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Letter to the Editor

## Regarding: Update on fascial nomenclature - An additional proposal by John Sharkey MSc, Clinical Anatomist



The author of this proposal suggests including bones into the collection of tissues described by a future definition of fascia. Here we respond to this suggestion, as our group has worked on a consensus process related to fascia nomenclature, which included several publications in this journal (Stecco and Schleip, 2016; Adstrum et al., 2017; Stecco et al., 2018).

In the most recent publication, we had reported the conclusion of a multi-staged Delphi process conducted by our group. Altogether, 21 experts were invited to contribute. The process culminated in the publication of two suggested terms. The term ‘*a fascia*’ was suggested for communication within the fields of histology and detail-oriented regional anatomy and describes “*a sheath, a sheet, or any other dissectible aggregations of connective tissue that forms beneath the skin to attach, enclose, and separate muscles and other internal organs.*” (Stecco and Schleip, 2016) This definition aimed to create a high degree of congruence with the current version of the Terminologia Anatomica (Federative International Programme on Anatomical Terminologies [FIPAT], 2011).

In addition, the term ‘*the fascial system*’ was recommended to facilitate description of supra-regional functional properties (such as tensional force transmission, sensory capacities, fluid dynamics, as well as the regulation of wound healing and of fibrotic pathologies). This tissue system “*consists of the three-dimensional continuum of soft, collagen containing, loose and dense fibrous connective tissues that permeate the body. It incorporates elements such as adipose tissue, adventitia and neurovascular sheaths, aponeuroses, deep and superficial fasciae, epineurium, joint capsules, ligaments, membranes, meninges, myofascial expansions, periosteal, retinacula, septa, tendons, visceral fasciae, and all the intramuscular and intermuscular connective tissues including endo-/peri-/epimysium. The fascial system surrounds, interweaves between, and interpenetrates all organs, muscles, bones and nerve fibers, endowing the body with a functional structure, and providing an environment that enables all body systems to operate in an integrated manner.*” (Stecco et al., 2018).

Both ‘*cartilage*’ as well as ‘*intraosseous connective tissues*’ have been considered for inclusion. Though the majority of the involved experts would certainly consider them as ‘*connective tissues*’, they deliberately did not include them in their final suggested definitions of the terms ‘*a fascia*’ and ‘*the fascial system*’. Bone was never accepted for inclusion in either definition. As a “hard” tissue rather than a “soft” tissue, there was universal agreement among the committee members that it was outside even the most basic parameters under consideration.

The consensus process operated under the widely supported premise that the fascial system is neither identical with the whole locomotor system nor with connective tissue per se. Connective tissue is the more general taxonomic category and is usually defined to include cartilage and bones, as well as blood, not to mention fascia and the elements of the fascial system. Bones are of course mechanically and metabolically continuous and co-emergent with the fascial system. Yet if we included every tissue that is continuous, co-emergent, and contributes to the functioning of the other tissues and systems, no tissue could be logically excluded. A definition is a reductive process to facilitate communication. This can be done with conscious respect for the essential unity of the body.

We welcome the author's reminder of the essential unity of the living human body, particularly in the light of the fragmented body perspective characterized in a large amount of classical anatomy teaching and description. The process of definition is an evolving one, and we welcome and invite the insights, contributions, and reflections of the community in the Delphi process. We anticipate a next round in this process will start when a new version of the Terminologia Anatomica will be released, or when new experimental findings are published that sufficiently support a renewal of our previous nomenclature suggestions.

Nomenclature Committee of the Fascia Research Society.

### References

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