

Ninja Movement Exercises and Vertical Bone Alignment

By Tsuguo Hirata, Certified Advanced Rolfer™,
Rolf Movement® Practitioner



Tsuguo Hirata

ABSTRACT *The author, Tsuguo Hirata, studies ninja movement arts from a teacher of that form who also exemplifies in his movement the goals of Rolfing® Structural Integration (SI). He shares with us the importance of proper alignment of vertical bones, which allows gravity to transmitting through the bones, which in turn allows soft-tissue tensions to relax. He introduces three bone-alignment exercises from his ninja teacher, expanded with his commentary.*

How I Met the Ninja Sensei

I met him, the *ninja sensei*, Go Murasame Sensei, five years ago. (Sensei is the Japanese honorific for a teacher, and a *ninja* is a practitioner of martial arts dating back centuries.) He made a presentation to the Japanese Rolfing® Association (JRA) at the annual meeting in March 2013, where he demonstrated his martial arts for the group. I didn't attend this meeting, but afterwards heard that his demonstration amazed all the Japanese Rolfers in attendance. So, I checked out the video of his demonstration on YouTube, and thought I had better meet this person and see his movement abilities with my own eyes. By the summer of 2013, I had started taking his workshops.

It is always easier to show unique movement than to describe it with words, so I hope readers of this article will take the opportunity to see Go Murasame Sensei in action. The link here takes you to the JRA video, which the host Mr. Tachibana, and the *ninja sensei*

himself, kindly gave permission to share: <https://bit.ly/2tFNHhD>.

What amazes me most about his demonstration is how he embodies the goals of Rolfing SI to a very high degree. I attended workshops and trainings with French Rolfer and Rolf Movement instructor Hubert Godard from 2003 to 2011. Other than Hubert, I have not met a great movement teacher like the *ninja sensei*. He teaches a new, higher perspective on movement, but is also a skillful movement artist in his own right.

The Ninja Sensei's Background

When I first met Go Murasame Sensei in 2013 he was thirty-two years old. He wears black upper and lower *dogi* similar to a judo uniform. He calls his curriculum *Nin Tai Shinsou Jutsu*, which translates as the Art of Ninja Based Control of Body and Mind. He has tackled various martial arts since the upper grades of elementary school, including *Shorinji*

Kempo, aikido, karate and judo, aiming to become a master.

First, what is a ninja? Historically they were spies in service of the shogun or other leaders of samurai. Disguised as ordinary tradesmen, their mission was to obtain tactical information from and spread disinformation among their enemies. Through their physical training, they developed skills of stealth and fortitude in movement. In present day Japan, there are almost no ninjas in the traditional sense, but the training and traditions continue among a small number of people who work as martial arts instructors or as performers.

Go Murasame Sensei refers to himself as a 'ninja' partly because he belongs to the Musashi Ichizoku, one of the ninja schools, and partly because 1) a ninja is a very skilled martial and movement artist; 2) a ninja can engage movement without holding tension in his body or joints; and 3) a ninja always thinks tactically of how to avoid conflict and yet succeed in all situations. On this latter point, a ninja is not aiming at just winning a match or striking down opponents: a ninja aims to favorably handle any situation around him and to survive those situations. As such, the surrounding situation is always a 'match', and he is not limited by any rules of competition or style in order to succeed or survive. In the course of becoming a master of martial arts, Go Murasame Sensei has explored and developed the most effective body use for his aims. This has developed into a full curriculum for becoming able bodied, of which I will share only a small portion.

The Ninja Sensei's Goals

In short, the ninjasensei is adamant that we employ his insights into body movement so as to use our bodies effectively. These insights demand movement with gravity and enhance our agility. We as Rolfers share the same goals.

Watching, experiencing, and comparing the ninjasensei's movements directly with my body, I was forced to acknowledge the importance of bone alignment in particular. I could not ignore how constant and deeply embedded my tendency was to move my body by means of rigid muscle tension. There was no axis in my body. Many joints were stiff. I couldn't move bones well through my own will. My brain could understand what Go Murasame Sensei said, and my eyes could see his

very agile movements, but I could neither follow nor imitate his movements.

He used to poke fun at us students, jokingly saying, "What the heck, you Rolfers cannot move! You always maintain you should move in accordance with gravity." What he said was right. I had learned the SI work, and I teach my clients Rolf Movement work. However, I couldn't realize the goals of Rolfing SI in my own body. So, I started observing Go Murasame Sensei's movements carefully, checking the differences between his and my own. I monitored the changes that happened to my body after repeating his exercises.

