29.

How Karen connected with Dr. Feldman and came into research after thirty years with a private practice and no formal training as a scientist is an incredible story. There are many lessons to be gleaned by the Rolfing community from Karen’s experience. Specifically, Karen offered several pieces of practical advice for Rolfers who want to do research, but are unsure where to start. Here are the items listed below, and a more comprehensive discussion follows:

1. Become ‘integrally informed’
2. Discover what you’re interested in: what is it about the Rolfing work that keeps you interested and engaged?



Karen Price



Marie Terrill

3. After you discover what you’re interested in, find your research partners through these interests, and make sure they receive some Rolfing sessions themselves!
4. Develop a study design, collect some pilot data, and plan on doing some *pro bono* work
5. Do the Recipe for reproducibility!

Marie Terrill: What do you mean when you say Rolfers should be ‘integrally informed’ and how will this help on the path to research?

Karen Price: As Rolfers, we are approaching the body structurally. Physical therapy, occupational therapy, indeed most medicine is approaching the body through function. In contrast, Rolfing SI structurally enables clients to move (function) in a way as close to normal as possible. Movement sculpts the brain. And specifically with CP, it’s not as though these kids are just laying in a crib and their brains sculpt on their own. Since CP is a movement disorder, their original movement starts out even more disorganized than non-CP children. For example, when you watch babies move, they all show movement that is relatively the same, developmentally normal movement. That kind of movement is what stimulates, sculpts, and prunes the brain. When we work on the body, we bring it as close as possible to its anatomical position, and that invites appropriate movement. Organizing the structure organizes the functioning in many ways.

What I rediscovered working with a lot of kids with CP is the main tenet of Rolfing SI: that we’re balancing the body in gravity. In order to walk, we need to be balanced in and with gravity. Say you’ve got a child with a left-side hemiplegia (spasticity on one side), meaning mainly the right side of the brain is affected: with standard therapeutic approaches for this condition, the child will only have his affected (left) leg worked on. But a lot of times, if the right leg is not supporting him, in Rolfing terms, he’s never going to walk. He literally doesn’t have a leg to stand on.

MT: So you’re talking about having an integrated perspective of a client, and not just focusing on one area or one part, even with a client who has gross structural and functional discrepancies across sides?

KP: Yes, with many of these children, I was working the other, non-affected side of the body. When that part became more integrated, then they had something to work with. Then they could jump; then they could run. Otherwise, they’re trying to do the best they can, but they can’t do it.

Our approach of working the whole body in Rolfing SI is a global approach. Rolfing SI was conceived at the ‘level of relativity’. Ida Rolf talked a lot about Korzybski’s ‘levels of knowing’. The basic idea here, and this is an example of being integrally informed, is that there are five levels of knowing. The first level is knowing through superstition. That’s self-explanatory, but let’s just imagine

I say, "It's cold out." Then you come along and you say, "Well, is it really cold out? Let's measure." So, the second level is measurement. You go measure it, and you say, "Yes, it's zero degrees, it's cold out." The third level is cause-and-effect: what measurable event is happening to cause the cold? This is where the medical world and the research world get stuck, in chasing cause and effect.

MT: Yes, it can be a very linear way of thinking.

KP: Ida Rolf was an amazing thinker. She was so far ahead of her time. Rolfing SI is conceived at the fourth level, the level of relativity: how does this all *relate*? How do the parts of the body relate to each other? How do we relate to the larger field of gravity? We need to move research into the level of relativity, which is going to include the subjective as well as the objective dimension. We are whole people; we're not just a statistic.

The fifth level is synchronicity, which is really the level where Rolfers can exist while working. During a Rolfing session itself, I think all of us have experienced synchronicity at some point. For example, you don't know why you suddenly move to another part of the body. The client says, "I was just feeling that in my shoulder," and you were on his shoulder before he ever said anything. That's really the level we always already function at, only we can't quite maintain it, or we don't know we're functioning there.

Another tremendous resource for Rolfers with regards to becoming integrally informed is the work of Ken Wilber. I strongly recommend becoming familiar with what he calls the Integral Approach.

Any research about Rolfing SI really has to be conceived in terms of relativity. I think this is the point: we're not looking for causes. When you look at the whole body of a child with CP, or of any person, what is that whole body, that whole body/mind saying to you? What's being communicated? For example, a lot of the kids that came to see me were outwardly cooperative because they'd been going to therapy their whole lives and were used to it. But a lot of them were burned out on therapy. They already could tell, even little ones, that it wasn't doing any good. They hated going. They'd come in, they're way too young for eye-rolling, but you know . . .

MT: You can feel it.

