Tendon Regeneration: Understanding Tissue Physiology and Development to Engineer Functional Substitutes

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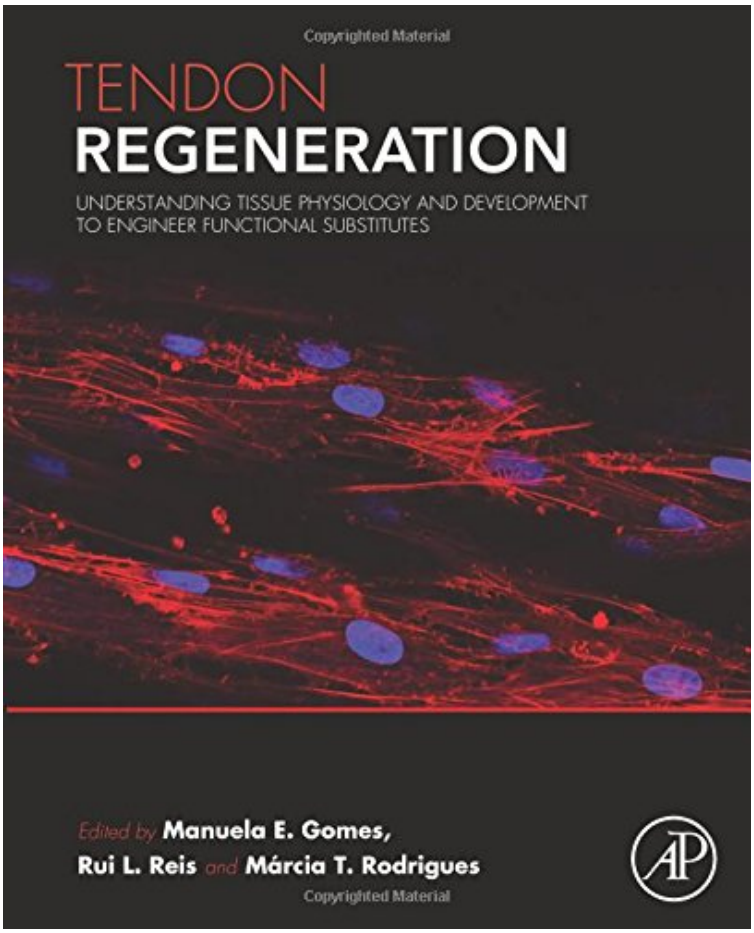

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From Academic Press : Tendon Regeneration: Understanding Tissue Physiology and Development to Engineer Functional Substitutes before purchasing it in order to gage whether or not it would be worth my time, and all praised Tendon Regeneration: Understanding Tissue Physiology and Development to Engineer Functional Substitutes:

Tendon Regeneration: Understanding Tissue Physiology and Development to Engineer Functional Substitutes is the first book to highlight the multi-disciplinary nature of this specialized field and the importance of collaboration between medical and engineering laboratories in the development of tissue-oriented products for tissue engineering and regenerative medicine (TERM) strategies. Beginning with a foundation in developmental biology, the book explores physiology, pathology, and surgical reconstruction, providing guidance on biological approaches that

enhances tendon regeneration practices. Contributions from scientists, clinicians, and engineers who are the leading figures in their respective fields present recent findings in tendon stem cells, cell therapies, and scaffold treatments, as well as examples of pre-clinical models for translational therapies and a view of the future of the field.Provides an overview of tendon biology, disease, and tissue engineering approachesPresents modern, alternative approaches to developing functional tissue solutions discussedIncludes valuable information for those interested in tissue engineering, tissue regeneration, tissue physiology, and regenerative medicineExplores physiology, pathology, and surgical reconstruction, building a natural progression that enhances tendon regeneration practicesCovers recent findings in tendon stem cells, cell therapies, and scaffold treatments, as well as examples of pre-clinical models for translational therapies and a view of the future of the field

From the Back CoverTendon Regeneration is the first book of its kind to highlight the multi-disciplinary nature of this specialized field and the importance of collaboration between medical and engineering laboratories in the development of tissue substitutes following tissue engineering and regenerative medicine (TERM) strategies. Beginning with a foundation in developmental biology, this book explores physiology, pathology and surgical reconstruction, building in a natural progression to provide guidance on biological approaches to enhance tendon regeneration practices. Contributions from scientists, clinicians and engineers, who are all leading figures in their fields, provide recent findings in stem cells therapies, scaffold augmentation and tissue engineering approaches, as well as examples of pre-clinical models for translational therapies and a view of the future of the field.About the AuthorRui L. Reis, PhD, DSc, Hon. Causa MD, FBSE, FTERM, member of NAE, is the Director of the 3Bs Research Group and of the ICVS/3Bs Associate Laboratory of the University of Minho. He is also the CEO of the European Institute of Excellence on Tissue Engineering and Regenerative Medicine, the Global President of the Tissue Engineering and Regenerative Medicine International Society (TERMIS) and the Editor-in-chief of the Journal of Tissue Engineering and Regenerative Medicine. He is a recognized World expert, with almost a 1000 published works and more than 25000 citations to his work, in the development of biomaterials from natural origin polymers and their use in tissue engineering and regenerative medicine, and in controlled drug delivery, in many cases in combination with different types of stem cells. He has been awarded many international prizes and is the PI of projects with a budget totalizing more than 40 million Euros.