The ninjasensei shows us his movements, and he teaches us various exercises, but he doesn't sum up his theories in words. He doesn't like verbalizing the end goals in detail. Once we start to chase the verbalized feelings, we tend to make a fake ideal in our minds. He dislikes this attitude in learning, and instructs us instead to sincerely practice and compare our body sensations each time to make distinctions. He checks our progress by having us do some regular martial-arts-like movements, and correcting them by example; his method is to just say, "That's bad – look, do it like this," or "That's better" to indicate we are coming closer.

So, to conceptualize his work, I needed to construct my own ideas, using a Rolfer's viewpoint and finding the elements of body transformation. One of the big ideas I got from him is bone alignment.

Bone Alignment

What is bone alignment? When two neighboring (vertical) bones are aligning well end to end, movement and weight forces transfer easily through their juncture with the least loss of energy. When two neighboring bones align poorly, the contact area is less and transmitted forces have to 'twist' at that juncture. This causes tension around the joint. Further, for the transferred weight of the body to travel through a misaligned joint, the body must respond by supplying sudden extra support to the weak joint area via muscular tension and ligamentous strain.

So poor bone alignment not only changes structure and posture for the worse, but the constant reliance on tensions in muscles and joints also lowers the efficiency and speed of movement. To our bodies this may seem 'normal' and

the usual state of affairs, but it is a basis for low performance and an accelerated aging process. In such a state, it's as if gravity does not pass through our body, bones, and tissues easily or lightly. In actuality as well as theoretically, gravity passes equally through everything on earth. However, tense tissues holding the body in bad bone alignment also oppose the flow of gravity. Nerves, arteries, veins, viscera, and tissue fluid all function better with nice vertical bone alignment as well. When the bones are restored to good alignment, tissues cooperate with gravity, and gravity flows through tissues evenly, healing them like fresh water irrigating withered fields.

We Rolfers should remember the famous saying of Dr. Rolf that "The wonders of Rolfing occur because of gravity. Gravity is the therapist. Rolfers direct the flow of gravity as if it were an electric wire, so that gravity can flow through unimpeded." This states the supreme principle of Rolfing SI. However, this is not forefront in a lot of actual Rolfing work if the Rolfer is overly preoccupied with releasing fascia and restoring fascial integration. Ideally, connective tissues and fascia heal and integrate themselves in the presence of good bone alignment, when the connective tissues can cooperate with gravity flow. From this viewpoint, bone alignment is primary and fascial integration follows as a matter of course. (Or, we may need to do fascial integration work in preparation for bone alignment.) We need bone alignment and the subjective feeling of bone connections. When we feel the bones, we also feel consciously the objective work of the ligaments.

These days I'm using a 'gravity-line touch'. I use my touch to 'put' a gravity line – a kind of short plumb line or midline floating in a tissue pool – in a chosen local tissue. This is what I am experimenting with: I use my index finger to contact and give a vertical axis through the tissues toward the center of the earth, enhancing gravity so that the tissue can respond to that. My aim is to awaken the tissues to help the body to sense a clear axis that organizes shape and movement. If this is successful, the tissues around a gravity line respond by aligning and transforming, and transmitting their changed status to the brain via sensory nerves. It works.

