

# FASCIA NEWS September 2018

A sporadic newsletter from the Fascia Research Group, Ulm University

Dear colleagues,

We are pleased to share with you some new information relating to the field of fascia. This time we start with organizational matters right at the beginning; scientific news follow afterwards.

## Additional activities around the Fascia Congress



The international [www.fasciacongress.org](http://www.fasciacongress.org) in Berlin, planned for 14/15 November 2018, which is held every three years, has already reached maximal enrollment capacity. Currently, the possibility is being explored for late registrants using another large room in the conference center for the plenary lectures. Furthermore, a congress on the topic of *Fascia in the Osteopathic Field - in Clinical Context* ([www.osteopathie-schule.de/osteopathy-congress-2018](http://www.osteopathie-schule.de/osteopathy-congress-2018)) will be held in the same building immediately afterwards.

On the evening of November 13<sup>th</sup>, 2018 an additional event '*Artistic Views on Fascia*' will take place, which contains several artistic contents about fascia, among them the premiere of the movie '*The Secret Life of Fascia*' by Bruce Schonfeld. More under [www.fascia-art-berlin.eventbrite.com](http://www.fascia-art-berlin.eventbrite.com)

## Additional workshop with Thomas Myers

As usual, several optional pre-congress workshops will take place. Here - not surprisingly - the workshop of Thomas Myers (USA) was already fully booked after a short time. The organizers are therefore all the happier to be able to announce an additional workshop with Tom Myers for 12.11.18. More under <http://myers-workshop-nov12.eventbrite.com>



## Two workshops with Robert Schleip in the US

Robert Schleip will be offering an East coast and a West coast US workshop in 2019, both in February. The details are

- Fascia in Movement and Sport– Los Angeles – February 9<sup>th</sup>, & 10<sup>th</sup>, 2019.  
Information and booking: <http://ncepfitness.com/fascia/?v=3a52f3c22ed6>
- Fascia as a Sensory Organ – Boston – February 16<sup>th</sup>, & 17<sup>th</sup>, 2019.  
Taught together with Thomas Myers. Information and booking: [stephanie@anatomytrains.com](mailto:stephanie@anatomytrains.com)



## Fascia Plastination Project

In cooperation with [www.plastinarium.com](http://www.plastinarium.com) and [www.fasciaresearchsociety.org](http://www.fasciaresearchsociety.org), a team of international experts is currently working on the production of a plastinated anatomical representation of the body-wide fascia network in humans. First exhibits of individual fascia structures will already be shown at the upcoming fascia congress in Berlin. It is quite possible that you, dear reader, will see whole body models based on these models during your next visit to a body world exhibition. Anatomists who actively support the project with their expertise are Prof. Carla Stecco, PD Dr. Hanno Steinke, Romed Hörmann MSc, John Starkey MSc, Prof. Andry Vleeming, Dr. Ekkehardt Geipel, Prof. Rainer Breul, and others. Further information can be found at: <https://fasciaresearchsociety.org/plastination>



### **Reliability and validity study for new Indentometer**

In the last issue of FasciaNews we had already referred to the [Indentopro](#) measuring instrument that we produced together with the Steinbeis Institute in Chemnitz. Since then, numerous devices have been in therapeutic or research use. Against this background, it is all the more valuable that a group of researchers led by Dr. Jan Wilke of Goethe University Frankfurt has now published a study that assigns great reliability and validity to the technology used in it. However, this study still refers to the immediate predecessor model, in which the further precision of the current [Indentopro](#) had not yet been included ([www.ncbi.nlm.nih.gov/pubmed/29945340](http://www.ncbi.nlm.nih.gov/pubmed/29945340)). For full-text versions of the study, we recommend contacting the authors via [www.researchgate](http://www.researchgate).

### **Important consensus paper**

Triggered by the congress [Connective Tissues in Sports Medicine](#) at the University of Ulm in March 2017, an international team of authors worked together for more than a year on an article for the high-ranking *British Journal of Sports Medicine* on the topics dealt with at the congress. This article has now been published successfully as a so-called Consensus Statement and can be downloaded free of charge from the Journal's website under the title ['Fascial tissue research in sports medicine: from molecules to tissue adaptation, injury and diagnostics'](#).

