

# EMAGAZINE All the colours of bodywork





## ALL THE COLOURS OF BODYWORK

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# 05 EDITION EMAGAZINE

Happy New Year and welcome to the 5th edition of our Anatomy Trains E magazine. The theme for this E mag is "all the colours of bodywork".

I often get asked when teaching Anatomy Trains, what next? What else complements Structural Integration and Anatomy Trains? There are so many different types of bodywork that complement the Anatomy Trains and Structural Integration concept and add depth and colour to your touch and practice. I decided this E mag would be about some of those options. We have some amazing advanced work that is being developed and taught by our Anatomy Trains faculty as well as from previous graduates of Anatomy Trains Structural Integration. This E mag kicks off with an article from the 'Boss' himself, Tom Myers, and I can't start the New Year without a huge Thank You to Tom for the inspiration he has given me and so many others. I am so grateful for his continuing help and mentorship.

If you are a graduate of ATSI or just love anatomy and would like to write a piece for our E mag, we would love to hear from you.

Don't forget, if you have a question for Tom and our faculty send an email to info@anatomytrainsaustralia.com. We have also included flyers featuring some of our workshops for 2018 so you can start planning your year of learning.

Enjoy

Julie

JULIE HAMMOND // Director Anatomy Trains Australia & New Zealand

*"I hope that in this year to come, you make mistakes.* 

Because if you are making mistakes, then you are making new things, trying new things, learning, living, pushing yourself, changing yourself, changing your world. You're doing things you've never done before, and more importantly, you're Doing Something.

So that's my wish for you, and all of us, and my wish for myself. Make new mistakes. Make glorious, amazing mistakes. Make mistakes nobody's ever made before. Don't freeze, don't stop, don't worry that it isn't good enough, or it isn't perfect, whatever it is: art, or love, or work, or family, or life.

Whatever it is you're scared of doing, Do it.

Make your mistakes, next year and forever."

- Neil Gaiman



JULIE HAMMOND // Editor & Director Anatomy Trains Australia & New Zealand



THOMAS MYERS // Founder Anatomy Trains



KELLY LYONS // Graphic Designer

i hope that in this year to come you make mistakes.

Ida Rolf first introduced the concept of 'core' in the 1970's.

### PSOAS Diaphragm Balance A NEW TAKE ON 'CORE'

TOM MYERS

### he Definition of Core

The word 'core' is not yet well-defined. I first heard the word from Ida Rolf in my Structural Integration training in the early '70's but her use of the word was vague and malleable according to the situation. What was 'core' and what was 'sleeve'? The general concept is clear - the copper wire is the core, the rubber insulation is the sleeve - but the anatomical specifics tend to shift with each analysis.

Building on the work of Paul Hodges and Priscilla Barker, the world of manual therapy and training has been focused for the last decade on defining your 'core' as the stability 'belt' of the transversus abdominis linked with the inner laminae of the thoracolumbar fascia and erector spinae muscles. The transversus is linked neurologically with the pelvic floor so, together with the back muscles, they form a large 'bowl' (the meaning of the word 'pelvis') at the bottom of the ventral cavity. These muscles plus the spinal myofasciae work to produce pelvic floor competence and stability for the sacroiliac joint



(SIJ) and lumbar spine. The current widely-held definition of core includes the transversus abdominis and the inner laminae of the thoracolumbar fascia, sometimes accompanied by the pelvic floor. This belt is useful in providing static stability for the pelvis as a whole, but cannot function dynamically for each hip in turn.

This configuration acts like a belt and, like most belts, it holds up your whole trousers at once, not one leg at a time. It acts, for instance, like a sacral belt that is used to stabilise the pelvis after a difficult childbirth. And there is evidence that strengthening this belt can contribute to general lumbopelvic stability (Vleeming, Lee).

The problem comes when we consider that each half of the pelvis needs to be UN-stable, moveable at the SIJ during the swing phase of walking, while the other half, the SIJ above the weighted leg from heel strike to push-off, needs to be super-stable to prevent upslip - to prevent the hip bone from gliding up relative to the sacrum when gravity's coming down the spine and ground reaction force is shooting upward from the leg. The SIJ is the very vulnerable



meeting point of these opposing forces.

In other words, in addition to static stability in standing posture or yoga poses, we need dynamic stability in gait and any athletic endeavour. The 'belt' definition of core - TvA + spinal muscles - does not get us to this alternating dynamic stability: one SIJ strongly forces closed while the other SIJ shifts with the swinging leg.

### **Anatomy Trains and Core**

In the Anatomy Trains world, we tend to define 'core' quite specifically as those structures included within the coherent fascial continuity we call the Deep Front Line, from the inner ankle to the tongue.

We define 'core' structures as the myofasciae belonging to this line, the Deep Front Line. Both the transversus / multifidus 'belt' (not pictured) and







the psoas / diaphragm 'cobra' are part of this line.

Although transversus abdominis and the pelvic floor are included with that line, here we focus on another two structures within that line - structures capable of providing the dynamic stability / mobility equation required of a working SIJ - the 'cobra' on each side of the lumbar spine formed by each psoas major linked into each dome of the diaphragm.

Calling it a 'cobra' is just for convenience, but the 'dynamic core stability complex' - each psoas major linked to its corresponding diaphragmatic dome - allows motion





on the swing side of the SIJ while contributing to force closure on the weight-bearing leg.

For neophytes, this is a hard anatomical combination to picture. Imagine that the tail of the cobra is the distal end of the psoas, wrapped around (and blending into) the ligaments twisting around the neck of the femur, with a strong attachment to the lesser trochanter. From there, the psoas reaches up and forward to pass in front of the ball of the hip joint and the iliopectineal ridge beside the pubic bone before diving posterior behind the peritoneum and kidneys, alongside the lumbar spine to attach to the lumbar bodies, discs, and transverse processes.

And even though Netter and other atlases show a neat separation and an arcuate line of fascia between the psoas and the diaphragm, the in-thebody reality is that they are fascially connected and interact in function, such that pulling on the psoas can change the shape of the diaphragm.

Long-term pulls on the psoas can affect diaphragmatic position and

function. Conversely, long-held pattern in the rib cage can depress psoas function and make walking less efficient.

So think of the psoas belly as the neck of the cobra, and each dome of the diaphragm as the hood and head of the cobra, with their two noses about where the outside edge of the rectus abdominis attaches to the seventh rib approximately under the nipple line.

Using the image of the cobra allows us to see the functional and structural relationship between the two. When you are walking, the psoas tightens on heel-strike to both sides (I know, not standard, but that is my clinical and personal experience).

All these patterns disrupt the flow in the ventral cavity - meaning breathing, the diaphragm as an 'organ massager', and the function of the pelvic floor.

On the side going from heel strike through weight acceptance through the rockers to toe-off, the psoas stabilises the ball in the hip socket, relenting slowly during the swing phase to allow the hip to extend while keeping the lumbar spine stable and the SIJ force closed (along with the piriformis, a topic for another day). On the side that's swinging from toeoff to heel strike, the psoas starts the contraction from toe-off - when psoas is stretched, eccentrically loaded - and gradually contracts to assist in flexing the hip but also to maintain leg-toback connection during the swing.

The object of the game from minuteto-minute is to keep the spine stable and the SIJ functioning while the weight shifts from foot to foot, left to right, but the center of gravity moves fairly steadily straight forward.



### **Balancing the Diaphragms**

The longer-term object is to maintain the relationships in the abdominal balloon while we motivate our digestive system through the world. Specifically, this means maintaining two sets of reciprocal relationships:

• between the respiratory diaphragm and the pelvic diaphragm; and

• between the back muscles behind the lumbar spine and the abdominal muscles in front of it.

The relationship between the respiratory diaphragm and pelvic diaphragm is an essential element of 'core' that reflects into the optimal function of both diaphragms. This relationship is controlled by the spinal and abdominal muscles - but the psoas-diaphragm 'cobra' is an essential element in between those two.

How can this relationship between the two diaphragms be compromised? Let us count the ways.

If the myofasciae - either muscles or fascia or both, so here we are including the erectors, the multifidus, the thoracolumbar fascia and probably quadratus lumborum - behind the spine are locked short, the pelvis will tend toward anterior tilt and the rib cage will tend toward posterior tilt. Each of these takes their respective diaphragms with them, so that they no longer face each other and work reciprocally, as they both face forward. This of course also puts increased pressure on the viscera and the abdominals in front of them, which will tend to bulge out anteriorly, pushed by the lordotic lumbar spine.

If the abdominals in front of the spine are locked short - and here we include rectus abdominis and the obliques, along with all the layers of abdominal fascia, specifically the semi-lunar lines just lateral to the rectus - then the rib cage will fall in front, the lumbars tend toward flexion from their normal curvature, and the two diaphragms will both be facing more to the back. Both of these patterns have an effect on the 'cobra'. In the first pattern, with the tendency toward a hyperextended lumbar spine, both psoas major muscles will be short along their entire length, pulling down on the posterior part of the diaphragm and tamping down the airflow to the posterior portion of the lungs. This often accompanies an ingrained fear response, which involves the kidneys, adrenals, and coeliac (solar) plexus in the pattern as well.

The protocol of choice in this all-toocommon pattern (variable, of course, with individuals) is to:-

a) open the spinal muscles and fascia first - with back stripes and twelfth rib lifts, etc.

b) open the psoas all the way along its length

c) facilitate a complete exhale as a habit, and

d) tone the abdominals.



In my experience, toning the abdominals works best with multiple short range contractions (1/2", 2 cm) at approximately postural length. Lie on the floor, knees up. Lift the head and chest up a bit, hands up by your mid-thigh. Repeat short, quick contractions to the point of fatigue, 3 -4x/week. (Look on the internet for multiple points of view about how best to tone the abdominals for posture - this is what has worked in my own practice, and comes from Callenetics.)

Abdominal toning, by the way, may be made easier by some work with the umbilical area. Why, you may ask, would you want to lengthen the belly tissues when they are already too long? The answer is that clinically many of these people present with excessive tightness in the transversalis fascia behind the belly button. It is eccentrically tight, but it is associated with emotion (not getting enough), and it is often helpful in getting the client to relent with this pattern. In the second pattern, the drop in the ribs in front shuts off air to the front of the lungs - this 'depressed' posture literally depresses the diaphragm against the organs. The psoas will be short in the upper fibers, accompanying the relative flexion of the lumbars, and lax in the lower fibers. This position is associated with depression and an apathetic affect, the 'freeze' portion of 'fight, flight, or freeze'.

The protocol for such a pattern involves first opening the abdominal myofascia from the umbilicus up to the costal arch and onto the rib cage. The mid-back needs to be activated, through twists and back bends, with the stronger backbends helping to create strength once the mobility is present.

For the psoas, after it is open and ready for more challenging work, put your client seated on the bench, against a wall if necessary, and get in contact with the outside fibers of the psoas. Have them arch their back - cue them to the mid-back more than the lumbars - slowly enough to feel when they begin to stretch under your hands. Deepening the back bend or reaching up with the arms makes it more challenging for both you and the client; arms crossed on the chest and simply reaching up with the spine makes it less challenging.

In either case, the object is to get the two diaphragms facing each other this will result in the most efficient breathing pattern, as well as dynamic stability in the pelvic floor, which gives it the best chance of adapting to the changing pressures without leaking.

(In general, exercises to 'strengthen the pelvic floor' are less effective when these two diaphragms are out of touch with each other. Whatever exercises - PC pump, Mulabanda, or others - you give for the pelvic floor, know that lasting results and a more adaptable dynamic requires this kind of balance of the whole balloon, not just increased tone of the levator ani itself.) The above is a summary of what happens when the tissues in front or in back of the 'cobra' are posturally short, and both these disturbances are so common among both sedentary and athletic clients. Of course, there are other ways to disturb this balance, beyond the sagittal plane.