I remember Hubert Godard demonstrating during a workshop how he was trying to

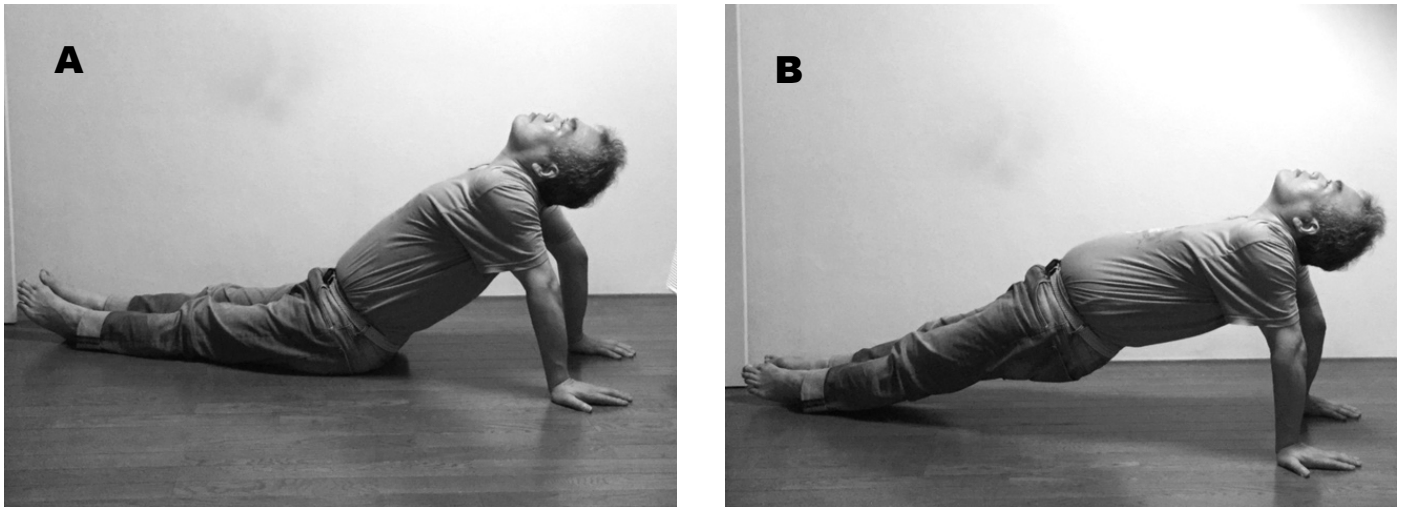


Figure 1: Shoulder/Elbow Alignment Exercise. A – preparing for shoulder and elbow alignment. B – the full pose for establishing shoulder and elbow alignment.

align the client's body to midline, gravity flow even in a demo of session one. With just a bit of feeling of midline, gravity flow changes our walk and movement immediately. Gravitational flow on earth affects bone density in particular. This is true for anyone, but consider astronauts as an extreme example; as you know, astronauts returning from space-station duty have a loss of bone density from being out of the earth's gravitational field.

I also remember a conversation with the late Peter Melchior, one of the first Rolfing instructors appointed by Ida Rolf, in Boulder in 2003. I asked Peter, "Tai chi master Cheng Man-ch'ing writes that our bones become flexible and stronger through tai chi exercises, that bone marrow will change its quality. He said that the body should feel like cotton wrapped around steel bones if the tai chi practitioner succeeds in circulating chi fully in the entire body, including in the bones. Is it possible to do the same thing by giving Rolfing work?" Peter, who was a student of one of Cheng Man-ch'ing's disciples, said, "Yes."

Other than bone alignment, I need to mention another important piece for body optimization: that is coordination involving sensory and motor nerves. When we alternate between sensory nerves and motor nerves, we can set up a type of feedback loop, and when we focus on this feedback loop while doing movement or exercise, we can notice slight differences between repetitions, such as which body parts are employing extra tension.

We can also use split attention to coordinate various movements together. For example, trying to move our hands and elbows while at the same time focusing on the brachial plexus by lengthening the lower neck and simultaneously focusing on dynamic scapular movement. We want the arms and hands to have a sense of hanging from the back of the neck around C7-T1, with the scapulae as a *moveable* station that is supportive but also responsive to the dynamics of the whole spine and pelvis and able to slide on the rib cage. Or, trying to move feet and knees while at the same time focusing on the lumbosacral plexus by pushing the sacrum posterior and also feeling for opening and closing of the sacroiliac (SI) joint. (The average person's sacrum is a bit anterior or stiff between the SI joints and cannot rotate or glide as a rotational axis of the spine. It needs to be able to move anterior/posterior and rotate with each ilium, and also be able to move at the SI joints. This is the basis of a lot of the walking practices in martial arts, to begin to refine these sensations.) These kinds of attentive movement coordination take mental focus, so the brain tires more easily than the muscles. In this way, bone-alignment exercises not only change body structure but also improve neural coordination. Coordination requires attention and observation of the feedback process by the person doing the movement. This starts an 'upgrade' of the human being, and the result is a body that feels lighter and more agile.

