

# Centre for Biomedical Technology

## Universidad Politécnica de Madrid

21<sup>th</sup> October 2020, 10h

ON-LINE  
MECHANOBIOLOGY  
SEMINARS  
@ UPM



**10:00-10:15 h.** Opening and presentation of mechanobiology seminar

**Plenary Talk.** Session chair: José Pérez- Rigueiro

**10:15- 11h.** Prof. Dr. Thomas Scheibel (University of Bayreuth, Germany).  
*Biomaterials for heart muscle tissue and peripheral nerve regeneration*

**11:00-11:30 h.** Break

**Short Presentations.** Session chair: Gustavo Plaza

**11:30-11:50h.** Rebeca Bocanegra (IMDEA-Nanociencia, Borja Ibarra's group, Molecular Motor Manipulations Lab). *Dynamic constriction and fission of endoplasmic reticulum membranes by reticulon*

**11:50-12:10h.** Daniel García González (Carlos III University, Department of Continuum Mechanics and Structural Analysis). *Advanced multi-physical modelling in biomechanics: from brain to collective cell migration*

**12:10-12:30h.** María Rosaria Pricolo (CNIC, Jorge Alegre's Group- Molecular Mechanics of the Cardiovascular System). *Engineering tools to probe titin mechanics in living cells and animals*

**12:30-12:50h.** Fidel Lolo (CNIC, Miguel Ángel del Pozo's group- Mechanoadaptation and Caveolae Biology). *Cav1, caveolae and the force-buffering continuum*

**12:50-13:10h.** Blanca González (CTB-UPM, Gustavo Plaza's group- Biomaterials and Regenerative Engineering Lab). *Contribution of T-cell biomechanical features to immune dysfunction and ageing*

**12:10-13:30h.** Ángel Merchán Pérez (CTB-UPM, Javier de Felipe's group- Cajal Cortical Circuits Lab). *Mechanical interactions between cerebral blood vessels and perivascular synapses*

**13:30h** Closure