



“Seminars in Biomedical Engineering”

Programa de Pós-Graduação em Engenharia Biomédica

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Google Meet Link: <http://meet.google.com/vkp-uxix-cww>

SPACE PHYSIOLOGY AND CARDIOVASCULAR BIOMECHANICS

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Abstract

Essa palestra será dedicada à apresentação de abordagens típicas da modelagem da biomecânica cardiovascular aplicadas à resolução de problemas de medicina espacial. A palestrante, Profa. Dra. Carole Leguy, liderou em 2017 um projeto de pesquisa internacional baseado em um estudo de “bed rest” junto à Agência Espacial Europeia (European Space Agency – ESA). O foco do estudo foi a análise do risco cardiovascular nos astronautas para entender como restrições ao exercício físico podem influenciar o envelhecimento vascular.

A palestra será em língua inglesa.

Speaker's Bio

Carole Leguy is Professor of Regulatory Affairs in Medical Technology at Ruhr West University of Applied Sciences since 2018. Dr. Leguy has gained extensive experience in the field of medical technology as an internationally oriented scientist. Currently, she is working on new approaches of "serious games" in rehabilitation in physiotherapy and researches in the field of biomedical engineering.

Previously, she specialized in space physiology at the German Aerospace Center (Institute of Aerospace Medicine) in Cologne and at Simon Fraser University (Vancouver, Canada). She completed her PhD thesis at TU/Eindhoven (The Netherlands). Her doctoral work dealt with the development of new methods based on ultrasound imaging and patient-specific 1D/3D computational fluid dynamics simulations to improve the prevention of cardiovascular diseases such as atherosclerosis.

Carole Leguy is the holder of two prestigious European fellowships: the Marie Curie Early-Stage Research Fellowship and the International Outgoing Fellowship IOF.