### **Rib Cage Patterns - Corona and Transverse**

The rib cage can be laterally shifted, so that the diaphragm is no longer centered over the pelvic floor. This pattern has a Lateral Line component.

so looking to the lateral structures and quadratus lumborum (as well as the psoas on the side to which the rib cage is shifted).

What appears to be a lateral shift may well be one rotation in the

core with another counterbalancing in the sleeve - this pattern evokes the ATSI protocol for easing the outer rotation in the sleeve (Spiral Line, predominantly), before working on the core rotation in the psoas and multifidus on the opposite side as the rotation. If the diaphragm is centered over the perineum, the body can tolerate a small rotation without sacrificing the efficiency of the two diaphragms' relation. But there is one more commonly-seen pattern in the sagittal plane, where the rib cage shifts posteriorly relative to the pelvis. This may be accompanied with the anterior or posterior tilt of the rib cage, which we already discussed above. But the shift itself, regardless of whether there is an additional tilt or not, also disrupts the diaphragmatic balance.

The solution is to get the rib cage

WHEN THE 'POWERHOUSE' OF THE PSOAS, DIAPHRAGM AND PELVIC FLOOR ARE ALIGNED, IT IS MY EXPERIENCE THAT PHYSIOLOGY STARTS WORKING BETTER TO SUPPORT ALL YOUR OTHER GOALS FOR THE SERIES INTERVENTION. back on top of the abdomen again. This will involve some good work to open up the back first - there is a reason for having back stripes in every session - so that the lumbar tissues, especially

around the twelfth rib, will allow the restoration of the rib cage position.

Although psoas involvement varies with other factors in their biomechanics, you will often find that both the upper and the lower psoas are locked short, concentrically loaded, in this position. Again, some preparatory work is required, but if you and the client are on for it, sit the client on the bench and reach in (below the navel level) to the client's outside psoas and do your best to 'pinch' your fingertips together to hold both psoas and the spine in your gentle grip. Then lift the spine superiorly and anteriorly as you encourage them to inhale, lean forward a little and place their ribs atop their pelvis.

This is often not a happy experience for either of you - it requires strength and precision on the part of the practitioner, and the client often finds it very 'sensationful' - especially in the first few attempts. That said, it is worth repeating; it involves less work, less pain and more permanent results with several repetitions over several sessions.

When the 'powerhouse' of the psoas, diaphragm and pelvic floor are aligned, it is my experience that physiology starts working better to support all your other goals for the series intervention. Whether this is due to the intestines or kidneys being happier, the freeing of the lumbar autonomic plexi, or the proper positioning and functioning of the spine is not clear, but the general effect of calming the 'cobra' is so salutary that it merits this discussion.

Thomas Myers is the author of Anatomy Trains (Elsevier, 2001, 2009, 2014), the co-author of Fascial Release for Structural Balance (North Atlantic, 2010, 2017), and numerous articles for trade magazines and journals that have been collected in the books BodyReading: Visual Assessment and the Anatomy Trains, Body3, The Anatomist's Corner, and Structural Integration: Collected Articles. He has also produced over 35 DVDs and numerous webinars on Anatomy, visual assessment, Fascial Release Technique, and the applications of fascial research. Find Tom at

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### COURSE SCHEDULE 2018 NORTH AND SOUTH AMERICA

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#### Tom Myers Author of Anatomy Trains

### North and South America Courses

QΑ

Date	Course	Location	Jun 1-3	SE: A&L	Atlanta
Jan 12-14	ATS&F	Lancaster	Jun 1-3	SE: A&L	Peterborough
Jan 26-28	ATIM	Tempe	Jun 8-10	Anatomy Live Expanded	Boulder
Jan 30-31	Slings Essentials	Tempe	Jun 9-10	AT Movement	Rochester
Feb 2-4	Slings in Motion I	Tempe	Jun 22-24	SE: FOTH	Nashville
Feb 10-11	AT Movement	Burlington			
Feb 16-18	ATS&F	Edmonton	Jul 14-15	AT Movement ATSF	Peterboroug
Feb 19-21	ATSF	Honolulu	Jul 27-29		Arlington
Feb 22-23	SE: A&L	Honolulu	Aug 24-26	SE: A & L	Newton
Feb 24-25	AT Movement	New York	Aug 24-26	ATS&F	Austin
Mar 2-4	ATIM	Honolulu	Aug 24-26	SE: FOTH	Atlanta
Mar 2-4	ATS&F	Peterborough	Aug 24-26	ATS&F	Nashville
Mar 2-4	AT Movement	Newton	Sep 7-9	ATSF	Walpole
Mar 3-4	AT Movement	Clarence	Sep 14-16	SE: FOTH	Portland
Mar 3-4	AT Movement	San Mateo	Sep 16-18	ATS&F	Fullerton
Mar 9-11	ATS&F	Nashville	Sep 15-16	BR 101 & 102	Newton
Mar 10-11	AT Movement	Stamford	Sep 15-16	SE: S & A	Arlington
Mar 17-18	AT Movement	Vancouver	Sep 21-23	ATS&F	Buffalo
Mar 23-25	SE: ACB	Arlington	Sep 22-23	BR 101 & 102	Indianapolis
Mar 23-25	ATSF	Asheville	Sep 26-29	ATS&F	Rio de Janei
Apr 6-8	ATSF	Atlanta	Sep 28-30	SE: FOTH	Peterboroug
Apr 13-15	ATS&F	Portland	Sep 28-30	ATS&F	Saskatoon
Apr 13-15	ATS&F	Fullerton	Sep 30- Oct 1	SE: HNJ	Rio de Janeir
Apr 14-15	ATIT	Lowell	Oct 4-6	ATS&F	Salvador
Apr 19-20	ATIT	Boulder	Oct 5-7	SE: ACB	Nashville
Apr 21-22	ATIT	San Mateo	Oct 5-7	ATS&F	Waldoboro
Apr 26-29	ATS&F	Bristol	Oct 12-14	Yoga Workshop	
Apr 26-29	ATS&F	Rio de Janeiro	Oct 12-14	SE: ACB	Portland
Apr 28-29	BR 101 & 102	Peterborough	Oct 26-28	ATSF	Newton
Apr 30- May 1	SE: S&A	Rio de Janeiro	Nov 2-4	SE: ACB	Atlanta
May 1-3	ATSF	Milwaukee	Nov 10-11	SE: Tensegrity Spine	Nashville
May 4-6	ATSF	Newton	Nov 10-11	SE: T Spine	Portland
May 18-20	SE: A&L	Nashville	Nov 16-18	SE: FOTH	Austin
May 18-20	SE: A&L	Portland	Nov 17-18	SE: HNJ	Arlington
May 18-20	ATSF	Vancouver	Nov 30-	SE: FOTH	Newton
May 19-20	SE: Tensegity Spine	Arlington	Dec 2 Nov 30-	SE: A & L	Rochester
May 19-20	AT Movement	Chicago	Dec 2		Rechestel
	AT Movement	Lancaster	Dec 14-15	SE: S&A	Nashville

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#### Advanced Courses

#### Walpole Maine

Movement Immersion	Tom Myers	July 6th - 8th		
OD on Movement	lan O'Dwyer	July 9th - 10th		
Zoga	Wojtek Cackowski	July 11th - 13th		
The Embryo in Us	Jaap Van der Waal	July 18th - 21st		
Breath and Bliss Immersion Jill Miller July 22nd - 24				
Aston Postural Assessment	r Judith Aston	July 25th - 27th		
Balancing the Face for SI	Lauren Christman	July 28th - 30th		
Bone Work	Sharon Wheeler	July 31st - Aug 4th		
Advanced SI – Closing a Session	Liz Stewart	August 5th - 7th		
Upper Extremity	Ron Murray	August 8th - 9th		
Movement Immersion	Tom Myers	August 10th - 12th		
ATSI Advanced Part II	Tom Myers	August 13th - 15th		

#### Fascial Dissection with Tom Myers

Tempe, AZ	January 8th - 12th, 2018
Tempe, AZ	February 5th - 9th, 2018

### **Anatomy Trains** Structural Integration Certification (ATSI)

#### Part One: Structural Essentials

September 7th - 9th: ATS&F (pre-requisite) September 11th - 27th: Structural Strategies (days off September 16th & 24th)

Part Two: Structural Strategies October 29th - November 9th (days off November 3rd - 4th)

#### Part Three: Structural Integration

March 25th - April 6th (days off March 31st - April 1st) April 29th - May 10th (days off May 4th - 5th) June 4th - 15th (days off June 8th - 9th)

# INTERVIEW

An interview with Ann and Chris Frederick BY JULIE HAMMOND

# ANN & CHRIS FREDERICK

nn and Chris Frederick are a very successful partnership, directors and founders of the Stretch to Win Institute. Ann originally created a unique system of neuromyofascial manual therapy called Stretch to Win - Fascial Stretch Therapy® (STW-FST®) for the USA Men's Olympic Wrestling Team of 1996. Chris is a physical therapist and former dancer. He and Ann joined forces in 1998 and evolved Stretch to Win - Fascial

Stretch Therapy into the success story it is today. I had the pleasure of meeting Ann and Chris Frederick a few times but didn't really know them or Fascial Stretch Therapy. I found out there is so

much more to this couple than meets the eye. The theory and concepts behind Fascial Stretch Therapy had me hooked and ready to sign up for a workshop. Ann has the most infectious laugh and she and Chris seem to complement each other very well. I hope you enjoy this interview as much as I enjoyed doing it.

### Julie: I am really interested to hear how the two of you met. What year was this?

**Ann:** It was an orthopaedic surgeon that introduced us in 1998, not knowing we were going to fall madly in love and spend the rest of our lives together.

"When we stand side by side WE TRULY MAKE EACH OTHER too much about STRONGER TOGETHER." Chris: I had just moved from New York City to Phoenix. I had decided to relocate after spending a lifetime in New York City and I was basically looking for opportunities when I found this orthopaedic

surgeon who was also from New York City. He knew I was a therapist and dancer and he said, "you know there's a girl here who was also a dancer and is a therapist too, so since it sounds like you both have a lot in common, here is her number." The rest is history.

Ann: He walked through my office door almost 20 years ago and we haven't been apart since. It's a love story made in heaven.

Julie: So that leads me to my next question, how do you manage to work together and still stay together?

Ann: I think the truth of it is, we are truly soul mates and there is nobody else on earth we would rather be with than each other. So our ability to run a business together and stay happily married, as well as write books together and run a school together, just seems like the most natural thing in the whole world and neither one of us can bear to be away from each other. We are rather peculiar that way.

### Julie: That is pretty amazing and rare, I could not work with my husband. How does it work? I know you both have very different personalities, does this help balance the two of you?

**Ann:** Ah yes, one of the things that makes it work so well is that we have very complementary dynamics. I am majorly organised and I have management skills, running the teaching team and staff when we had a clinic. I write all the manuals and do the program design and things like that and Chris is spectacular with the heavy science piece and the media piece. He deals with that component, so we have a synergistic relationship. He does his side of the business and I do mine and when we come together to teach or to write we have a cohesive understanding of each other's role.

"When we stand side by side we truly make each other stronger together." There has never been a power struggle which is a truly rare thing.



started, Ann trained me. She had been in business for three years when I met her. I met her very early on in her own development of Fascial Stretch Therapy and Stretch to Win. I obviously got some oneon-one training and we fell in love.

**Ann:** (laughs) He just wanted some private training for free.

**Chris:** It was her baby, so to speak. She created it but she was also totally open to my creative impulses and urges to develop it into what it is today. Ann had it already formed but when I came aboard, with my background in dance and other creative arts, it allowed the two of us to come together in one vision. She allowed me to basically evolve her work with her so it's now very different today than when she first started.

