

International Conference on
Precision **E**ngineering and **S**ustainable **M**anufacturing

PRESM 2023

July 16 Sun – **21** Fri, 2023

Bankoku Shinryokan,
Okinawa, Japan

PROGRAM BOOK

 <http://www.presm.org>

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PRESM 2023 Program

[J] Cellular Mechanobiology: From Fundamental Science to Translational Applications in Precision Medicine

Introduction Cellular mechanobiology, which studies how cells respond to mechanical cues, can help us develop new treatment strategies for many diseases. This focus session aims to provide an up-to-date overview of the latest advances in cellular mechanobiology research and to promote multidisciplinary approaches to understanding, diagnosing, and treating disease.

Organizer Prof. Toshiro Ohashi (Hokkaido University, Japan)

PT Date, Time July 19(Wednesday), 2023 / 16:20-17:55 (JST, UTC +09:00)

Details Session Chairs : Profs. Jennifer H. Shin (KAIST, Korea)
Toshiro Ohashi (Hokkaido University, Japan)

Paper No.	Time	Title / Presenter & Authors
W4-FJ1 Keynote	16:20-16:45 (25')	Mechanobiological Design of a Postoperative-placing Matrix for Selective Capture and Elimination of Residual Cancer Cells *Satoru Kidoaki (Kyushu University, Japan)
W4-FJ2 Keynote	16:45-17:10 (25')	Mechanical Properties of Cellular Primary Cilia and Mechanosensing Mechanism *Toshiro Ohashi (Hokkaido University, Japan)
W4-FJ3	17:10-17:25 (15')	Biomechanical Analysis of Osteocytic Spheroids for Bone Tissue Engineering Applications *Jeonghyun Kim (Nagoya University, Japan), Takashi Inagaki (Nagoya University), Eijiro Maeda (Nagoya University), Taiji Adachi (Kyoto University), Takeo Matsumoto (Nagoya University)
W4-FJ4	17:25-17:40 (15')	Classification of Cancer-associated Fibroblasts with Morphodynamic and Motile Feature-based AI Platform *Jennifer H. Shin (KAIST, Korea), Minwoo Kang (KAIST), Somayadineshraj D. (KAIST), Chanhong Min (KAIST)
W4-FJ5	17:40-17:55 (15')	Assembled Trachea Epithelium and Blood Vessel Endothelium Modular Study for Asthma *Hyoryung Nam (POSTECH, Korea), Yoo-mi Choi (POSTECH), Sungkeon Cho (POSTECH), Ge Gao (POSTECH), Donghwan Kim (POSTECH), Jongmin Kim (POSTECH), Hwanyong Choi (POSTECH), Se-Hwan Lee (POSTECH), Jinah Jang (POSTECH)