

FASCIA NEWS January 2018

A sporadic info-letter of the Fascia Research Group, Ulm University, Germany

Dear colleagues,

In case you receive this info-letter for the first time, then we probably heard from you in the past that you were interested in our courses or products in the fascia field. We plan to distribute these FASCIA NEWS between 1 and 4 times per year; not more. In case you are not or no longer interested in this, you can simply reply to this mail with the word ,UNSUBSCRIBE' in the text. Alternatively you also have a chance to unsubscribe at the end of this newsletter.

Internat. Fascia Research Congress, Berlin, Nov. 14-15, 2018

The first Fascia Research Congress, held at the grounds of Harvard Medical School, in 2010, served as an important catapult for the field of fascia related scientific exploration. The repercussions from that congress, including they positive report in the prestigious Science journal, motivated many researchers and clinicians putting fascia into the foreground of their personal attention. This congress series has been extended into now a tri-annual rhythm, with Amsterdam (2009), Vancouver (2012) and then Washington (2015) as the next stations. The congress usually hosts 600 to 900 international participants, and includes the leading scientific researchers as well as clinicians in the field as presenters. Participants are mostly physiotherapists, MDs, osteopaths, chiropractors, and other manual therapists, movement scientists, yoga/Pilates instructors, athletic coaches, surgeons, veterinary therapists, surgeons, naturopaths, and others.

In 2018 this highly esteemed international congress takes place for the first time in central Europe; i.e. in Berlin on November 14/15th. It will be hosted at the well-known Urania center at the city center of Berlin, a venue with a rich history for scientific interactions, at which already Albert Einstein, Wilhelm Roentgen and Thomas Edison presented their pioneering ideas in personal lectures and discussed them with peers.



Promising topics at this upcoming congress will be – from our perspective – new insights about the *primo-vascular channels* in fasciae, the interactions between proand anti-inflammatory cytokines in the matrix, the particular role of the perimysium in fibrotic pathologies, the training adaptation of tendons in different exercise methods, novel imaging and other assessment methods for fascial tissues, the influence of fascial stiffness on cancer development, among others.

The congress website www.fasciacongress.org has opened its doors for registrations since a few days. Based on the high interest in this congress as well as the inclusion of a simultaneous German translation this time we highly recommend an early registration in order to secure your place.

Additional educational events

Among the many different educational events within the fascia field we want to particularly emphasize the following two rare opportunities.

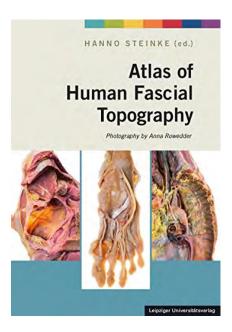
A fascial prosection course will be held at the Plastinarium in Guben/Germany on July 27.-29, 2018. Instructors are Prof. Carla Stecco and Dr. Robert Schleip. It includes the use of human body donors and places a special focus on visceral and meningeal fasciae. Detailed information will be available after Feb. 1st at www.fasciaresearch.de

We also highly recommend the functional anatomy course with a strong fascial emphasis of Prof. Andry Vleeming and Prof. Henryk Lexy, held at the Charité in Berlin on May 10-13, 2018. Likewise, an early registration is recommended: https://preview.tinyurl.com/y817td3m



New fascial anatomy book

The first fascial anatomy atlas, published in early 2015 by Prof. Carla Stecco, served as a milestone in the field of macroscopic human anatomy. It has become ,a classic' in the field of fascial anatomy (see https://preview.tinyurl.com/y9y7efqv). In a few days, we will be enriched by a second fascial anatomy book, this time by Dr. Hanno Steinke (an assistant professor at the University of Leipzig, who was a main contributor at our last Fascia Research Summer School) in cooperation with the awardwinning German photographer Anna Rowedder. The photographic images in this book are most impressive, as they are most carefully dissected and illuminated to



enhance perceptual clarity. Preorders are possible: https://preview.tinyurl.com/ycpskqj5

New assessment tool: IndentoPRO

Some of you have known that one of our favorite obsessions at Ulm University in recent years has been the development of improved measurement tools for fascial properties. For this purpose, we have collaborated with multiple international experts and laboratories since 2011. It is therefore our great pleasure to announce the availability of our new tool for measuring the tissue properties in fasciae located up to 2 cm under the skin.





It will be an intriguing challenge to find out whether it will be able to beat the palparatory sensitivity of a well-trained human hand (e.g. of an experienced osteopath or Rolfer) or not. A non-serious opportunity to explore this question will be given at the upcoming Fascia Research Congress in Berlin (described before), where are "Man versus Machine- Contest" will examine the question whether this tool will be able to recognize small differences in the stiffness of various phantom-gel pads more accurately than the best naked hands among the hundreds of participants. A valuable hint for your preparation: According to a recent study published in Manuelle Medizin: a training in mindfulness based exercises and meditation has been shown to increase palpatory perception (https://link.springer.com/article/10.1007/s00337-013-1069-x)

In addition to an assessment of tissue stiffness with a variable indentation depth between 2 mm and 15 mm, this novel tool also allows for a quantification of the elastic storage capacity of the tissue (visco-elastic properties, via repeated measurements in short distance) as well as a

determination of the Pressure Point Threshold (PPT, or algometer function).