**Ann:** Chris also brings in the heavy medical side having been a physical therapist for many years. He

brought in a medical side to it where mine had been more kinesiology and intuitive based. I was science based but it wasn't heavily medical and he brought that component that helped raise the bar to what we were able to do from a clinical and scientific standpoint.

### Julie: When you put something together it is your baby. It must have been hard to let someone come in and add to it, so that shows how much trust and respect you have for each other.

**Ann:** Not when he makes it better. Chris is pretty astounding. He has stood by my side. When I developed the whole technique with Olympic athletes and then professional football players, he just stood by my side and never wavered with the amount of hours and time it took to develop the technique.

**Chris:** I also didn't mind, with the amount of testosterone in the form of heavily developed, muscled, athletic bodies that were always around her.

Ann: (Laughs a lot) Love my job!!

### Julie: Can you describe Fascial Stretch Therapy (FST) to me?

Ann: It's hard to put into a single word but it is a global approach to the fascial network. It is looking at the decompression of the body. That is so desperately needed, through what happens to us with time, age, stress, gravity and repetitive movements to the body. Our concept is opening from the joint out to the edge of the net. Looking at things more globally, less locally, unlike most stretching modalities that are normally very local. We look global first and then move from ungluing the joint capsule out to the glue that gets caught in the edges of the net.

**Chris:** I would like to give your readers a feeling of one of our principles of Fascial Stretch Therapy.

Pick up your non-dominant hand, point your index finger to the ceiling and close the other fingers to make a light fist. Take the finger pad of the non-dominant hand against the finger pad of your dominant hand and gently push the finger of the dominant hand into extension. Take it as far as it goes until you feel that first barrier of resistance we call R1, resistance 1. Take note how far it went; for many manual therapists not far. Why? Because we are always working our finger flexors. Now release that and grasp the finger with the hand that was pushing. Grasp the whole finger to the base of the finger, hold it firmly and lift up to the ceiling as you push back into extension and tell me how much further did it go? Three times further at least for most people.

So that's an indication for the decompression of the joint that works a couple of ways. It sends a neurological signal to the proprioceptors and mechanoreceptors to release and let it go. You get more stretch and less discomfort by adding traction to the tissue. That's one example of the ten principles we teach in Fascial Stretch Therapy so that you have a successful outcome with the client.

Julie: I got really excited at this point and forgot I was interviewing as this is a concept we use in Structural Integration but I hadn't thought of it from a stretching point of view....

Simple but effective explanation, make sure you try it.

Julie: From the beginning of Fascial Stretch Therapy to where it is now, how different is it? How has it evolved?



The self-stretching component has expanded, so that has turned into a course called LifeStretch that teaches people how to teach stretching in a group setting, as well as one-on -one, self stretch homework & for self care. Also, we have stuck to the principle of just going deeper.

### Fascial Stretch Therapy™

Ann Frederick Chris Frederick

Foreword by Thomas W Mye

Flexibility for improved speed, power, and agility

cond Edition

### Ann Frederick Chris Frederick

We have always had a philosophy not to go too wide out of your subject but go as deep as you possibly can into the same subject, so as not to stray off into other topics that aren't as relevant. Techniques often get watered down when you get led one way or another. Chris and I are both of the mindset that you just keep drilling deeper and deeper in the knowledge of it. I think the other thing that is exciting is that I've just started doing research again after 20 years, with the University of Arizona Medical School; we are doing a study with FST and chronic non-specific lower back pain which we are hoping to present in Berlin at the next Fascia Research Congress. The research is something that makes it different from a lot of techniques and something that we truly want to expand on. There is a lot of anecdotal proof but hard research is a lovely thing to have under your belt as well.

**Chris:** I think a big influence was the Anatomy Trains Structural Integration that we did with Tom Myers in 2003/2004. We were the third graduating class. We already had the FST system developed and it continued to evolve after 2004 but Tom's work had a big impact on me developing aspects of integration of FST with Anatomy Trains methods and techniques and coming up with new movements. Our system is very different from other systems; it's a choreography. We teach movement instructors, trainers and manual

There are very specific applications of FST and stretching means different things to different people. Flexibility is typically defined in all the strength and conditioning text books as simply range of motion; we have to disagree.

Mobility is just one aspect of

therapists and they move actively around the table constantly. From very slow movements called Slow Stretch Wave, they move very slowly with the client,

"We define 'flexibility' in our book as adaptation and it is the SUCCESSFUL ADAPTATION OF THE PERSON TO THE FORCES AND STRESSES OF LIFE OR WHATEVER IS ASKED OF THEIR BODIES. To withstand mental, emotional and physical stresses and their ability to adapt to that stress and strain and then successfully recover is true flexibility."

moving the body very slowly for specific reasons that would be more post activity or restoration.

Then there's quick movements we call the Fast Stretch Wave, which is done for athletes within 30-60 minutes before an event. We get them moving at a tempo that is three times quicker than the slower tempos, in order to rev up the sympathetic nervous system, keep them alert and get them to be dynamically flexible. Not changing the connective tissue length or creating too much space in the body. They need a healthy stiffness to the tissue that is still hydrated and ready to move. People think of stiffness as being a negative thing but athletes must have an element of stiffness for dynamic stability, for mobility to occur. What we do with the faster movements is to support that. This has all got clearer over the years with our application.

you must have the other factors to go with it. Stretching is one means to get the system working better, simply because we live in a compressive atmosphere, environment, work space and

flexibility but

so on. We get compressed, we are not moving all day. Fortunately decompression is a big element but do we stretch everyone? No. Does everyone need to be stretched? No. Does all the tissue need to be stretched? No. This is all based on assessment; we really teach comprehensive connective tissue assessments on and off the table. We have developed a choreography of really assessing specific angles way outside of the cardinal planes because it's not functional just to move in those planes. We move out of those planes to be very specific to the client's needs on the table, assessing and then balancing out the system; or if you are a health professional we call it treatment.

Julie: The concepts of FST are fascinating and so much more complex than I first imagined. It sounds very much like the concepts of Structural Integration but in a movement application. You use the same language. When we are looking at someone we want them to be adaptable and resilient and we look for areas of decompression. I really like the theory behind your work.

**Chris:** It's perfectly complementary to Structural Integration; we speak the same language. We do have a different approach to it and I love teaching people from the SI community because they understand. It feels like the missing link because it fits in perfectly. This work isn't something I learnt in SI but they work together; it's just a different approach. SI has a fantastic approach to assessing and correcting imbalances in the body and what FST does is just another way to do it.

**Ann:** FST is also much easier on the practitioner physically. It was developed due to the predominant client base I had. They were American football players that are 2 to 3 times bigger than I am. So the whole thing is based on using your body to get leverage and not your arms. It's very energy efficient using the ground and your core a lot.

**Chris:** The thing that springs to mind is the client that comes in with thick, dense connective tissue where you know right from the first session you are going to need more time. You and all your readers know what I am talking about. If you have experienced people with that sort of connective tissue, then we advise doing FST first and then doing SI. It's a nice way to prepare the myofascia and make it more receptive to receiving your SI work.

Julie: Ok, sign me up now, I am hooked. I would love to come and do some training.





Julie: One of your premises for FST is 'Bio tensegrity and the epidemic of compression'. I love this phrase and as a Structural Integration practitioner this resonates well with me. What we do is to create space in the body. Can you explain this from an FST point of view?

Ann: The way I look at it is you have to start by getting space in the joint capsule. One of the things I found with the original research was that there are two things that are the most restrictive factors in the human body; the joint capsule and the fascial system. That is where the glue lays down, so my philosophy from the beginning was to get the glue out of the joint capsule and use the ends of the long bones to do it. I use the femur and the humerus at different angles and use many oscillatory movements that unwind and open up the joint to create space where the space has become compromised and compressed. It's about decompressing the joints from the centre of the body out to the edges in a way that is extremely gentle and kind and working with the person. One of the things I say that is different about FST is it is one of the unique methods where the practitioner works with the person, not on the person or at the person. So there is a synergistic dance that happens. A romancing of the nervous system, not attacking the nervous system. We believe that you never cross into a real threshold of pain ever. You can dance up to the edge of what we call 'stretch awareness' but the second you get to the edge you need to back away so that there is no guarding or recoiling that happens in the tissue or the nervous system.

Julie: It makes sense. It's the same as touch, it's a fine line and if you cross it then the tissue will just guard.

Chris: Fascial research has shown there is a time and place for static stretching. Benefits are being shown in research that it may be beneficial for people over 65 to be more statically stretched rather than dynamically. This is interesting but the trend today in fitness is to go towards dynamic stretching. FST has always been about movement; it's never been about 'stay and hold' a stretch, we never use the word 'hold'. We never tell our clients to hold a stretch. They stop breathing, they stop moving and they are very mechanical in their movements. They start counting, it's very boring and people hate it. We have always moved; it's just a matter of changing the tempo to meet the tissue's needs and the goals of the client on the table. Are they going to do activity in 30-60minutes? We are going to be pumping the fluids and moving at a faster rate. Do we need tissue change? Well we need to take our time such that the tissue has a duration of time so that it can change for plasticity reasons. We have different applications depending on the client's needs.

The movement is done in oscillatory fashion; we call it a StretchWave™ because undulation was a term that didn't resonate with the athletes. So we called it the 'stretch wave' and they got it. It's an up/down, side/side, yin/yang movement however you want to think about it. I came up with that term for my first book because I was trying to come up with a term that athletes would relate to and I said, "it's a wave, everything's a wave in the body. The way you breathe is called tidal breathing. The EKG of the heart is a wave. Light waves that enter the eye, it's all waves." It occurred to me that the movements we do, follow a theme.

### Julie: Interestingly, in manual work we use oscillatory movements and bring up a lot of emotions. Does it have the same effect in movement?

**Ann:** Interesting, because we tend to get more laughter than tears. They get fits of laughter that they can't control. The stretching is so gentle it releases a huge amount of endorphins. It's a natural high. We have emotions come out more in laughter.

**Chris:** I think we do definitely get interoceptive responses as does SI. It's one of the least understood of the receptors. We do get people who cannot explain what happened after FST. They can't explain why they feel euphoric or giddy or they want to dance. They start wiggling their hips as they walk. You see the flush of the face, things are changing and they are not quite sure what just happened.

### Julie: The two of you have been in business together for almost twenty years and very successful. How long did it take for the momentum to build, for you to feel the excitement in your product?

Ann: I would say it has been exponentially growing every year. We were talking about landmarks in business; we just moved into our global headquarters last month and it was twenty years in the making. To create this incredible 11,000 square foot space that we teach in, treat out of, will host out of - I think what has made the biggest difference is writing the books and the exposure that those have given us. Also having an international Canadian company has made a huge difference with how many students we can put through the school by having a teaching team in another place. I think the opportunity that we have had with a lot of high profile clients that have been beyond willing to speak out for what our work has done,

is what has drawn a lot of students to come and train with us and want to carry on the legacy of working with the high-level elite and professional and Olympic athletes.

Chris: Honestly Ann got her start very rapidly with elite athletes. Just starting basically with Olympians and professional athletes within the first six months to a year she exponentially just shot up to the top. Those are the kind of clients that do what I call 'locker room marketing' for the athletes. No one cares what you promote on social media, they want to hear from a fellow team mate what they recommend. That's how they find out where to go and that's how Ann started. Over the years, like everyone out there who is a fellow bodyworker, you can put in your time day after day working with people but I became amazed at, this is 'shoulder week' or this is 'foot week'. I think we can all relate to that and so over the years it just contributes to your body of knowledge, your exposure.

