

COMPUTATIONAL MECHANICS IN CLINICAL PRACTICE

ZOHAR YOSIBASH^{*} AND CHRISTIAN GASSER[†]

^{*} Computational Mechanics and Experimental Biomechanics Lab
School of Mechanical Eng, The Iby and Aladar Fleischman Faculty of Engineering, Tel Aviv
University, Tel Aviv, Israel
yosibash@tauex.tau.ac.il <https://www.yosibash.sites.tau.ac.il/>

[†] Dept. of Engineering Mechanics
KTH Royal Institute of Technology, Stockholm, Sweden
gasser@kth.se <https://www.kth.se/profile/gasser?l=en>

ABSTRACT

The increasing amount of digital personalized data, particularly CT and MRI visualization, holds great promises for diagnosis and treatment at the patient level. Computational mechanics (CM) based on the available digital data allows for providing patient-specific information which may be directly translated to clinical applications. This information, when fused with artificial intelligence has the potential to be used very successfully in clinical practice.

This mini-symposium is devoted to recent developments in CM when used for clinical applications with a focus on bones and blood vessels. Presentations that combine CM methods based on CT or MRI with artificial intelligence algorithms are encouraged.

Personalized treatment strategies that are guided by clinical needs and implemented into clinical practice are of particular interest.