KP: Yes. They were communicating verbally and non-verbally that they did not want to be there. For my part, as the [practitioner], I have to be very aware of how I'm approaching them to get them to cooperate with me. To show them, "This is going to be fun. This is going to be cool. You're really going to like it. We're going to have a great time. You're going to see benefits right away. It's not going to hurt. You don't have to do anything. You can just play and hang out." I have to be communicating all of this to them, with my whole person, generally non-verbally, to get their cooperation.

We see this with adults. Somebody comes in, and maybe it's a partner of someone you work with, and he doesn't really want to be there, but his partner has insisted, and he's sceptical, asking, "What are you going to do for me?" Or people who are so invested in their story that they are coming to you for further validation that there's nothing that can be done to help them. You see that. You see that right away. We've all seen that. What do you do? As Dr. Rolf said, "Just roll up your sleeves and get to work."

This whole thing, this whole dimension, this whole relativity, moving beyond cause and effect, is something that we as Rolfers can really contribute to the field of research to integrate across disciplines, including medicine and research.

MT: Yes. I agree with you. I think that this is also an incredibly important point for Rolfers, and really for researchers in the entire scientific community. I see this so much. What question you ask shapes the response that you get, which in turn shapes a worldview. If you ask about cause and effect, then the interpretation of the results will be in the domain of cause and effect, since that is what you are anticipating. The interpretation of what you already were anticipating, what you already 'knew', then feeds back into your worldview, and you continue to see the world as made up of cause and effect.

It's like the questions that are being asked in a scientific community, more than actually telling us more about the world, are actually telling us about our collective mindset, and how we perceive the world. What you can learn about us right now in this age in the scientific community is that we conceive of the world in a cause-and-effect relationship with itself. If this is how we see the world,

then how can we shift our worldview, and move more into relativity – what you're talking about – which is not about this *versus* that, structure versus function, nature versus nurture, but rather that they're inseparable, influencing one another synchronistically? If you work with one, you're inherently working with the other.

This is such a great point you make of being integrally informed as we follow a potential path to research. If we try to offer Rolfing SI to the scientific community as something important to measure, and the scientific community comes back and says, "Great. Let's measure cause and effect," then whoa, look at all of the potential that we're going to miss.

KP: Right. Yes, that's absolutely true. You said it beautifully. Finally, one last thing about this is that if we continue to stay in the level of quantification of cause and effect in research, this also inevitably cuts up a human being into just one level as well.

MT: Your next point for Rolfers is to know what you want to study and why.

KP: Yes. So my example is: I love working with children. It's my thing. I'm good at it. It's fun. I enjoy it. As I've gotten older, it's a little easier on my body. I've been drawn to it since 1978 from my experience auditing a Ten Series with a child, and then the first child I worked with as a Rolfer, where I witnessed dramatic changes.

MT: Perhaps another way to describe it is discovering what you're interested in. We were all drawn to Rolfing SI for some initial reason, and then through doing the work, we discover what we're actually interested in and what our strengths are through the process.

KP: Right, if you discover that you enjoy working with the low back and relieving back pain, then go find a physical therapist [to network with for research]. If you are drawn to working with depression then try to connect with a psychologist or psychotherapist.

MT: So, moving onto your next piece of advice, which is to find your research partners through your interest. Can you describe how you connected with Dr. Feldman?

KP: Yes, to start with, Dr. Feldman is a pediatrician. She's an MD and PhD, and she specializes in children with disabilities. She's on several boards and consults with

the California Children's Services Program. But she doesn't have a background in Roling SI. Feldman and I crossed paths because she received Roling sessions from my husband, Jim Price. Jim was trained by Rolf in the late 1960s and was the first Rolfer around this area. Feldman was referred to him from another client. She had had a longstanding back problem. She'd tried acupuncture, chiropractic and, since she's also a yoga teacher, used yoga to help her back. But no one could give her more than temporary relief. After she worked with Jim, he completely resolved her back problem and it has not returned.

We knew Feldman was a pediatrician, but not [that she was] such a 'heavy hitter', so to speak, being a professor at Stanford and with all that she does. I said to Jim, "Tell her about my work with children," because I wanted more MDs to know what Roling SI can do for children. After finishing the Ten Series with Jim, the three of us had a meeting and we talked about Roling work for children. I showed her a picture from [the monograph] *The Promise of Roling Children* of a little girl with CP and how her legs changed from the Roling work. Heidi looked at that and said, "Let's do a study." I said, "Great!"

MT: Wow. So from there, you slowly gathered your team. Can you talk more about who the team was comprised of?