Then we started to do interviews, then the books and then the local press interviewed us because we started working with the local team, the Arizona Cardinals, and then they went to the Super Bowl. They were at the bottom of the NFL, the worst team in the league and they rose to the best. In our time we saw them go from the bottom to the top. Ann started working with them in 1995 and they went to the Super Bowl in 2009. It was incredible to take a ride with them and then get into the media with that. So that all helped to grow the company, to constantly pursue our passion to the point where we decided "let's start teaching this".

We came to the point where we asked "do we just keep this to ourselves and have this massive success doing what no one else is doing and enjoy the fruits of our labour?" We looked at each other and Ann said, "no, I have a bigger mission." Maybe Ann should explain.

Ann: For me, if you are given a gift you should share it. We can impact a lot of people. This is a loose figure but we have about three thousand graduates and somewhere over a million people have experienced the FST technique now. It is still growing and we couldn't have done that if we had just stayed isolated in the clinic. There are so many more lives that can be touched by teaching it. Also, when you work with high level athletes, you get a lot of exposure. I have been in Sports Illustrated, Runner's World, a lot of national publications. I always find it interesting when athletes are the ones who want to get the exposure for us. We never ask for it, they come to us and ask, "can we do a piece on this?"

Chris: Tim Ferris came in based on another big marketer, Joe Polish, who was one of our clients who said "you are in town for just a day you have to see Chris Frederick." We got Tim in and I saw him and that was that. I didn't hear from him again; he was on his way to Vegas and was writing a book called The 4-Hour Body. He was researching everything about the body. Then his book comes out and someone says "hey, did you know he mentions you in his book?". On one page he says, "I was asking a coach, who are the best coaches in flexibility?" The coach in the book said "hands down Ann and Chris Frederick, Stretch to Win." Tim Ferris said "oh right, I went and saw Chris Frederick for one session and my hips hadn't felt that mobile in ten years." And from that I had clients call me from all over the country wanting to fly in and see me, because of Tim Ferris.



Julie: There is a lot of emphasis on research and evidence based practice now. How do you stay current and on top of this?

**Chris:** That's a very good question and I get asked that a lot. We believe in evidence based practice. It's necessary, however it is a onedimensional limited way of looking at the world. We will never be in a position to know everything about the dynamic living systems of the world we live in if we wait for evidence to come in. It's not here yet, nor will it ever be. You must have both. You must continue to gather the evidence of course and you must practice based on what you get from that. Then there is a huge lack of where to go after that, so you also have to use your years of experience, your intuition and everything else you have got. Meaning you can't just use your left brain analytical, you must be able to trust your touch, your senses, your intuition and you will get much better results. We need both. I believe in evidence based practices. I believe we should gather it and be very knowledgeable about it but at the same time I believe in practice based evidence, which is what we teach.

There are so many factors; one important factor is nutrition. Nutrition plays a huge factor in how our clients are and how they respond to our manual and movement therapies. It is not just what we do with the fascia, it is based on the integrity of the fascia from a physiological level. Do they need Vitamin K, etc? These are things that we are not well versed in so you must have someone on your team that is. We strongly believe in having a solid referral network of very capable practitioners who do what you don't.

Ann: I agree and I think the other piece from that, directly related to flexibility, is the hydration piece. I worked with a naturopath for several years who would IV the ball players while I stretched them and about seven minutes into the stretch there was a dramatic change in the flexibility of the tissues with the hydration. I could look at the clock without fail, athlete after athlete, and know the exact point in time when the tissue would change. So the hydration piece and the level of what the hydration is, the electrolyte balance and those sorts of things have such impact on the feel and quality of the tissue.

**Chris:** Robert Schleip did some studies on the super hydration of isolated tissue showing that once a tissue is stretched it super hydrates beyond 100% of its capacity. What does that do for flexibility? It is a stiffening from hydration which gives the tissue more integrity yet more mobility.

Julie: I would like to ask a more personal question to Chris and you don't have to answer it. The last time we met was in Maine at Jaap van der Wal's course (which was absolutely amazing). I found the two of you very different from the first few times we'd met. I wasn't sure if it was just because I was more familiar with you but there was a definite difference between the two of you and, Chris, you spoke a little bit about your health issues. Are you happy to talk about it?

**Chris:** I think taking Jaap's course stimulated a few things. It's amazing that as a scientist he went into the spiritual world. It's a very unusual take on the science of embryology and development. Somehow someone asked me about near death experience. She asked "do you believe in the near death experience?" and I said, "that's what I experienced."

The course was closer to the time I went through my near death experience (NDE) and I think the way Jaap teaches, being very experiential, having us stand, move, breathe and think about the spiritual side, stimulated the discussion in me and others.

**Ann:** We were also listening to 'Proof of Heaven'. I don't know if you're familiar Julie, there is a neurosurgeon that wrote a book called Proof of Heaven and he had a rare strain of meningitis and was in a coma for a long time and had a NDE. He had always dismissed his patients' experiences. Chris and I were listening to this on audio tape at night and it was hitting him very profoundly. I think that's what you saw; along with Jaap's workshop we were on a spiritual quest and we weren't as light or giggly as we normally are.

**Chris:** During my training as a physical therapist, I worked with several patients who were comatose. I had one gentleman where I could move my finger and his eyes would track my finger but he was otherwise non-communicative in a vegetative state. So it was incredible to see his eyes move and track my finger and it always made me wonder how much of him is alert and knows what's going on. It really made me think, especially with my own experience and reading about Proof of Heaven (which I highly recommend), what you see is not always what is; you must keep an open mind. You never know what your client has experienced.

I am so interested in hearing from people who have experienced NDE because only if you have experienced it can you speak on it and we could learn a lot from these experiences.

### Julie: Thank you for that and it was lovely to see the two of you so together and attentive with each other.

**Ann:** Having had the surreal experience of watching my husband die in front of me and the thought of not having somebody who is supposed to go through my life path with me, was the most unfathomable experience. I didn't think my level of love for him could be greater than it was and every single day it is even more. The appreciation and the gratitude to have him and to have him healthy and have so much of our life ahead of us has changed me and I will never be the same because you look at how in a split second everything that matters can go away. In a heartbeat or not a heartbeat as the case may be .....

Julie: You do realise I am going to get into trouble from Tom. Ann you are known for your humour and Tom told me to get across the humour and light heartedness and here I am having you recall Chris's near death experience.

Ann: (Laughs) It's the flip side of humour. One of the reasons I think we are deliriously happy is we laugh from morning until night. Chris has for over twenty years brought to my bedside, God bless him, a greens drink every morning that alkalises my blood before he brings me a cup of fresh brewed organic coffee that makes my eyes pop open. He also does a dance (as she laughs infectiously)

### Julie: I think we might have to carry that conversation on over a drink in Arizona ......

Julie: I am very jealous of your new classroom. I have a classroom in Perth and am now looking for a new one and know you have had a lot of hard work with your classroom. In fact, I can't call it a classroom; it is so much more than a classroom, your Institute.

**Ann:** The teaching space itself is 7000 square feet.



### Julie: I want that space!! It is huge, you must be so proud of it.

Ann: I am very proud of it. We envisioned it and manifested exactly what we hoped for. It has four bathrooms with eight toilets and four urinals- that matters as we all know everyone has to go at the same time with bodywork- all electric tables planned for 2018, a huge kitchen for people to gather and four treatment rooms. It's enormous and a dream come true that we have spent twenty years working on. I knew from the minute I walked in the door it would be our headquarters.

### Julie: What are your future plans?

**Ann:** The goal now that we have our own space is teaching more. I have already added more workshops to the calendar year and Chris is working on the Master's program which will be exciting to launch because it's been a long time coming. We are also looking forward to hosting. We have Jaap van der Wal and Gil Hedley scheduled.

### Julie: What is the most defining or proudest moment in your career?

Ann: First one that comes to mind, and I always say I crescendoed too early, was when I first started in 1996. I had one of the Olympic wrestlers come off the mat after winning the gold medal and he picked me up,spun me around, kissed me on the cheek and said "Annie, I could never have done this without your help".

Chris: Defining moment for me was seeing our first book in my hands in hard copy. It took us three years and, while we both collaborate, Ann did the instructions on how to stretch and I did our philosophy, theory and principles. The meat of the book in terms of describing what we do is sort of my job and I enjoy it. It has since led to basically a writing career so the second book took us a year. I have grown as a writer. I have a journal that I have kept since I was 17 and one of the things on my bucket list was to write a novel. I didn't write a novel but maybe a novel on stretching, so to speak. I basically achieved that dream come true and that would not have happened if I hadn't met Ann.

Ann: When we met in the very beginning, Chris's message on the voicemail after our first business lunch said that he thought it would be really great if we got together and collaborated on writing a book and he used it as a pick up line. Julie: It worked and he got two books out of you!!

Ann: It worked really well.

# Julie: Final question: What piece of advice would you give your younger self?

Ann: The advice from my parents gave me the tenacity and vision to do what I am doing. It took me a little time to find my way but the advice was that "as long as you stay rooted to the earth and reach for the stars, you have the ability to attain anything. But most importantly, never let anybody try to take your dreams away".

**Chris:** I took a torturous crooked path where I really didn't know where I was going, yet if you maintain the confidence in following your thoughts and desires safely, and don't be afraid of taking chances and risks, you will always end up where you need to be.

**Ann:** "I would like to share that there has never ever been a risk that I have taken that hasn't been worth the jump and the leap of faith. Life is too short and so am I not to take chances "

ACTIVE FASCIAL RELEASE A Tensegrity Based Therapy

James Earls

ctive Fascial Release incorporates the principles of tensegrity-based movement alongside a variety of manual therapy methods to assess, normalize and re-educate soft tissue. During treatment, manual therapy techniques are applied in conjunction with a client's movement. This is in contrast to many othopedic techniques that assess, treat and reassess local tissue dysfunction by isolating structures to minimize obfuscating factors. AFR deliberately manipulates many forces to act simultaneously on the body, but it does so with an understanding of the implications - implications that require appreciation of the tensegritybased architecture of the human body.

The principles incorporated in a tensegrity structure dictate that when one element changes position or tension, the rest of the structure alters in response (Scarr and Levin, 2014). Much work over the last twenty years has focused on applying similar nontraditional biomechanics to biological structures but many have applied themselves to the cell (Ingber, 2008), local epimuscular force transmission (Huijing, 2009) or focused on structures around one or two joints (van der Wal, 2009, Levin, 2007). AFR's use of functional anatomy principles gives a wider context for force transmission to and from distant body parts, giving the therapist the opportunity to visualize the client's real-world reactions to movement demands.

The standard, isolated, orthopedic process is counter to the underlying principles of tensegrity that suggest the reaction of a localized area is dependent on the forces experienced by the rest of the organism. The tensegrity model suggests that the sites of pain and its biomechanical cause can be distant from one another. Each patient presents with their unique anatomical variation, with their individual history, and with their subsequent motor strategies.

Active Fascial Release seeks to find order within their system by blending long-chain movement, in gravity, with manual therapy. The intention is to find correlating areas of biomechanical challenge and sites of pain or further dysfunction and then aims to normalize the patient's movement pattern. Working with the patient as they move, in contexts that mimic their everyday function, brings their system into positions that replicate the multidirectional reality of their everyday life. When using AFR, each patient is assessed, treated and re-educated in ways that acknowledge their uniqueness.

Movement limitations are multifactorial – motor control, joint issues, inflammation, soft tissue restriction and lack of layered tissue glide can all create limitations in range of motion. It is important to remember that not every limitation is a soft tissue restriction and the AFR practitioner seeks to differentiate these aspects, treat accordingly and to re-educate appropriate movement thereafter.

AFR uses functional anatomy as developed and taught by Gary Gray (2001). Gray's work has provided a comprehensive system for understanding how the body reacts to long chain movement in the context of its anatomy with mass, momentum, gravity and ground reaction forces. Functional anatomy gives a foundation for predicting, assessing and treating the body's reaction to movement. The practitioner can, therefore, manipulate those forces to create desired actions through the joints and into the surrounding tissues.