As a matter of practicality, in preparation we first need to align the bones of

the limbs and spine in a step-by-step manner. We can do this through various exercises, giving our weight directly into the bones, allowing the weight to flow down to the 'end' point of contact to earth or floor through the hand, foot, or sit bones. As we become more accustomed to aligning our bones, the ligaments and tendons fluidly adjust to gravity as well and we get optimum inside-bone weight transmission. Doing this well requires awareness of our tendency to tense muscles/ligaments. Ligaments quickly respond with contractile tension to weight shifts in movement, acting as a brake on bone-to-bone transmission. Therefore, it is necessary to repeatedly practice aligning the bones involved in these exercises and to actively inhibit this tendency to constrict the ligaments.

Three Bone-Alignment Exercises

I will now share three exercises, adding additional modifications and 'translations' from what I have learned from the ninja sensei as well as yoga postures. In his actual classes, Go Murasame Sensei teaches us many exercises, such as two-person partner moves like in karate and aikido where each exercise has a purpose of developing some bone alignment and necessary muscle output in a coordinated way, and each execution of the exercise functions as a check on how we are developing the bone alignment. As it would be too complicated to explain these partner

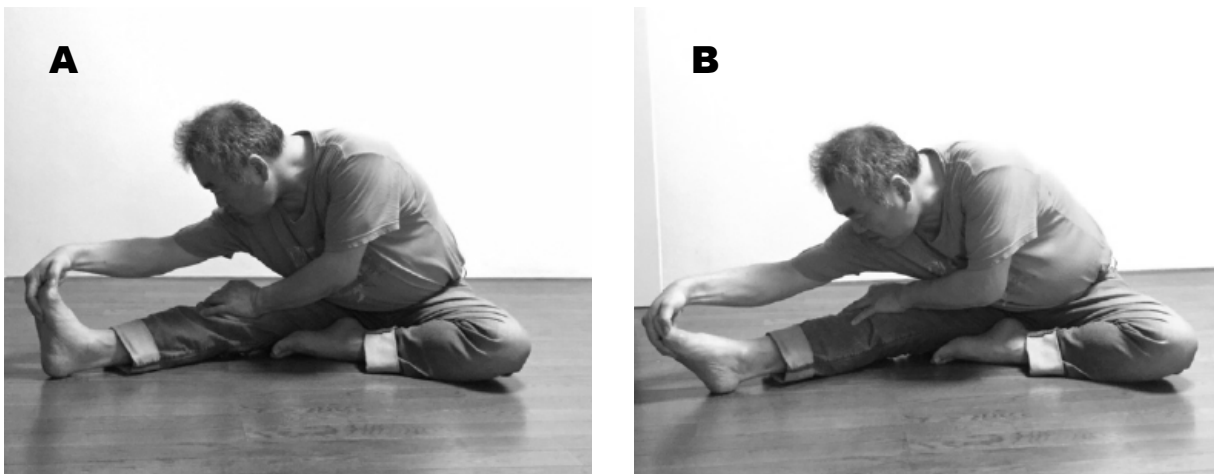


Figure 2: The Heel-Scrubbing Exercise. A – basic position. B – deepening heel scrubbing, without toe dominance.

exercises and moves in writing, I will share three solo exercises.

Shoulder/Elbow Alignment Exercise

Superficially, the Shoulder/Elbow Alignment Exercise resembles a relaxed reverse plank, but the goal is to develop bone alignment in a relaxed and felt way. Muscle-wise, the exercise should be relaxed, but may be difficult to do without muscle tension at first. Focusing on bone alignment will get you there, but this focus requires a shift of mind that demands a lot from the brain.

The first part of the exercise is shown on in Figure 1 (A). Sit on the floor extending both legs forward. With hands on the floor, fingers facing in the same direction as the top of your head, straighten your elbow completely. Receive the entire weight of your upper body through your humerus and radius, clearly extending the bones of the five fingers and the carpals. Let your face look up as you drape your head and neck back in a relaxed manner. The viscera of the anterior cervical area – the pharynx, esophagus, aorta, etc. – lengthen and relax. Engage both scapulae by drawing them together and open the area between the deep shoulder (true glenohumeral joint) and upper lateral edge of scapula to receive the whole weight of the upper body, which awakens the ‘bone sense’ of the hands, arms, and scapulae to transmit weight through bones without muscle tension along the spine; this is to allow the bones to function as a pillar of support, as we would see in a quadruped.