KP: At first it was just Alexis Hansen (a first-year med student at Stanford at the time), Heidi, and myself. We did an initial pilot study to gather data and presented a poster together at a medical conference (the poster can be seen on my website). This then led to our small initial team getting a large grant from the Gerber Foundation to fund a much bigger study and be able to have a more comprehensive team. Because Heidi and Alexis were at Stanford, we had many resources to help us.

MT: And who else was part of the team?

KP: We were able to recruit a professor and doctor of pediatric physical therapy from University of California, San Francisco to do the assessments; a very well-known pediatric physiatrist from Oakland Children's Hospital; a pediatrician doing her fellowship in Heidi's lab; as well as a wonderful research assistant who really held it all together. We were seven fantastic and dedicated women.

MT: It's really exciting that you've done this. How you came across Dr. Feldman is really amazing, and apparently we all need to go and give Roling sessions to doctors who are affiliated with medical schools that have access to grant-writers and funding!

KP: Exactly!

MT: That's really a great strategy so that they can experience it themselves. That's the power of Roling SI. Once you have that experience of the changes that it can bring about in your own body, then you start to get excited about the potential that it could have for others.

KP: Right. That's the way I've run my whole practice. We never really advertised or anything. It's just: do your work; do your work to the best of your ability and let that speak for itself.

MT: That's really beautiful. I love it that you had already been [practicing] Roling SI for thirty years before this opportunity came along. To me, that's great. Exactly illustrates what you just said. Do your work and who knows what's going to happen. All of which is a nice lead-in to your next piece of advice for Rolfers interested in research, which is: expect to do some *pro bono* work in the beginning, particularly while you are gathering preliminary data – and that this attitude will bring a whole host of benefits to your practice!

KP: Yes, I think this is really important: do your initial projects *pro bono*. Don't worry about getting paid. If you make [getting paid] the focus, then it becomes a big stumbling block, because the truth is you're probably not going to get paid. Yes, we all need to work and earn a living . . . but you know what? We all can make time in our schedules. Both the personal and professional benefits are enormous.

MT: Set it aside, know that you're not going to get paid, and do it.

KP: Right. Just do it. First of all, you'll get the greatest number of subjects possible, because people will respond positively: "Okay, I don't have to pay for it, I'll go try it." The first study I did about ninety sessions *pro bono*. I gave Roling sessions to all eight children in the study, plus we had another child that was a case study who didn't finish the Series, and a few other free sessions for the children that we didn't accept. The second study I did, we also had five children, aged four to seven that I, as well as everyone on the team, worked with

pro bono. They ended up not using the data. That was another fifty sessions.

Now, this doesn't mean your entire practice is free. Maybe you're adding three to five more sessions a week that are *pro bono*. That's it. And the project will have a discrete timeline, so for a while you're very busy. But the returns that you get make it all worth it. There is a huge opportunity for creativity; you're free to think and work outside the box. You're learning. It shows your commitment to the work, which leads to a full practice. Finally, it brings many blessings that you will continue to discover throughout your career and your life. Look at it like doing an internship. Internships are common these days, to gain experience to get a job. During your 'internship' you are gathering preliminary data and can then go out and find a grant, which leads to getting paid. And you also learn what works and what doesn't for the study design so you don't waste time later on.

MT: I like how you're making the connection between internships and doing a preliminary study as a Rolfer. You're learning; you're gathering data. I just have to say this for the benefit of our readers, that in terms of funding, no project is going to get funded just for an idea if there isn't enough promising preliminary data. What you say is good advice.

KP: Finally, the last thing I'd say to Rolfers interested in research is to do the Recipe so the study can be reproduced. The Recipe is our strength for scientific reproducibility.

MT: Yes, the ability to reproduce a study is essential. If a study is not repeatable and reproducible it is not considered science.

KP: That was actually something written in all of our papers; that one of the reasons Roling SI was chosen as a modality in the study was because of the ten-session series, and that the sessions are repeatable. Other therapeutic modalities don't necessarily have this; for example, even acupuncture doesn't always have a protocol. Same thing with chiropractic, physical therapy, even yoga therapy. The progression of a session and the progression of the sessions within the Roling Ten Series are well-defined.

MT: Karen, thank you so much for your time. It has been such a pleasure to get to know you a little bit throughout this interview. You are an inspiration.

KP: Thank you, my pleasure.

Karen S. Price graduated with honors from Northwestern University in 1974. After receiving Rolfing SI in 1977, she began her Rolfing training in 1978 and graduated from The Rolf Institute® of Structural Integration in 1979. She received her advanced Rolfing certification in 1988. She is a long-term meditator and a Registered Yoga Teacher (RYT-200). Karen has maintained a private practice in the same location in Palo Alto, California for thirty-seven years, specializing in work with

women and children. For more information on Karen, please see the bio on her website rolfingchildren.com.