Long chain movements can be analysed to gain further, contextual information on a patient's movement strategy. While real-time video analysis can be useful for visual assessment, they do not allow palpatory feedback and assessment to the operator. For therapeutic evaluation, it can be useful to mimic the actions in a more controlled environment. In a sporting context, for example, the actions of kicking and throwing can be replicated. Prearranging the patient's feet according to the set-up necessary for the performance and asking for hand, knee, or chest movement can allow the operator to assess the full body response in that position. The operator can view, palpate, guide and manipulate joint and soft tissue within the position.

During treatment, forces can be guided into or away from target tissues using foot position and directional movement drivers by varying distances, angles, height, and speed. Environmental factors can also be manipulated to create desired effects; for example, assessments are performed shod and unshod, on various surfaces, and with the feet placed at different heights using platforms.

Diagnosis can be accomplished by provoking discomfort and movement challenges by altering the client's positioning. Through controlling the environment and position, the operator can also use real-time tissue palpation to assess for end-feel, tissue glide, and overall tissue quality. Information gained through palpation is then used to determine the treatment strategy.

As mentioned above, not every restriction is due to soft tissue restrictions. Lack of end-feel, without the presence of inflammation, can be an indicator of motor control issues. In this case, the patient's movement can be guided and assisted by the operator to support the introduction of new movement strategies and capabilities for the patient. Importantly, the operator can return to this supported movement strategy at any time to help integrate any tissue change.

# ACTIVE FASCIAL RELEASE

When variations of soft tissue restrictions are felt at the end of range, the operator can use a range of manual engagements to provoke corrections. Because the patient is standing and moving, some safety and comfort considerations have to be taken into account. These include the depth and direction of tissue engagement, both of which are inversely related to the degree of pre-stretch in positioning as well as to the speed and range of movement being used. Extra support can be given to the elderly, weak or unstable clients by positioning them next to a wall or having them hold a stable support as they move.

Small range oscillations towards the end of range are used to achieve relative movement between tissue layers, to stimulate mechanoreceptors, to rehydrate and realign collagen fibres (Schleip, 2017). The speed, range, and direction of movement are altered, directly (by hand) or indirectly (through instruction), to achieve desired effects as the operator manipulates the soft tissues.

Soft tissue engagements are similar to pin and stretch strategies but must vary according to the patient's positioning and movement. Factors involved in choosing the direction of engagement vary from assisting or restricting the patient's movement according to comfort and safety, but also to evoke different mechanoreceptor stimulation. By changing the direction of tissue engagement, the operator can focus the stretch to proximal or distal tissues while also receiving constant real-time feedback as to the effectiveness of the technique.

Glide between tissue layers is important for movement coordination and restrictions in the interfacing loose connective tissue may be involved in myofascial pain (Schleip, 2010, Stecco, et al. 2011, Langevin, et al., 2009). Stecco et al., 2011 suggests the function of hyaluronan (HA), as a component within the loose connective tissue, acts to lubricate and facilitate sliding of facial layers. Variations of HA concentration can alter local mechanics by changing the density of the loose connective tissue (Stecco et al., 2011) and this may influence mechanoreceptor stimulation, inhibiting muscle control (Schleip, 2010).

Relative motion between tissue layers is created during the oscillatory movements (Schleip, 2017, Guimberteau, 2015), allowing the operator's engagement to encourage appropriate tissue glide. It is proposed that application of pressure, combined with movement, can alter concentrations of HA within the loose connective framework. It is anticipated that the combination of effects created during AFR applications corrects local, and therefore, global myofascial force transmission in real-time.

Combining long-chain, oscillatory movements in clinically chosen positions and using appropriate vectors and degrees of motion gives the operator the opportunity to assess, treat, re-assess and re-educate the patient's system in context. The therapist continuously receives palpatory information during the movement and interventions allowing appropriate adaptations in contact and movement as necessary (including a return to conservative, table-based techniques at any time). The patient simultaneously receives conscious and unconscious information about their body's performance and interrelationships, assisting them with restructuring their movement strategy. AFR, therefore, combines the theories of tensegrity from a macro to a microlevel, aiming to normalize tissue response to force transfer by directing it through patient engagement. It does not replace traditional orthopedic approaches but can be used as an adjunct to assist full body assessment and integration of changes created during other treatment.

As it is both pain-free and involving the patient within the treatment, AFR is patient friendly and pro-actively educative whilst allowing the therapist to work with a number of systems simultaneously, helping normalize motor control patterns, joint ranges and soft tissue health.

James teaches a range of classes specialising on real-life movement - these include Active Fascial Release and Born to Walk. He is the co-author of 'Fascial Release for Structural Balance' and author of 'Born to Walk'. James and his wife live close to London Zoo where he is often seen looking for inspiration from the monkeys and apes and is such a frequent visitor he's been made a Fellow of the Zoological Society of London.

For more information on classes with James contact: je@activefascialrelease.com

# ACTIVE FASCIAL RELEASE

Gray, G. (2001). Total body functional profile. Adrian, Mich.: Wynn Marketing. Guimberteau, J. and Armstrong,

C. (2015). Architecture of human living fascia. Edinburgh: Handspring Publishing Ltd.

JAMES EARLS REFERENCES Huijing, P. (2009). Epimuscular myofascial force transmission: A historical review and implications for new research. International society of biomechanics Muybridge

award lecture, Taipei, 2007. Journal of Biomechanics, 42(1), pp.9-21.

Ingber, D. (2008). Tensegrity and mechanotransduction. Journal of Bodywork and Movement Therapies, 12(3), pp.198-200.

Langevin, H., Stevens-Tuttle, D., Fox, J., Badger, G., Bouffard, N., Krag, M., Wu, J. and Henry, S. (2009). Ultrasound evidence of altered lumbar connective tissue structure in human subjects with chronic low back pain. BMC Musculoskeletal Disorders, 10(1). Levin, S. (2005). The scapula is a sesamoid bone. Journal of Biomechanics, 38(8), pp.1733-1734.

Scarr, G. and Levin, S. (2014). Biotensegrity. Scotland: Handspring Publishing.

Schleip, R. (2017). Fascial Fitness : How to Be Vital, Elastic and Dynamic in Everyday Life and Sport. Lotus Publishing. Schleip, R., Zorn, A., Lehmann-Horn, F. and Klinger, W. (2010). The fascial network: an exploration of its load bearing capacity and its potential role as a pain generator. In: Proceedings of the 7th Interdisciplinary World Congress on Low Back & Pelvic Pain. Los Angeles: ISBN 978-90-816016-1-0, pp.215-218.

Stecco, C., Stern, R., Porzionato, A., Macchi, V., Masiero, S., Stecco, A. and De Caro, R. (2011). Hyaluronan within fascia in the etiology of myofascial pain. Surgical and Radiologic Anatomy, 33(10), pp.891-896.

Van der Wal, MD, PhD, J. (2009). The Architecture of the Connective Tissue in the Musculoskeletal System - An Often Overlooked Functional Parameter as to Proprioception in the Locomotor Apparatus. International Journal of Therapeutic Massage & Bodywork: Research, Education, & Practice, 2(4).

# STAYING FAITHFUL

to the goals and concepts of SI while exploring osteopathic methods

Kirstin Schumaker



y journey to where I am now began with a palpatory understanding of meridians. Between 1998 and 2002 I had been practicing shiatsu massage while dabbling with PNF (proprioceptive neuromuscular facilitation) and trigger point theory. I worked through clothing, thumbing my way along the acupuncture meridians. I geeked out about Chinese medicine theory with my acupuncture friends and was seriously considering acupuncture school, until my fortuitous encounter with fascia at a weekend class taught by Thomas Myers. In the weeks after that Anatomy Trains course, I discovered my touch and my perspective had changed. Suddenly I could feel and visualize, in a new way, the threedimensional shape of the Chinese meridians that I had been working with for years. I thought about this for a couple of months, as inspiration grew, and then I decided to shift my operating paradigm and strategic goals from the energetic to the structural. The Anatomy Trains made sense and would give me a new way to strategize how to work with a client's functional complaints and what I felt under my hands.

In 2004, I embarked upon the ATSI (then KMI) certification program and by halfway through the training, I had dropped shiatsu out of my practice completely. I was a convert to the myofascial paradigm and had become a serious student/practitioner of AT theory and technique. I was now a myofascial anatomy nerd but I wasn't content to stop there. As soon as I graduated I started taking visceral manipulation classes, from Tom Myers' friend and esteemed colleague, Christoph Sommer, a Rolfer® from Munich, Germany, who had studied extensively with French osteopath Jean-Pierre Barral. In 2006 I took my fourth CE class in the osteopathic tradition, my first class on working with peripheral nerves. Although my first three visceral classes had given me a more refined touch, which made my myofascial work more nuanced and subtle, I was definitely lacking confidence and palpatory certainty regarding organs. I couldn't yet practice visceral manipulation.

By the time I had completed my first peripheral nerve class with Christoph Sommer, however, I was thrilled to be palpating neurofascial "strings" within the myofascial fabric. Suddenly, my hands became smarter and I could "see" into the body in a more detailed way. I had also found a bridge from the fascial paradigm to the visceral paradigm, a bridge that would gradually help me gain confidence in my work with the viscera. I was now in love with the fibrous nature of the neurovascular tracts that weave between and through the layers of myofascia.

In the last eleven years, my journey has included more than 650 additional hours of neural and visceral classes, including four from the late Don Hazen, one taught by Christoph Sommer and Pilar Martin, and one taught by Jon Martine and Bruce Schoenfeld.



I assisted Jon Martine in a few classes, took a few classes from Ron Murray and studied extensively with Jeffrey Burch, taking his full Functional Methods series, his Visceral Manipulation series, and his Joints, Bursae, and Tendons series. All the techniques taught in these classes were handed down from the European osteopaths, for whose in-depth study and innovation I am grateful. While pursuing this integrated and yet patchwork course of study, I continued to practice SI, folding in my adjunct nerve techniques, a few visceral techniques and then a growing number of artery techniques. All this was exciting. In my practice the two different styles of work were melding but I also had opportunities to discipline myself into staying within the myofascial paradigm. I assisted in 10+ AT classes and in 2013 I began assisting in the ATSI/KMI certification trainings as well. By 2016, I was a full teacher in the ATSI program. I began teaching my own nerve classes in 2013. I described to clients and colleagues that I was doing neurallyinformed fascial work, but not long after that I began to own the arteryinformed half of my work as well.

An osteopathic approach to nerves tends to be quite visceral and fluid, at least in the Barral tradition. I can work this way but I tend to work more "bossily" with the fibrous quality of the neural tracts. Nerves are made up of 50-90% fibrous connective tissue, which is what helps protect neurons from overstretch injury. The fibrous connective tissue wrapping around the bundles of neurons also lends protective support to the neighboring vasculature, hence the fibrous neurovascular tracts. Consequently, much of the work that I do to target or liberate nerves and increase span within the artery network, actually feels quite fascial on the receiving end.

Because I have a bias toward the fibrous nature of these tracts, I characterize my work style as being much more like a structural integrator than an osteopath. I also utilize more client movement while I am working with their tissues and am more oriented toward giving the client the opportunity to integrate the work during their session. I first learned to work with arteries in 2011, through Jeffrey Burch's yearlong Functional Methods class, which completely transformed my practice. He doesn't teach a class on working with arteries but it always comes up in the course of his functional methods and visceral classes. I highly recommend all of Jeffrey's courses. They have been invaluable to my growth as a practitioner. Aside from the two of us, I know of no other SI practitioner who is teaching artery work. Currently, I am teaching a more comprehensive exploration of how to work with the artery network.