British Journal of  
**Sports Medicine** Latest content Current issue

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Article Text

Consensus statement

**Fascial tissue research in sports medicine: from molecules to tissue adaptation, injury and diagnostics** PDF

Article info

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Citation

## A tubular system in the interstitium

[A publication of the American pathologist Dr. Neil Theise](#) was discussed a few months ago in numerous media as a potential anatomical sensation: the alleged rediscovery of a body-wide 'organ' which consists of loose connective tissue and comprises numerous other organs and is also called 'interstitium'. This is indeed new for the representation of the body in most orthodox atlases and anatomical textbooks; but of course, not in the broader field of medicine including complementary medicine; especially as Jean-Claude Guimberteau, Gil Hedley, Ida Rolf, Andrew Taylor's Still, John D. Godman, Marie-Francois-Xavier Bichat, among others, explicitly referred to it. All the more fascinating, however, are the new photographs of the honeycomb-like architecture presented in the latest publications, which are based on the so-called second harmonic microscopy.

It will be exciting to see the expected exchange between Neil Theise and numerous knowledgeable colleagues, who will also participate in the upcoming fascia congress. One of the questions to be discussed together will then be the role of the tiny tubular channels in the groundsubstance, which were recently named 'Primo-Vascular System', that were originally described as Bonghan channels and have now been re-confirmed. The German matrix researcher Peter Friedl will also present new data, according to which a similar (or presumably identical) channel system could be documented with impressive video recordings. Based on these studies migrating cells use these channels on their way through the basic substance. Interestingly, these channels contain a high concentration of the 'lubricant' hyaluronan.

## Hyaluronan in different fasciae

[A new study by the University of Padua](#) compared the density of the water-binding substance hyaluronan in different human fasciae. A relative low density was reported in enveloping fasciae, which are adherently connected to the underlying muscles. In contrast the density was much higher in fascial sheets that express a high degree of sliding/shearing ability in relation to the underlying muscles. The researchers concluded that the density of the 'lubricant' hyaluronan is influenced by the shear mobility of the respective fascia tissue. Whether this also applies vice versa, i.e. whether an increase in regular heavy/sliding movements in the fascial network - e.g. through daily pleasurable pandiculating stretches - leads to increased hyaluronan expression, has not yet been clarified in the study ☺

## **Auxetic fascia propagation at tensile stress**

Up to now, most biomechanics had assumed that a fascial ligament or tendon becomes a little thinner in its cross-section when it is subjected to a tensile load in the longitudinal direction. This is at least the case with most 'dead' materials, which have a relatively constant volume under load. Therefore the surprise was all the bigger, as in ultrasound examinations it was now increasingly observed that the human Achilles tendon tends to widen during forced elongation, at least during a large proportion of the total response curve (e.g. [www.ncbi.nlm.nih.gov/pubmed/29555756](http://www.ncbi.nlm.nih.gov/pubmed/29555756) , [www.ncbi.nlm.nih.gov/pubmed/26102335](http://www.ncbi.nlm.nih.gov/pubmed/26102335) ).

Although this is probably not the case with all tendons, this intriguing behavior obviously has important (protective?) effects on tendon stiffness. It is interesting to note that this coincides with predictions made by Stephen Levin and other representatives of the biotensegrity model who had predicted such a multidirectional spread in tensegral-constructed tissues. It will be a fascinating question which type of fascial tissues exhibit this multidirectional strain adaptation, and which follow a different dynamic.

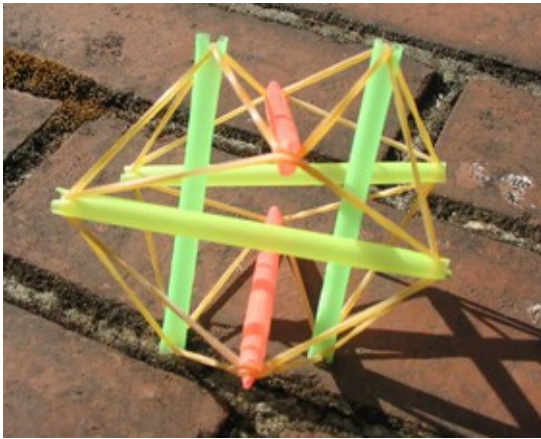


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## **Stretching for joint mobility**

A new review compared the effects of different stretching protocols on long-term joint mobility. It systematically compared 23 existing studies with each other. The study arrived at the conclusion that it is most effective to statically stretch the relevant tissue for at least 5 minutes total time per week with at least 5 individual applications per week. Our suggestion: As an averagely desk worker with slightly stiff joint mobility, you could experiment with stretching your hamstrings alternately for 1 minute each leg from Monday to Friday when brushing your teeth in the morning. If successful, your yoga teacher should notice the difference after three to six months on her own accord, of course without you telling her anything about it beforehand. 😊 (Thomas E et al. 2018 Int J Sports Med 39: 243–54).

So much for the latest news from the international fasciae scene, from the perspective of our small Ulm research group.

Fascianatedly yours

Dr. Robert Schleip and the Fascia Research Team

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