Marie Terrill is Certified Rolfer and Certified Structural Integrator^{CM} with a small private practice in Eugene, Oregon. She is also Secretary of the Rolf Institute® Research Committee. Marie studied molecular biology at The Evergreen State College and has ten years of experience in the field of functional

neuroscience, with a specific focus on epilepsy and epilepsy research. Additionally, Marie has an ongoing interest in the therapeutic aspects of movement, dance, and yoga, all of which she incorporates into her Rolfing practice. She has been a dedicated yoga practitioner since 2006 after sustaining a major injury, with a practice most recently fed by teachers in the field of Yoga Therapy and from the Iyengar tradition. Her website is www.mindbodyrolfing.com.

Researching of the Art and Science of Rolfing® SI

By Valerie Berg, Rolfing Instructor, Rolf Movement® Practitioner

We are all observers. Rolfers™ are taught to ‘see’, to open our focus and observe all aspects of a client’s way of being in gravity. We approach our clients with questions in our minds: “What would happen if. . .?” We take this inquiry into our sessions. Through trial and error, the ever-evolving methods developed by seasoned colleagues, and the tried-and-true effects of the ‘Recipe’, we gain experience that affords us the ability to predict certain outcomes.

We educate our clients with movement and functional input. We find articles and research to share with clients who wish to understand the reasoning behind the efficacy of Rolfing Structural Integration (SI). We explain the anatomy and function of fascia based on what we have learned and continue to study. We dazzle them with the beauty of the latest research on fascial connections and relationships.

Dr. Rolf was a scientist. She was concerned that the public image of Rolfing SI be linked to science in order to be taken seriously by the scientific and medical communities. She made research one of the missions of the Rolf Institute® of Structural Integration (RISI). Acupuncture and massage therapy programs already include a research component (making them eligible to apply for grants). However, RISI is still working to engage faculty and students in the relevance that research plays in our practice and profession.

Why is this so? Some of us recoil at the idea of research. Perhaps we believe it’s not how our minds operate. Maybe we prefer

to think of what we do as magical, more ethereal, mysterious. And while the effects of our work do sometimes seem magical, Rolf’s legacy is not well served by this resistance to the scientific method.

Research in the RISI Curriculum

Research literacy is a place to begin. The RISI faculty and Board of Directors believe we should elevate the standard of understanding and discussion about relevant research in our field. Online resources boast a myriad of claims in the name of ‘new studies’. But how many of us are educated to assess the legitimacy of the research that is out there? Four years ago, RISI offered half-day workshops in research literacy. Unfortunately, these were not taught in ways oriented to our work. The inclusion of research in our basic certification must be relevant to the clinical work we do to be accessible and applicable to new RISI students. To this end, the Research Committee will offer an online research literacy course for Rolfers interested in creating solid research.

Most students come to RISI motivated by some aspect of the work that changed their life. What if they could pursue that interest and passion in a way that educated the world on the effects of our work? What if we could capture and nurture that interest from the beginning? Paula Stal (who has published research on Rolfing SI and fibromyalgia) and I will be helping RISI faculty create ways to harness the inherent curiosity of beginning students.

Advanced Rolfing Instructor Pedro Prado introduced the case study into our curriculum. Prado (2016) notes:

I believe science is a communitarian effort and not solely the result of one well-intended mind. We need to develop a community that thinks scientifically and that communicates [its] thinking. As an instructor, I try to include case studies in all classes and give brief orientation to the students. As students see the results of systematic thinking around their clinical work in class, they get ‘enlightened’ (if this is not too strong a word . . .) and encouraged to continue investigating, thinking, and sharing.

The case study required in Phase III of the basic Rolfing training teaches students how to think about the Ten Series and understand each client’s response to the work. Students are taught to assess, reflect, work, and re-assess. Throughout Phase III they develop observational skills and clinical strategies. They utilize SOAP notes (subjective, objective, assessment, and plan) for each session of the Series and the three movement sessions. They then write their case into a paper for presentation to the group. Following the presentation of the paper, I have had small student groups come together to discuss each others’ case studies. Before-and-after client photos are included for the group to analyze. Students evaluate practitioner-client progress.

This is beginning science: observing and ‘measuring’ according to a given standard. As research goes, the case study is a ‘soft’ design. Richard Ennis [(2016), whose article appears on page 9] notes, “The strength of this design is it often informs about interesting specific cases that might not be found in a larger study with many participants. It can also be the initial basis