Fascia is famous. Growing numbers of conferences, scholarly studies, magazine articles, exercise systems, and self-help books feature this suddenly popular tissue. Although fascia has had champions as far back as Andrew T. Still, the originator of osteopathy (1828–1917), and Ida P. Rolf, the founder of Rolfing structural integration (1896–1979), their emphasis on fascia was unconventional and far ahead of its time. Until relatively recently, fascia was often considered a throwaway tissue—the whitish “packing material” that anatomists took pains to remove and discard in dissections and illustrations.

More recently, opinions about fascia’s importance have changed dramatically. Between 1970 and 2010, the annual number of papers about fascia in peer-reviewed scientific journals grew fivefold.1 Fascial theories are significantly influencing acupuncture, chiropractic, osteopathy, sports conditioning, yoga, and, of course, massage and other manual therapies. One sign of this is the ever-increasing number of manuals, media, modalities, and seminars focusing on fascial and myofascial approaches (including our own Advanced Myofascial Techniques seminar and DVD series).

Fascial Qualities
Our last column, “Understanding Fascial Change” (Massage & Bodywork, May/June 2014, page 114), described fascia and its qualities in detail. As a brief review, fascia can vary from dense to loose, and from very regular fiber organization (such as tendons or ligaments) to irregular (for example, superficial fascia, Image 1, or scar tissue). These many varieties of fascia share several common qualities, which can change depending on the tissues’ degree of health. Fascia can be stiff, bound, and painful when it has been distressed (through injury or disease), neglected (through lack of movement), or overused (by activity, posture, or habit). Skilled hands-on work can change each of these problematic qualities, helping the body’s fascia regain differentiation, elasticity, and refined perception; this column will describe two hands-on techniques to do just that.

Forearm Flexor Technique
Although there are many techniques we could use to illustrate the principles of fascial work, the Forearm Flexor Technique brings together many pieces of the fascial puzzle.

Preparation
Prepare for this technique by palpating the layers of fascia surrounding the anterior, or palm side, of the arm. Using your fingertips or pads, feel the outermost layers of tissue over the wrist and finger flexors of your client’s lower arm. Don’t use oil or lubricant, as you’ll actually be using the friction between layers to perceive and mobilize any adhesions or restrictions you may find. At first, move just the surface layers of the lower arm, feeling how you can slide the skin on the muscles underneath. If you slow down and feel for more detail, you’ll be able to discern that there are multiple layers of wrappings, some clearly distinguishable, and others blending.
with adjacent layers. Gently stretch and move these layers, and you’ll find that they slide or stretch to different degrees, and in different directions.

The superficial fascia (or subcutaneous layer) lies just under the skin. Some sources reserve the term superficial fascia solely for the fibrous membrane between the dermis and the deeper fascia surrounding the muscles; others define it as including all of the looser tissue layers adjacent to this membrane. Whichever definition we use, it is here that we find the retinacula cutis fibers: the numerous and minute small skin ligaments that are arranged above and below a fibrous membrane (Image 1). These tiny, column-like skin ligaments suspend this fascial membrane between the dermis above and the deeper fascia below. The retinacula cutis’ varying angles are responsible for the palpable “grain” of the superficial layers—the way in which these layers slide easier in some directions than others. The spaces between the retinacula cutis fibers are filled with fatty tissue, nerves and nerve endings, vasculature, and interstitial tissue fluids, giving these outer layers their looser or softer feel.

Just below these superficial layers, you can feel the deeper antebrachial fascia (Images 4 and 8). This glove-like layer is part of the deep fascia: the tough membranes that surround the entire body just under the superficial fascia, but over the fascia of the muscles themselves. The deep fascia is in some places called aponeuroses and, where it dives deeper between muscles, is referred to as the investing fascia or intermuscular septa. These contiguous structures tend to be denser and more resilient than the freer superficial layers. They are usually composed of several sublayers of collagen fibers. Some of these fiber layers are arranged parallel to the muscle fibers underneath, and others are organized at oblique angles, like the layers in plywood, in order to resist differing lines of force (Image 2). Between the deep fascia and the fascial wrappings of the individual muscles below them (the epimysia) is a thin layer of slippery hyaluronic acid (Images 1 and 3), which allows the large amount of gliding necessary for free muscular movement.

Once you can distinguish these layers from one another (see “Exercise: Layers”), switch from using your fingertips to your forearm (Images 5 and 6). Use the broad, flat surface of your ulna, just distal to the elbow. Avoid using the point of the elbow itself (the olecranon process) at this point. The forearm is a powerful tool, so focus mainly on perception rather than manipulation. Take some time to explore these outer layers again. Compare the lower arm’s palm side, where the skin is thin and the layers are usually clearly palpable, with the
thicker layers on the forearm’s dorsum (back-of-the-hand side). Make sure you’re still feeling just the wrappings of the arm, and aren’t yet working into the muscles themselves. This can be a challenge, especially if you’re used to massaging muscles rather than differentiating fascia. Feel for places where the outer layers are thicker, or don’t seem to slide against one another. Try moving in a proximal direction—as well as distally, medially, and laterally—in order to feel the differing fiber direction at various depths. When you find such places, gently move them in the more difficult direction (a direct release), and wait for a change.

