





Poster Session (virtual and onsite)

17:15 - 20:00

- in last name's alphabetical order, virtual contribution in blue -

- Neuronal and Glial Cell Co-culture Organization and Impedance Spectroscopy on Nanocolumnar TiN Films for Lab-on-a-Chip Devices ALICE ABEND (Leipzig University, Germany)
- 2 Magnetically Controlled Micro-Deformation of 3D Tumor Models for Mechanobiological in situ Studies DAPHNE O. ASGEIRSSON (ETH Zürich, Switzerland)
- 3 **On the Road to Cellular Digital Twins of in vivo Tumors** ERIC BEHLE (Jülich Research Centre, Germany)
- 4 Fatty Tissue As An Modulator Of Cancer Cell Mechanics ELIANE BLAUTH (Leipzig University, Germany)
- 5 Mesenchymal-Epithelial Transition and its Effect on Cell Mechanics and Proliferation in in vitro Cancer Models GINA DIMARI (TU Dresden, Germany)
- 6 **Rigid Tumors Contain Soft Cells** THOMAS FUHS (TU Freiberg, Germany)
- 7 Studying the Mechanical and Morphological Phenotype of Cancer-Associated Fibroblasts of the Prostate ANTJE GARSIDE (TU Dresden, Germany)
- 8 The Role of Intermediate Filaments in Stress Resistance in 3D Epithelial Structures TOM GOLDE (Institute of Bioengineering of Catalonia (IBEC), Spain)
- 9 Shape and Density Reveal Prognostic Relevance of Potentially Motile Breast Cancer Cells PABLO GOTTHEIL (University of Leipzig, Germany)
- 10 Machine Learning based Parametrization of Large Scale Tumor Simulations JULIAN HEROLD (Karlsruhe Institute of Technology, Germany)
- 11 Skin Epithelial Cells Change their Mechanics and Proliferation upon Snail-Mediated EMT Signalling

KAMRAN HOSSEINI (TU Dresden, Germany)

- 12 Inference of Population Structure from Spreading Variants GIULIO ISACCHINI (Leipzig University, Germany)
- 13 Single-Cell Physical Phenotyping of Mechanically Dissociated Tissue Biopsies for Fast Diagnostic Assessment MARKÉTA KUBÁNKOVÁ, (Max Planck Institute for the Science of Light & Max-Planck-Zentrum für Physik und Medizin, Erlangen, Germany)
- 14 Nanotube Scaffolds: Versatile and Customizable Culture Platform for Cells and Tissues ASTRID KUPFERER (Leibniz Institute of Surface Engineering (IOM) e.V, Germany)

- 15 Mapping Tumor Spheroid Mechanics in Dependence of 3D Microenvironment Stiffness and Degradability by Brillouin Microscopy VAIBHAV MAHAJAN (TU Dresden, Germany)
- 16 Application of Large Area Mapping AFM for Automated Structural and Mechanical Analysis of Cells and Tissues in Health and Disease TORSTEN MÜLLER (Bruker, Germany)
- 17 Mechanical Properties of the Premature Lung JONAS NAUMANN (Leipzig University, Germany)
- 18 Influence of Local Anesthetics on the Mechanical Properties of Circulating Ovarian Cancer Cells

IVONNE NEL (Leipzig University, Medical Center, Germany)

- 19 Physical Properties of 3D Matrix Regulate Killing Efficiency of Cytotoxic T Cells BIN QU (Saarland University, Germany)
- 20 Changes in Tissue Stiffness and Fluidity Predict Tumor Aggressiveness in vivo FRANK SAUER (Leipzig University, Germany)
- 21 Mechanical Characterization of Electron Beam Modified Collagen Fibers for Biomedical Applications

FRIEDRICH SCHÜTTE (Leibniz Institute of Surface Engineering (IOM) e.V, Germany)

- 22 Dissecting the Lateral and Longitudinal Assembly Kinetics of Vimentin with a Dual Wavelength Stopped-Flow Approach LOVIS SCHWEEN (University of Erlangen-Nuremberg, Erlangen, Germany)
- 23 **DNA-Based Tools for Biological Systems Modulation** CARY TUTMARC (Leipzig University, Germany)
- 24 Distinct F-Actin Networks are Required for Filopodia Motility and Migration of Cancer Cells SABINE WINDHORST (University Medical Center Hamburg-Eppendorf, Germany)
- 25 Yield Stress: A Tipping Point of Cell Unjamming XIAOFAN XIE (Leipzig University, Germany)