

Special Issue

Ligament/Tendon and Cartilage Tissue Engineering and Reconstruction

Message from the Guest Editor

Ligaments, tendons and cartilage share many tissue characteristics, such as the following: a poor or absent blood supply, a low cell content, and an abundant collagenous extracellular matrix. Some of these properties may explain their limited self-healing capacity during tissue injury. Hence, tissue engineering (TE) represents a promising strategy for tissue reconstruction. Using novel biomimetic biomaterials as chondro-/tenogenic cell carriers represents an innovative culturing approach; e.g., using smart bioreactors and versatile bioprinting strategies could support the regeneration of these tissues with tissue engineered implants. Cells recruited for TE, the tailored release of bioactive factors, and targeted cell lineage differentiation are also of interest. Novel data describing in vivo TE results gained using animal models are also welcome. Lead by and assisted by our Topical Advisory Panel Member, Dr. Clemens Gögele (Paracelsus Medical University), this Special Issue will focus on the most recent developments in tendon/ligament and cartilage tissue engineering, comprising in vitro and in vivo studies.

Guest Editor

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Message from the Editor-in-Chief

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