Arteries are linear, but not especially fibrous, and they respond very quickly and dramatically to the "just right" amount of pin-and-stretch. Practitioners need to know exactly where to put their hands to get a good specific hold on a portion of the artery network and they also need to know what artery release feels like under their hands.

In contrast to neural release, which feels like a taut string that becomes a bit less taut (a more yielding connection between two local points), an artery release feels more like stiff myofascia and hypertonicity which becomes generally softer.


improving structural balance, I do my regular body reading, asking what motor units within the Anatomy Train are short. I then palpate those motor units to assess for hypertonicity; I feel for swollen or thickened (historically inflamed) myofascial tracts and fish around for stiff or taut nerves. In addition, I involve the client in active motion testing so that they have a felt sense of how movement quality improves with each artery release technique. This naturally segues into teaching clients how to stretch their own vascular networks more effectively, which becomes great integrative homework. I explain that I am showing them how to listen to their body, understand neural and vascular tension, and "finetune" their efforts at stretching so that they can maintain and improve on the openness we have created in the session. This work is immediately applicable to enhancing a client's yoga practice and it is also really useful for helping nonyogis with chronically stiff or tight hamstrings learn how to find a more satisfying, more effective stretch. Clients and I both find it exciting that artery work opens up new potential for stretching and enjoying movement.

It is true that many kinds of orthopedic specialists and manual practitioners (massage therapists, physiotherapists and sports medicine practitioners) would benefit from understanding how neurovascular restriction and tension can impede movement and distort posture. However, I believe that neurovascular release has the most exciting potential when the techniques are used by practitioners who are well steeped and studied in AT concepts, body reading practice and structural goals, and who consistently work toward the hallmarks of improved alignment, balance, adaptability and support, rather than the relief of symptoms or functional improvement within a local region of the body.

Interestingly, I have discovered that some classic SI moves, when applied skillfully and without too much force, are actually very helpful for freeing up the nerves and arteries. Other classic SI moves, applied at the wrong moment or with inexperienced hands, actually increase strain on the neurovasculature, causing too much tissue disturbance or microtrauma which the body responds to by laying down new collagen fibers to shore up and protect the inflamed nerves and vessels. This results in slower progress, two steps forward and one step back, or it can turn highly sensitive clients off from SI work altogether.

Over the years my work has become gentler, more precise and more efficient. I have an easier time working with "sensitive" clients--all kinds of sensitive, including clients with PTSD, autism, or other sensory issues; elderly people, children, people with fibromyalgia.

In working with dural adhesion within the spinal column and where peripheral nerve roots emerge from the spinal column, I am able to address old whiplash injuries and impact injuries that have left lingering effects in the structure of layers within the central nervous system. The visceral work in my repertoire has gradually become more useful and I am discovering new techniques each week. I enjoy learning from my clients through my practice and I love what I learn from sharing these techniques with my colleagues. In summary of my professional journey, I would say that although I have journeyed far afield into the realm of osteopathic techniques, I am still faithful to the SI tradition of client-centered and client-empowering work. I still love introducing new SI practitioners to classic structural integration concepts and techniques and I intend to keep honing my own skills through teaching the foundations of classic SI. I am also completely committed to bringing a neurovascular awareness into the hands of SI practitioners throughout the world. What I am practicing now, I call neurovascularly informed SI, but I also fold in visceral work. I work with the dura of the central nervous system and I do this all in the context of structural integration. Rarely, any more, do I do classic series work (except when I am performing a series demo in the ATSI program), but I do as Tom Myers recommends "always know where I am within the series." I am still always aware of sleeve and core balance. I tend to work with A/P balance before Lateral Line balance. After working with those planes I give more attention to rotations. Throughout each session I listen to and address the client's areas of concern but I also prioritize working with areas that they don't realize are short and/or stuck, and which are silently related to or responsible for their areas of discomfort. Each of my sessions involves a lot of getting up off the table to walk around and test things out and each session leaves a person feeling more grounded or lifted, more integrated or lighter, or more connected--all the feedback a

or more connected--all the feedback a vicinit typically reports after a classic is SI session.

The aspect of what I do that looks less like traditional SI is that I usually start out each series with artery work, which has a big effect on the motor units of the core and sleeve. Then I address cutaneous nerves and spinal nerve roots and dura. I gradually add more and more techniques that feel myofascial. In the final sessions of each improvised individualized series I am always working more integratively, with the client more frequently upright in gravity and moving.

Currently in the USA, I teach a practical hands-on course in Nerve and Artery Release for Structural Integrators, through two four-day modules and a four-day practicum. These are supported by a comprehensive technique manual and an online review course.

The third module is a four-day practicum in which we apply all of the content from the first two modules to full sessions that are geared toward client-specific structural goals and functional issues. I imagine when I teach in Europe, Asia, and Europe, it will be necessary to offer two threeday modules in close sequence--with a few days or a week in between, and we will simply cover a bit less material. People who feel they might be overwhelmed by all six days can take only the first three days.

I generally recommend that new practitioners wait a full year after completing their SI training before they begin studying nerve and artery work, simply because I believe it's important to protect your investment in your foundational training by practicing the series work as much as possible initially. A number of shorter DIY home study courses will gradually evolve from the comprehensive "review" course. These will be available to people who haven't studied with me directly. Those who can't take a class with me will be able to utilize the home study courses in combination with study groups led by peers who have studied with me.

Please check my website for video demonstrations and further course description.

Kirstin completed her ATSI certification in 2005, and she joined the ATSI teaching team in 2013. *She greatly appreciates what she* learns through teaching foundational concepts and methods in the ATSI program, and she enjoys sharing with her ATSI colleagues the responsibility of helping to refine the curriculum. Since 2013, she has also been teaching her own CE courses for SI practitioners, on what she is calling neurovascularly informed SI. She can *no longer not pay attention to nerves* and arteries as she works with the *myofascia, and she is passionate about* sharing the magical efficiency of this approach with her colleagues. Kirstin practices and lives in the Pacific Northwest (Oregon and Washington states in the USA) with her spouse and their two small dogs.

For more information on Kirstin and her classes go to www.agilebodysi.com Kirstin will also be teaching in Australia early 2019





## EXPLORING THE BRIDGE between CRANIOSACRAL THERAPY and STRUCTURAL INTEGRATION

## Lauren Christman

hen I came to study with Tom Myers, I had been practicing structural bodywork (which was a major focus of the massage school where for eight years. During the same period, craniosacral work captured my imagination and curiosity so much that it became my primary focus and identity as a practitioner. When my husband, also an advanced bodyworker, passed me a copy of Body3, Tom's essays about regional anatomy, I knew that I wanted to study with him to deepen my anatomical knowledge. When I began training in KMI (now ATSI: Anatomy Trains Structural Integration), I didn't really understand that I would be receiving an education in the lineage of Ida Rolf. "Rolfers" were those folks who worked so hard on their clients that bruises might surface after a session. The work was deep, intense and decidedly yang. Me? I was a craniosacral practitioner, helping the body find health through light touch, fluid patterns, emotional expression, and changes of consciousness. Very vin. Now what?!



That was the beginning of a rich consideration of how structural bodywork and craniosacral work, superficially so different from each other, are actually quite complementary, sharing roots in osteopathic principles. In my practice and teaching, I often come upon misconceptions that get in the way of appreciating this complementarity. I am forever grateful to Tom that he never asked me to choose between the two methods. In fact, he gave me an intellectual framework that was big enough to include both of them: spatial medicine.

#### It's not about the pressure!

There's an obvious difference between the pressure that's applied in craniosacral therapy (classically, 5 grams) and in ATSI (many pounds). Independent of the attitudes that might accompany each level of pressure, or the skillfulness of the practitioner (for the sake of argument, let's imagine the best of each method), we appreciate that the degree of pressure used is never constant. It varies depending on the individual client (constitutional differences, sensitivities and particular problems), the structures involved, treatment goals and the arc of treatment. Often, during classroom

demonstrations, students ask, "How much pressure are you using?" My typical answer is, "Just enough." We use enough pressure to engage and positively affect the structure we're addressing. In myofascial work, we appreciate that engaging superficial layers (pec major) requires a different degree of pressure than engaging the deepest layers (subcapularis). In craniosacral work, we would use a lighter touch for engaging the delicate greater wings of the sphenoid than for the much more robust mandible. How do we discover how much pressure is needed in each instance? We start with light pressure and increase until we find the appropriate amount. "Just enough" is an intimate and dynamic reality.

# Styles of touch, aspects of movement

American osteopath James Jealous, in an analogy to the nervous system, distinguishes between "afferent" and "efferent" modes of engagement with the client. Afferent or "receptive" touch is when our contact and focus orient to incoming stimulus. We let the body "come to us." This is vital

when perceiving subtle movement patterns or the shape of highly malleable tissue such as organs. Efferent or "expressive" touch exerts pressure into the tissue and gathers information through outgoing interaction. We glide one structure relative to another in assessment, feeling for a motion barrier; we compress, decompress, lift, stretch, separate structures. This is particularly useful when encountering dense restrictions that have lost their capacity for subtle movement. We can easily see the limitations at either end of this spectrum. In highly efferent structural work, we can engage the tissue vigorously, but if we become so enthusiastic that we fully compress the tissue, we risk losing our ability to perceive change in the client's tissue and may only perceive our own effort. Conversely, in craniosacral work, we use our afferent listening skills to perceive the complexities of the client's system, but if we do not actively stay grounded energetically and cognitively (efferent through our own system), we risk merging our subtle field with theirs, losing clarity of perception and intent.



We float away together with the client and lose the opportunity of a therapeutic event. When we look at examples of excellent care, we see that both afferent and efferent qualities are present.

#### (See Figure A)

Living alongside afferent and efferent styles are two aspects of movement: motility and mobility. Motility (sometimes called inherent movement) is movement generated by internal forces. All living cells have motility; movement is one requirement of being alive. Craniosacral therapy orients to subtle, wave-like patterns of motility, both local and systemic.

Motility is like the hum generated by the movement of bees' wings we could focus locally on one bee and hear its vibration, or we could listen more broadly and hear the cumulative vitality of the whole hive. Perception of these patterns requires honing one's attention and afferent skills.

Mobility, on the other hand, is movement generated when one part of the body exerts a force that changes the position or shape of another part. Muscles mobilize bones with every gesture. The diaphragm mobilizes both the lungs above and the liver below with every breath. Mobility, like motility, is both local and systemic: gestures may be small or large, but the body organizes movement in holistic patterns. As bodywork practitioners, we mobilize the bodies of others sometimes for local effect, sometimes for systemic change.

A Structural Integration series offers a sequence of interventions designed to intelligently manifest this local-tosystemic relationship. Readers of this magazine who are familiar with the ATSI series will recall that it has three phases: the sleeve sessions (superficial layers/cardinal lines), the core sessions (deepest layers/deep front line) and the integration sessions.



The series is progressive: each session prepares the system for the next, building momentum, and the peak of the arc is the "head and neck" session.

## *Culmination of the core sessions: the head and neck*

Like the peak of a wave or a breath, a process reaches a high point and then shifts: rising to falling, inhale to exhale. As we pass over the peak, the forces at play begin to transform and reorient toward what comes next. In the ATSI series, freeing the structures of the head and neck stands as the threshold of transformation. Ida Rolf once characterized the aim of this session as "freeing the mask"—lifting away the fascial imprint of identity and interaction that we learn in early childhood and that gets reinforced with daily experience.

The session generally has three levels of treatment: superficial myofascia, deep myofascia and the bones of the face.

• Addressing the superficial myofascial layers of SCM, trapezius, levator scapulae and splenius cervicis, we align the position of the head and neck above the trunk.

• Working with the deeper layers of myofascia around the jaw (hyoids, pterygoids and tongue) we gain enhanced function locally and prepare for an even deeper layer.