For those interested: first prototypes of this tool have become available since 01.01.18 (see https://preview.tinyurl.com/ycmtz7ql). An industrial serial production – then with an official medical product certification – is expected for 2019. We are looking forward to our related continuing collaborations with our colleagues at the Professorship of Human Locomotion at Chemnitz University.

RESEARCH NEWS

Within the rapidly advancing field of fascia related research publications, let us – for the sake of brevity – comment on the following two only.

Fibromyalgie: an inflammatory disorder

Fibromyalgia includes the occurrence of chronic widespread musculoskeletal pain. Up to recently the only agreement among researchers about the explanatory mechanism of this pathology related to an amplified sensitization dynamic of the central nervous system. In contrast, lots of controversy continued to exist whether there are additionally also any peripheral changes outside of the brain and spinal cord. A new Swedish study, recently published in *Journal of Pain Research*, will give this discussion a drastic push forward. The researchers were able to demonstrate that fibromyalgia goes along with an



altered expression of inflammatory cytokines in the body. In addition to the presence of neuro-inflammatory cytokines (such as ,fractalkine', whose concentrations are increased in the cerebrospinal liquid in these patients) there are also clear signs of a ,systemic inflammation' (e.g. as expressed in altered values of interleukin-8 in the blood plasma). Details at: www.ncbi.nlm.nih.gov/pubmed/28424559 The authors conclude that fibromyalgia "seems to be characterized by objective biochemical alterations, and the lingering characterization of its mechanisms as essentially idiopathic or even psychogenic should be seen as definitively outdated." In addition, it

opens novel avenues for exploring anti-inflammatory interventions for this widespread myofascial pain pathology (via nutrition, movement, medication, meditation, manual therapy, ...).

Back pain: Feeling stiff is mostly driven by protective perceptual interference

Concerning chronic low back pain a new study from the group around Lorimer Moseley seems to place the emphasis more in the opposite direction. These Australian researchers demonstrate in a series of ingeniously designed experiments that perception of stiffness "does not relate to objective spinal



measures of stiffness and objective back stiffness does not differ between those who report feeling stiff and those who do not. Rather, those who report feeling stiff exhibit self-protective responses: they significantly overestimate force applied to their spine, yet are better at detecting changes in this force than those who do not report feeling stiff." They demonstrate how this perceptual error can be easily manipulated by providing an auditory input in synchrony to forces applied to back, which "modulates prediction accuracy in both groups, without altering actual stiffness, demonstrating that feeling stiff is a multisensory perceptual inference consistent with protection." See www.nature.com/articles/s41598-017-09429-1. Hint: The three video clips posted at the very end under *,Electronic supplementary material* are quite intriguing.

We suggest that this study supports the question whether the pain-inhibiting effect of myofascial treatments may often be less a direct result of local tissue changes than it a consequence of indirectly induced cortical changes in the patient; i.e. that their brain learns to attenuate their learned protection mode in relation to a given body part.

Arte TV documentary of fascia: January 27



The well-known TV channel ,arte' will be airing a 53 min. documentary on fascia, on Saturday 27.01.18 at 10:50 pm in Germany. Be prepared for an even larger impact of this new TV documentary in comparison to TV documentary on fasica from ,Quarks & Co' several years ago, which triggered many subsequent media reports on fascia in print, TV, and radio. The new arte-TV report includes live shootings with Prof. Carla Stecco in Padua, with Helene Langevin MD in Vermont, with the american author and therapist Tom Myers in Maine, with the German sports medicine researcher Dr. Jan Wilke in Frankfurt, with the French surgeon Dr. Jean-Claude Guimberteau in Bordeaux, with our Fascia Research Group of Ulm University (in the lab as well as during surgery), as well as many other interesting features. In case you miss this first time, the documentary can be expected to be repeated several times in subsequent weeks/months. In addition, a translation and screening in other languages is most likely. The video can be viewed at the ,Mediathek' until 26.02.18. More at: https://preview.tinyurl.com/yd4exgg8

Supporting Fascia Research with AmazonSmile



A final hint: If you order via Amazon, you have the option to enter, *Verein zur Förderung der Faszienforschung e.V.*' as recipient under www.smile.amzon.de. Once done, it will result in Amazon donating 0,5% of your future purchases to our research charity association. While not resulting in any

additional costs for yourself, this quick and simple online gesture will continue to support our on-going research work.

So far the latest news from the fascia research field as seen through the perspective of the small Fascia Research Group at Ulm University.

Fascianatedly yours
Dr. Robert Schleip and Fascia Research Team

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