In addition to increasing your skill at palpating specific tissue layers, this slow, specific mobilization of the arm’s outer wrappings has therapeutic effects. Moving layer on layer helps accomplish our first fascial goal of differentiation, as these layers will become freer and more slippery the longer you work them. You’ll notice that the slower you move, the more fluidlike the tissue feels—go slow enough, and tissue restrictions seem to melt away on their own, which brings in greater elasticity (our second fascial goal). And because the outer fascial layers are so rich with free nerve endings and other mechanoreceptors, we are also stimulating fascial sensitivity and perception (our third goal).

FASCIAL COMPARTMENTS
Once you’ve thoroughly explored the outer fascial layers that wrap the lower arm, sink a bit deeper. Keep the same sensitivity to layering and fiber direction. Rather than just mashing the muscles until they are softer everywhere, use the tip of your forearm to gently feel down in between the muscles, looking for the spaces between the various muscular compartments and bundles (Image 5). The consistency and density of the wrappings, septa, and intramuscular fascia that define these bundles can vary. In people who use their arms or hands for repeated motions like gripping, typing, etc., they are often thicker, firmer, and more adhered into a single mass.

As with the outer wrappings, our aim is to encourage both differentiation and elasticity, so feel both for stiffer areas of tissue, and for any places where bundles or layers don’t seem to slide against one another. Your pressure should be firm and specific, but never so much that your client has to tense or withdraw in any way. When you find a motion-restricted area, wait patiently with static pressure or glide just a bit, at a super-slow pace, until you feel a softening or easing response in the tissue.

To get even better differentiation between the arm flexors, ask your client to slowly flex and extend the wrist, or open and close the hand (Image 6). With your own forearm, continue to search for the furrows and separation between muscle bundles. Sensitively and slowly, you can use the tip of your elbow a bit more now to feel between the forearm’s muscular compartments (Image 10). Ask the client to participate by making individual finger motions. This will allow you to more accurately feel the individual flexors, and to sink between them as your client moves. Use much gentler pressure over the wrist, of course, and do not use so much pressure or speed that you cause pain. You can get all the therapeutic effects we’ve discussed by being patient and focused, rather than heavy and fast. Continue this work throughout the entire flexor surface of the lower arm.

FOREARM EXTENSOR TECHNIQUE
Once you’ve differentiated the tissue layers and muscle bundles on the anterior (palm) side of the lower arm, repeat the process on the posterior side. The majority of muscles in this region relate to finger and wrist
extension, though you’ll also find thumb and elbow muscles here. Because the posterior side of the arm is less fleshy and more sensitive than the anterior side, we’ll use a different tool: the soft fist. Keeping your fingers open and your wrist straight (Images 7 and 9) will allow you to work sensitively and deeply with very little effort. The skin of the knuckles is hard and smooth enough to allow for good control when gliding layer over layer while working the antebrachial fascia. Once you’ve worked the superficial layers, the shape of the knuckles allows you to gently sink between the extensor compartments in the forearm in order to separate and differentiate their structure and function.

Again, ask for slow, steady wrist and finger movement, in all directions. As before, invite your client to use these active movements to further differentiate the fascial structures on the extensor side. Examples of ways to cue this exploration might be: “Let your fingers flex and extend, one at a time, as if playing a scale on the piano,” or, “Pretend you’re typing. Find the finger movements that are harder than others, and play with those.”

In addition to the mechanical effects of increased differentiation and elasticity, the combination of slow active movement and pressure floods your client’s brain with novel sensation related to proprioception and movement control. Imagine that you’re turning up the volume on the signals your client uses for proprioceptive coordination. When you find a movement limitation—one finger extending less than the others, for example—you can use this combination of focused pressure and proprioceptive refinement to evoke new movement possibilities. The changes in range of motion and refined control are often dramatic, and because they involve neuromuscular learning as well as tissue change, these changes tend to last over time.

Exercise: Layers
As a touch experiment, see if you can distinguish three different layers:
1. Skin: first, simply glide on the surface of the skin (as you would do with oil or lubricant).
2. Superficial fascia: next, barely under the surface, move just the outermost tissues as you feel for the slight sponginess, looseness, and “grain” within the superficial layers (which themselves are composed of multiple sublayers).
3. Deep fascia: slightly deeper (but still not into the belly of the muscles), feel the tougher membrane that glides easily on the muscles underneath; this is the deep fascia sliding on its hyaluronic acid layer.

An analogy might be helpful: imagine a sheet on a massage table. The first level of movement would be to feel the texture of the sheet’s surface; the second, the stretch and weave of the sheet fabric itself; and the third, the way the sheet slides on the table underneath.

WRAP-UP
Although there are many tools for working with fascia, I have described just two examples here: the forearm and the soft fist. As a pair, these two tools will give you effective ways to invite greater fascial differentiation and elasticity almost anywhere in the body. The forearm is well suited for large areas, such as fascia over the spinal erectors, or the iliotibial tract. The soft fist is useful for detailed work, such as the superficial fasciae of the neck, the plantar fascia, etc.

The other important “tool” we’ve used for working with fascia is your client’s active movement. By asking your client to feel into the work and move in a way that facilitates differentiation and elasticity, we leverage fascia’s perceptive qualities in the service of lasting change.

Notes