Once settled into this position, bring the whole body off the floor slowly with toes pointed down, supported by the heels, as shown in Figure 1 (B). The whole weight

of the upper body is now relaxed and supported only by the scapulae ‘saucers’ over and the bone alignment of the arms, forearms, and wrists. Allowing a similarly nice bone alignment of the lumbar, pelvis, femur, tibia, and calcaneus, causes the lower body to feel lighter as well.

The Heel-Scrubbing Exercise

The Heel-Scrubbing Exercise begins as single leg extension with alternating dorsiflexion / plantar flexion of the ankle. Sit on the floor and extend one leg using the opposite-side hand to push the knee down to the floor so it doesn’t come up when you move the heel. The other hand holds the toes and ball of the foot in dorsiflexion. Then move your heel forward and backwards in a straight line as if the back of the heel is scrubbing against the floor but without letting toe flexion/extension dominate (see Figure 2 A and B). The hamstring tendons at the back of your knee will move strongly.

After scrubbing the back of your heel several times, try standing and walk around to notice the changes. The leg you worked should be better aligned, straightened, and more able to feel stronger support from the floor. This is because you were able to fully lengthen and straighten the Achilles tendon, as well as the plantar fascia, while getting full extension of the knee simultaneously with the heel touching the floor. This pose looks like the *maha veda* or *maha bandha* poses of yoga.

Modern people generally have weak and stiff Achilles tendons, and therefore less movable heels, tilted calcanei, poor foot tone, and tight long plantar ligaments. If you do this exercise every day, the soles of your feet will be more flexible and

will be able to catch more clearly minor moves in your center of gravity when standing and moving.

Rear Stretch

This is a deep hamstring stretch accomplished with the tibias aligned vertically toward the center of the earth, but it involves the back side of the femurs, the tibias, the pelvis, and the back of the entire body. So, the ‘rear stretch’ means lengthening the back of the entire body, soft tissues and bone. Most people tend to use the quads in standing and walking, which results in tight and strong tendons and ligaments on the front and sides of the knees and body weight that is transmitted more in the front of the femur. Thus, the quads not only take on a bigger role in supporting body weight, but also tend to stop transmission through the inside of the femur because of their tension. Observing people who use their quads this way, we notice that their knees and patellae appear to be protruding and their sacrum wants to go forward on the ilia, tending to get ‘stuck’.

By the way, I have personally confirmed through palpation that Go Murasame Sensei’s knee joints (femurs on tibial plateaus) are loose and sliding even while he is standing. I have also palpated the tissues around his sit bones while he is seated in *seiza*, and those tissues felt ‘melted’, exposing the contour of the bones.

In our daily lives we usually don’t take postures that allow most of our weight to load the tendons attaching to the sit bones, or to load the deep layer of the gluteals either. This stretch lengthens and tenses these less-used tendons/ligaments and fascias, which are potentially the

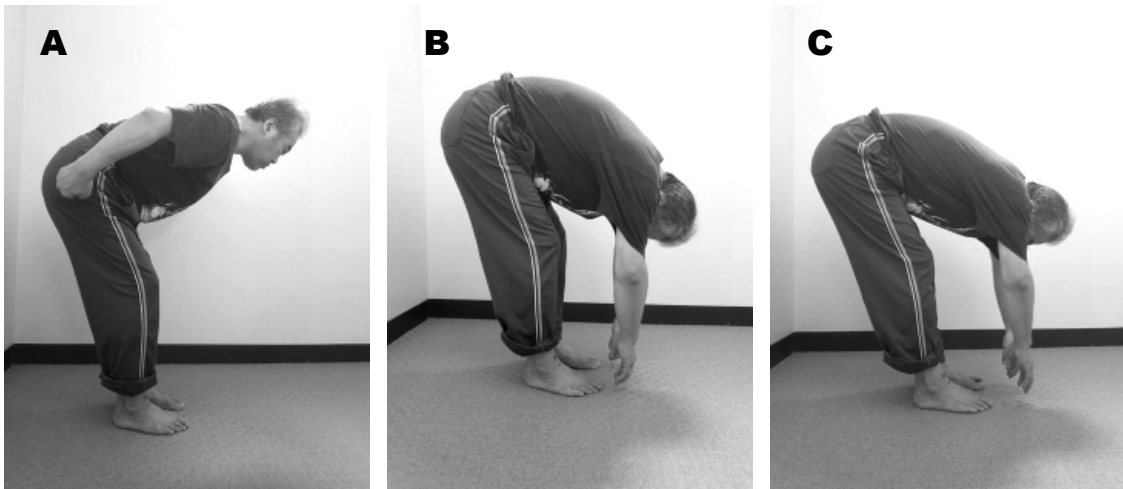


Figure 3: Rear Stretch. A – stimulating the area around the greater trochanter helps define the plane for the hip hinge. B – maintaining vertical shins while relaxing the body down. C – stretching the entire posterior of the body by reaching with the sit bones.

strongest soft tissues available for ‘uprighting’ the entire body. This stretch awakens an important functional region and brings a big structural change with even the first attempt. Don’t take my word for it – try it yourself.