• Decompressing the bones of the face (the maxillae) via intranasal work.



Treating the external musculature of the head and neck is common to most forms of massage; working with the myofascia inside the mouth is less common and requires more sensitivity of touch. This brings us to the nose! Intranasal work is a unique component of the ATSI series, coming as the culmination of a full-body process of differentiating fascial relationships.

Let's take a closer look at the relevant anatomy to better understand session design. On an architectural level, the head can be divided into three sections:

• the cranium: the "balloon" or sphere of bones that houses the brain and sits atop the spine;

• the face: a group of bones that houses most of the special senses, air sinuses and upper teeth and 'hangs' off the front of the cranium; and

• the mandible: technically, an appendage, attached via the TMJs, ligaments and muscles of mastication.

The face sits outside the cranium, anterior and inferior to it. (See figure B.) French osteopath Bruno Ducoux, my first craniosacral mentor, likens the face to the basket of a hot air balloon, because the sutures nestle together such that the bones "hang" from the frontal bone at the bridge of the nose. For those of you who have studied embryological development, you'll remember that this is a key area of connection between the endodermal layer (viscera and anterior tissues) and the ectodermal layer (central nervous system and posterior tissues). (see figure C) In the face, this area can get compressed, from jaw tension, injury or posture, impairing sinus drainage and adding to eye strain or headache patterns.

The facial bones, generally, are thin and responsive to light pressure. Here, using efferent touch to mobilize also requires heightened afferent awareness to not over treat, because "just enough" is usually more pressure than typical craniosacral work, but much lighter than most structural workers typically use. By gently inserting the pinky into the nasal passage, the practitioner is able to decompress the central bones of the face: the maxillae. The maxillae contain the upper teeth and the largest air sinus, and form the inferior surface of the orbit. (See figure D) Mobilizing them has many benefits: releasing compression from chewing (especially grinding the teeth), resolving blows to the face,

and addressing neuromotor strains linked with bite, a deeply set movement pattern. Widening the maxillae also allows for greater sinus mobility and drainage, and creates the opportunity for increased freedom of movement in adjacent structures.

Freeing the maxillae makes way for the sphenoid, which sits behind them at the back of the eye socket. This intricate bone houses the pituitary gland, the deepest air sinus, and passages for a majority of the cranial nerves. The sphenoid is as central to craniosacral work as the psoas is in postural/structural work. Beyond the sphenoid, we find central brain structures (i.e., hypothalamus, thalamus, limbic system), the deepest fascial layer (the dura), and the brain itself. Gaining freedom in the bony layer of the face creates an opportunity for the cranium to move well — both in motility (think of all the physiological activity!) and in mobility.



this that we are now created the body cell by cell like bees building a honeycomb. Hhe human body and the universe grow from this not this from the universe and the human body.

rumi



ATSI aims to FREE THE WHOLE BODY from fascial restriction



We don't generally think of the cranium as being mobile, but it is designed to be responsive and adaptive to the full-body forces of walking, bending, twisting, as well as to life's bumps and insults.

The ATSI head and neck session just dips its toe (or pinky) into the water of the facial bones and sutures, in a sensitively efferent style. Craniosacral work lives in that water, in a relatively afferent style. Part of the potential in familiarity with both systems is

> finding the best place to be, in a given situation, to meet the presenting pattern of the client, locally and systemically.

Once the structures are free, we look for a process of integration, in which the system can reorient, explore

new or recovered functions, and allow for a categorically new form of health to express itself. ATSI aims to free the whole body from fascial restriction, enliven the client's proprioceptive map, and educate the client about balance and body usage.

Craniosacral aims to free the whole body from cranial injuries, fluid inertia and autonomic trauma, allowing for the inherent physiological health to be optimally expressed — rejuvenating the 'hum' of the beehive. Rather than choosing between one approach or the other, we can draw from each, appreciating the complementary dance between form and function in the human body.

#### This

that we are now created the body cell by cell like bees building a honeycomb. The human body and the universe grew from This, not This from the universe and the human body.

- Rumi

Lauren M. Christman, LMP, CCST, CBSI/KMI December 2017

For more details of Lauren's workshops go to www.craftedtouch. com: Lauren will also be presenting at the Anatomy Trains summer school in Maine; July 28th - 30th

Lauren Christman, LMT, CCST, CBSI/ATSI A bodyworker since 1994, Lauren integrates craniosacral, visceral manipulation and structural integration for children and adults. From 2005-13, she taught AT and ATSI courses in the US and UK. Since 2007, she developed her own coursework in craniosacral, intraoral and pediatric approaches. With over 18 years experience teaching beginning and advanced students, Lauren brings a balance of precision, curiosity and humor to the classroom. With her husband, she has authored numerous articles and a chapter on Structural Bodywork in "Integrated Pain Management" (Handspring, 2016).

# ANATOMY TRAINS AND PODIATRY

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This Is What Anatomy Trains Did For Me by Dr Suresh Sivacolundhu, CEO and Senior Podiatrist, The Foot Clinic,

PERTH, AUSTRALIA.

For 25 years I have been practicing the science of Podiatry. I have worked with some of the top athletes in the world at the Olympics, Commonwealth Games and World Championships and have taken that experience to our local mums and dads, their kids and grandparents. I practiced podiatry having been taught that injuries and postural problems can be addressed by orthotics, footwear, and muscular stretching and strengthening exercises. But there was always something inside me, or a little voice on my shoulder, saying that there was something missing, something beyond what we had been taught at University and at Sports Medicine conferences. My lightbulb moment was when I met Julie Hammond at my first



Anatomy Trains workshop. I was familiar with proprioception but Julie and her team introduced me to a level of neuromuscular biomechanics that I was unaware of, and I began to understand the importance of this reflexive postural balancing mechanism. I understood and liked the concept of the tensegrity model and myofascial lines which connected our feet to the rest of the body but wondered how much does it really affect our posture? That question was answered during our 3-day workshop. After seeing the changes to each other, and after feeling the changes to my own body, I was hooked. I literally felt ten years younger and my chronic (7 year) common hamstring origin injury felt almost 100%. I knew this was the missing link, the pathway forwards for me, the beginning of the rest of my career in podiatry and my pursuit of excellence in movement longevity.

That was a year ago now, and I have been crazily working on evidence based treatment protocols for "Building Better Bodies, From The Feet Up". My work is now categorised into Extrinsic Treatments to support and stabilise ourselves in the short term, and Intrinsic Treatments to create lasting strength and resilience within our bodies. The first line of treatment we utilise to create intrinsic strength and resilience within our patients' feet and legs is to provide Foot Mobilisation Therapy (FMT), Anatomy Trains Structural Integration Therapy (ATSIT) and Power Plate Proprioceptive Stimulation Therapy (PPST). The results are instant. Our patients feel their feet are lighter, their arches are higher, they have a more even distribution of pressure across the ball of the foot and heel, and they feel more stable. Inevitably their NRS pain scores are significantly reduced. We do have to explain to our patients that this awesome sensation they are experiencing won't last forever, but we can work towards it lasting forever with the help of an ATSI practitioner, a Pilates based exercise program for core strength and dynamic yoga for fascial fitness. I also explain to our patients that when it comes to movement longevity, neuromuscular strength (fascial fitness) will always trump musculoskeletal strength, so it is vital to focus on their reflexive stability first.

I have been refining these techniques for a year now and have noticed massive changes to the speed at which patients recover from heel pain, Achilles tendonitis and Mortens neuromas.



. Just last week a patient came in with a radiographically diagnosed 11mm Mortens neuroma, associated with a pronated foot position, low Subtalar Joint axis and unlocked midfoot during propulsion. After one session of FMT, ATSIT and PPST her NRS pain score went from 5/10 to "I can't feel it!" Once I explained to her the science behind her "miraculous recovery", she wanted to tell everyone.

I also successfully treated an emergency doctor with knee pain using the same treatment protocol and Foot To Core Integration (FTCI) exercises (courtesy of the amazing Dr Emily Splichal, Evidence Based Fitness Academy, New York City). She then told her Neurologist sister who referred one of her patients to see me with chronic neuropathic pain. I was understandably nervous as we were unsure of the nature of her neuropathy. I explained to her that what we were doing may or may not help but she was at the point where she was willing to try anything.



We performed FMT, ATSIT and PPST and her NRS forefoot pain score went from 8/10 to 4/10. This was a massive achievement as she had not had that level of pain relief in three years. We then had a discussion regarding what else we could try and decided on a Low Level Laser treatment (PBMT) modality. When she stood up she began to cry because she was virtually pain free. I can't tell you how good it feels to give that to someone - I even have goose bumps and a lump in my throat while typing this.

I have to thank Julie Hammond at Anatomy Trains Australia for this gift of knowledge, as it has truly transformed my way of treating patients. I love what I can now do for them. But I also let them know what I'm doing at The Foot Clinic is really quite selfish as I'm also doing it for my own benefit. I thought when I tore my hamstring in a wakeboarding accident seven years ago that I would never get back to running competitively again. I even tried running at the World Masters Athletics in 2016 but ended up in the bottom 10% of athletes.

I have been fortunate enough to have Julie work on me in the latter half of 2017, in between her busy work/training schedule overseas and interstate. I'm also doing regular core strength classes and yoga classes in an attempt to follow the rule "do as I say AND as I do". Now, at 48 years old my Fitbit tells me I'm in the "Excellent" cardiofitness range for men 40-49. I'm doing the odd parkrun on a Saturday morning with my wife and three kids, and even the occasional parent sprint event at Little Athletics. Thanks to Julie and Anatomy Trains I now am confident that come 2019, the year I turn 50, my experience at the World Masters Athletics will be a very different one!





NOIA

# COURSE SCHEDULE 2018/19



Tom Myers Author of Anatomy Trains

#### Australia & Asia - 2018 Courses

Date	Course	Lo
6-7 Jan	Tensegrity Spine	Syd
13-14 Jan	Tensegrity Spine	Me
20-21 Jan	Tensegrity Spine	Pe
17-19 Feb	AT S&F	Ja
23-25 Feb	Arches & Legs	Ac
3-4 Mar	Shoulders & Arms	Me
3-5 Mar	Fans of the Hip	Ac
March	AT in T	TBO
10-11 Mar	Shoulders & Arms	Syd
23-25 Mar	ATiM	Syd
31/03-01/04	Shoulders & Arms	Pe
7-9 April	Abdomen, Chest & Breath	Ac
6-8 April	AT S&F	Нс
5-6 May	Tensegrity Spine	Ac
12-13 May	Head, Neck & Jaw	Pe
26-27 May	Head, Neck & Jaw	Syd
2-3 Jun	Head, Neck & Jaw	Me
9-10 Jun	Shoulders & Arms	Ac
23-24 Jun	Joe Muscolino COMT	Pe
30/06-01/07	Slings Essentials	Syd
7-8 Jul	Head, Neck & Jaw	Ac
July	AT in T	TBO
1-3 Sep	Slings in Motion 1	Syd
7-10 Sep	Sharon Wheeler Scar Work	Pe
14-17 Sep	Sharon Wheeler Scar Work	Syd

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#### New Zealand - 2018 Courses

Date	Course	Location
10-11 Mar	Shoulders & Arms	Auckland
19-20 May	Head, Neck & Jaw	Auckland
10-12 Mar	ATIM	Auckland
16-18 Mar	ATIM	Christchurch
19-20 May	Head, Neck & Jaw	Auckland
23-24 Jun	Slings Essentials	Christchurch
7-9 Sep	Slings in Motion 1	Christchurch

#### ATSI Part II – Sydney

20-30 Aug 2018 (25 August 2018 Day off)

#### ATSI Part III: Structural Integration – Perth

Block 1 - 4 January - 21 January 2019 (10 & 16 January 2019 Days off)

Block 2 - 5 February - 21 February 2019 (10 & 16 February 2019 Days off)

For further information and to register: www.anatomytrainsaustralia.com E: info@anatomytrainsaustralia.com T: +61 415 707 130

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# EACHER INFOCUS

Michael Watson



uring my university years, I heard my professor proclaim that '..a career is something you do while you look for your ideal job'. That in some way, life is a series of fortunate or unfortunate events that guide you. Each moment takes you to the next and voila!!