Stand with your feet shoulder width apart, toes facing forward. Make fists and strike your greater trochanters with the ulnar side of your fists a few times. Again make fists but this time stick out your middle fingers and strike the center of each greater trochanter with the tip of the respective-side middle finger a few times, visualizing your greater trochanter, the neck of the femur, and the revolving axis of your pelvis as you do so. Now bend your knees 15°-30° degrees keeping the tibias vertical to the floor, sticking your buttocks as far back as possible, maintaining contact with your greater trochanters with the tips of your middle fingers; see Figure 3 (A). The important points here are that 1) you must keep your tibias vertical to the floor with your body weight equally and evenly distributed between the right and left tibia, and 2) your knees go neither forward nor backward even as you stick your buttocks back. This forces a release in the muscles around your knees and stops the tendency of putting the knees forward to support your weight on your quads. Instead you are stretching ligaments at the SI joints and tendons at the ischia. From this exercise, you cultivate the tendency of supporting your weight more on the hamstring tendons and SI joint areas as well as on the vertical tibias and feet.

Going further, droop your back, neck, and hands forward down to the floor maintaining the position of the tibias and greater trochanter. Relax your neck and let your head and neck hang. Relax your SI

joints and lumbosacral region so that the lumbosacral region lengthens and makes a flat back as shown in see Figure 3 (B).

Once here, push your buttocks and the tendons around the ischia back and up. At the same time, shift your tibias slightly back, feeling the lengthening of the deep layer of hamstrings closer to the ischia; see Figure 3 (C). Maintain this lengthening position and tension for five seconds. Return to the tibias-vertical position and note the alignment and weight transmission through the tibias. Note that you are coming back to the preparatory position in which almost all of your weight is supported by the vertical tibias. In contrast, in the position of pushing your buttocks and the tendons around the ischia back and up, all of your weight is supported by the lengthened hamstrings and back of the knee in maximum tension, and at the same time all the tension of the body to hold this position is gathered/concentrated at the junction area around the ischia and the SI joints. Repeat this stretch lengthening the deeper hamstring layer several times.

After doing this exercise you’ll feel more upright when standing. When you ‘catch’ the subtle difference of bone alignment before and after the exercise you’ve made big progress. Noting that the bone alignment between femur and tibia has changed and your sacrum has a new position, keep this feeling fresh in daily standing and walking.

Conclusion

The effect of the bone-alignment exercises on gravity flow through the bones refreshes tissue quality, a realization that is very important. These three exercises, done in

a manner that maximizes bone alignment and relaxation, will help all manner of people find and develop their central body axis (midline). I hope many Rolfers try to execute these exercises themselves, and taste the effects in the body so they may help their clients do them in their sessions as well. The realization found through bone-alignment exercises and movement changes the goals and the feeling of our structural work.

Author note: I created this article with the encouragement of the Journal’s Editor-in-Chief, Anne Hoff. I would like to thank her, and I also appreciate the kind cooperation of editor Matt Walker who helped me turn my English draft into this final version.

Tsuguo Hirata is a Certified Advanced Rolfier and Rolf Movement practitioner living in Yokohama and practicing in Tokyo, Japan. He incorporates ninja movements, yoga movements, and other martial arts into Rolf Movement and Rolfing practice. In addition, Tsuguo’s interests have led him to study osteopathic biodynamics, Somatic Experiencing®, and the Barral Institute’s curriculum of visceral, cranial, peripheral nerve, and vascular articulation work, all of which he draws upon. Tsuguo’s concern lies in how to change the quality and shape of our body – including skin, muscles, tendons, bones – towards a fluidic nature, in other words, full of life force. He would like to continue to introduce other excellent Japanese-origin bodywork techniques and ideas to Rolfers worldwide.