It was a wet autumnal New York day in 1999. I had embraced the calling several weeks earlier to enrol with this guy called Thomas Myers at a workshop at the Breathing Project in Mid-town. A brief search on the internet led me to the Anatomy Trains website. The calling was more of a scream for help; a strong realisation that actually my previous three years at university had ill-equipped me for working with the human body with any depth of knowledge or understanding.

The topics were 'Anatomy Trains - An Introduction' and 'Intrinsic Muscles of the Pelvis'.

Intrigued and slightly nervous I made my way to NYC.

Within minutes of hearing Tom speak, a small quiet voice inside began to call out loudly. My Sadguru (inner teacher) was smiling from within. The word integration was interjected between sentences with purpose and poise. This word 'Integration' was the main theme of my dissertation concerned with the segregation of Paralympic athletes from the Olympic movement. Tom's languaging and vocabulary describing the Anatomy Trains lines, formed and functioned as Integration - a language I could understand. My love for Structural Integration was born. I look back to that moment and wonder today - how many students of Anatomy Trains go through that experience? Personally and professionally. The 'ah ha' moment.

This remarkable introduction to Anatomy Trains and Tom's work cemented my path of learning towards the full KMI training just two years later.

Prior to Anatomy Trains, I had studied Pilates with the late Romana Krysonowska in the classical style. I moved allegiances with time to Joan Breibart and Eve Gentry's Pilates approach of working more specifically to the client's needs. At the same time, yoga had been a regular mainstay in my daily routine. Along with the hundreds of yoga wannabe's, I took a 200-hour training to try to solidify my years of practice. At the age of 20, my first yoga teacher was an Octogenarian with purple hair and pink lipstick who had persuaded me to take up the practice as a way to offset the damage I had sustained from playing rugby and competitive sprinting. My inner warrior on the rugby field and track initially struggled with the passiveness of yoga. Power Yoga had not yet emerged and therefore the three poses an hour with pranayama had to suffice.

Through perseverance, and often a firm boot to kick the ego into touch from my many yoga teachers, I began to learn the value of calmness and inner stillness. Above all else, this was the most important lesson I could have received. In any moment, I learnt, there was a time for growth and change.



between stimulus and response there is a space. in that space is our power to choose our response. in our response lies our growth and our freedom.

frankl.



"Between stimulus and response there is a space. In that space is our power to choose our response. In our response lies our growth and our freedom." Frankl.

I love this quote!!!!

KMI Structural Integration started to become the way in which I saw the Pilates and yoga movement I was teaching, the way my clients were standing and showing up in their bodies and, undeniably, a powerful tool for change.

So much so that a huge part of my life in recent years has been to offer Structural Integration sessions internationally outside of my home base in Bermuda, with travelling practices in Switzerland, USA, Netherlands and London. I have seen and experienced how widely accepted Structural Integration has become.

As a continued part of my professional growth and a desire to spread the benefits of Anatamy Trains and Structural Integration, I enrolled into the Anatomy Trains teacher training program in Maine in 2010. Along with fifty other students we spent three weeks breaking down pedagogy, understanding the Anatomy Trains lines and re-establishing our own connection to the work. Although a graduate of the KMI program, a revisit to the essence of the work was welcomed. Tom took us back through the Structural Integration story, how Ida Rolf told her 'story'. Back through the recipe that makes the 10/12 series work so powerful. At this time, I had already been teaching as a regular at yoga retreats, Pilates conventions and on continuing Ed courses for personal trainers and fitness teachers. I also knew how the Anatomy Trains lines were the missing piece for many who were still trying to struggle using inefficient language and 'the old story' of how the body functions.

After completing the teacher training, several months of teacher assisting followed. Trips to Switzerland, California, New York and finally Sweden led me to lunch with Tom for the infamous 'Tom Test'. Now, for all graduates who wish to teach, the Tom test is a must. No one moves on without the approval of Tom Myers. I've never sat in on any other Tom tests so I can only recount how it was for me. Thankfully and as history will say... I passed but with one condition. "if it's a deal breaker then no problem" Tom said. "But would it be at all possible for you to wear a shirt with a collar?" A hand shake of acknowledgment was made and I was welcomed into the teaching faculty of Anatomy Trains.My first gig was not



an easy one. A phone called was made, an email was sent and within just a couple of months I was stepping in for James Earls in Ukraine. Not only was it my first Anatomy Trains teaching role but also my first time teaching through a translator.

Skip forward seven years and Anatomy Trains has taken me to every corner of the world with the exception of Africa and Australia. Although there is still much to be learnt and understood, the teaching role has allowed me to explore and be even more curious about my own journey. Perhaps in some way I have found the ideal job and somehow made a career out of it. Michael Watson is a certified Anatomy Trains® educator, Kinesis Myofascial Integration practitioner and esteemed movement specialist. His 20 years' experience in sports science, Feldenkrais, Pilates and Yoga takes him from Bali to Budapest teaching the interconnectedness of movement and health.

Michael has been a guest speaker at numerous conventions worldwide. Notable appearances include: British Fascial Symposium (2014), Fit Pro Convention (2014), San Francisco State University (2009)

A proud father of three home birthed children, Michael is also a natural birth advocate. He works progressively alongside his wife at his home base of Bermuda in bringing awareness to birth and reforming birth options for women.

## COURSE SCHEDULE 2018/19

ANATOMY TRAINS

Tom Myers Author of Anatomy Trains

#### European Courses - 2018/19

Date	Course	Location	Jun 1-3	Abdomen	Torun
2018 – Ana	tomy Trains Stuctur	e and Fuction		Chest & Breath	
Feb 8-10	AT S&F	Amsterdam	Jun 8-10	Tensegrity Spine	Amsterda
Feb 15-18	AT S&F	Oslo	Jun 9-10	Head Neck & Jaw	Torun
Mar 8-11	AT S&F	Vienna	Jun 29/30- Jul 1	Fans of the Hip	Oslo
Mar 15-18	AT S&F	Warsaw	Jul 6-8	Tensegrity Spine	Oxfordshire
Mar 16-18	AT S&F	Belgrade	Aug 25-26	Tensegrity Spine	Torun
Apr 19-22	AT S&F	Gdansk	Aug 23-20 Aug 31-	Abdomen	Oslo
May 4-6	AT S&F	Dortmund	Sep 2	Chest & Breath	0310
May 11-13	AT S&F	Zagreb	Sep 7-9	Shoulders & Arms	Amsterdar
May 17-20	AT S&F	Poznan	Sep 7-9	Arches & Legs	Torun
May 18-21	AT S&F	Soborg	Sep14-16	Shoulders & Arms	Oxfordshire
May 31-Jun	a 3 AT S&F	Antwerp	Sep 14-16	Abdomen	Zagreb
Jun 15-17	AT S&F	Manchester		Chest & Breath	
Jul 5-8	AT S&F	Poznan	Sep 29-30	Shoulders & Arms	Torun
Sep 7-9	AT S&F	Oslo	Oct 6-7	Head Neck & Jaw	Oxfordshire
Oct 19-21	AT S&F	Budapest	Oct 13-14	Head Neck & Jaw	Amsterdar
Nov 9-11	AT S&F	Clare	Nov 9-11	Tensegrity Spine	Oslo
Nov 16-18	AT S&F	Exeter	Nov 10-11	Head Neck & Jaw	Torun
2018 – Struc	ctural Essentials		Nov 23-25	Fans of the Hip	Torun
Feb 2-4	Arches & Legs	Amsterdam	Dec 1-2	Tensegrity Spine	Zagreb
Feb 2-4	Shoulders	Dortmund		ctural Essentials (cont	inued)
E I 1/ 10	& Arms	-	Jan 17-19	Shoulders & Arms	Oslo
Feb 16-18	Abdomen Breath & Chest	Torun	Jan 29-31	Arches & Legs	Budapest
Feb 16-18	Fans of the Hip	Amsterdam	Mar 8-9	Head Neck & Jaw	Oslo
Feb 22-	ATSI Part II	Torun	May 15-17	Abdomen	Budapest
Mar 4		loidii	Mar. 10.10	Chest & Breath	Development and
Feb 23-25	Abdomen	Clare	May 18-19	Tensegrity Spine	Budapest
	Breath & Chest		Sep 25-27	Shoulders & Arms Head Neck & Jaw	Budapest
Mar 2-4	Arches & Legs	Oxfordshire	Sep 28-28	Head Neck & Jaw	Budapest
Mar 9-11	Arches & Legs	Torun	2018 – Tom	Myers European Tou	ır
Mar 12-20	ATSI Part II	Exeter	Apr 07-08	The Female Pelvis and	Flesland
Mar 16-18	Abdomen Breath & Chest	Amsterdam	May 09-10	Cycles of Life ATIM A look	Bogis-Bosse
Mar 17-18	Tensegrity Spine	Clare	(SOLD OUT)	Behind the Curtain	0
Mar 23-25	Fans of the Hip	Zagreb	May 11-12	Anti-Fragile	Bogis-Bosse
Mar 24-25	Tensegrity Spine	Torun	(SOLD OUT)	Fascia: Resilience,	
Apr 6-8	Arches & Legs	Oslo		Repair and Body Learning	
Apr 13-15	Fans of the Hip	Oxfordshire	May 14-15	The Physiology	Bologna
Apr 21-22	Shoulders & Arms	Clare	101019 14 10	of Emotional Release	Dologi la
Apr 28-29	Head Neck & Jaw	Dortmund	May 19-20	Resilience: Taking the Strain	Piacenza
May 4-6	Arches & Legs	Clare		and Čoming	
May 11-13	Fans of the Hip	Torun		Back Stronger	
May 19-20	Shoulders & Arms	Torun	May 25	BodyReading Masterclass	Cambridg
May 29- Jun 9	ATSI Part II	Oslo	May 26-27	The Female Pelvis and Cycles of Life	Cambridg

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#### USA - Advanced Courses

#### Walpole Maine

Movement Immersion	Tom Myers	July 6th - 8th
OD on Movement	lan O'Dwyer	July 9th - 10th
Zoga	Wojtek Cackowski	July 11th - 13th
The Embryo in Us	Jaap Van der Waal	July 18th - 21st
Breath and Bliss Immersion	July 22nd - 24th	
Aston Postural Assessmen	HJudith Aston	July 25th - 27th
Balancing the Face for SI	Lauren Christman	July 28th - 30th
Bone Work	Sharon Wheeler	July 31st - Aug 4th
Advanced SI – Closing a Session	Liz Stewart	August 5th - 7th
Upper Extremity	Ron Murray	August 8th - 9th
Movement Immersion	Tom Myers	August 10th - 12th
ATSI Advanced Part II	Tom Myers	August 13th - 15th

#### USA - Fascial Dissection with Tom Myers

January 8th - 12th, 2018

#### February 5th - 9th, 2018

#### USA – Anatomy Trains Structural Integration Certification (ATSI)

#### Part One: Structural Essentials

Tempe, AZ

Tempe, AZ

September 7th - 9th: ATS&F (pre-requisite) September 11th - 27th: Structural Strategies (days off September 16th & 24th)

Part Two: Structural Strategies October 29th - November 9th (days off November 3rd - 4th)

Part Three: Structural Integration

March 25th - April 6th (days off March 31st - April 1st) April 29th - May 10th (days off May 4th - 5th) June 4th - 15th (days off June 8th - 9th)

Demonstrating touch depth

