

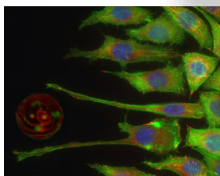
## **FEBS Workshop *Biological Surfaces and Interfaces: Interface Dynamics***

**02 July – 07 July 2017 – Hotel Eden Roc, Sant Feliu de Guixols, Catalonia, Spain**

### **POSTERS**

All posters should be put up during the first coffee break on the presentation day and taken down at the beginning of the session on the following day.

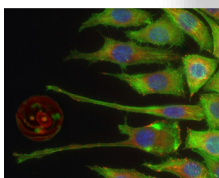
The poster sessions start at 21:15.



Monday, July 3

## Poster Session I

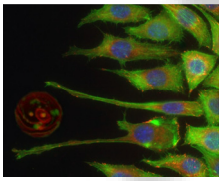
1	Andres Alba-Perez	Plasma polymerised ethyl acrylate for biomedical applications
2	Veeran Chauhan	The Development of Smart Self-Reporting 3D Printed Scaffolds to Augment the Manufacture and Biocompatibility of Tissue Engineered Systems
3	Sandra Clara Trujillo	Smart injectable hydrogel with magnetic microspheres for the local mechanical stimulation of cells: In vitro proof of concept
4	Ricardo Cruz-Acuña	Synthetic Hydrogels for Human Intestinal Organoid Generation and Colonic Wound Engraftment
5	Joseph Desna	Biomaterial platform to study cell – cell interactions
6	Gustav Emilsson	Solid State Nanopores Sealed by Hydrophilic Polymer Brushes and Gated by Molecular Recognition
7	Gustav Ferrand-Drake	Modulation of enzyme activity on functional nanostructures
8	Csaba Forro	Hydrogel stiffness gradients to culture well-defined neural networks.
9	Cristina Gonzalez-Garcia	Protease-degradable microgels for protein delivery for bone regeneration
10	Louise Hespel	Switchable polymer coatings for in situ control of cell and neuron adhesion
11	Boglarka Kovacs	Biomimetic surface coatings assembled from genetically engineered flagellin variants to control the adhesion of living cells
12	Bin Li	Interpenetrating polymer networks (IPNs) Hydrogel with Tailored Local Stiffness
13	Virginia Llopis-Hernandez	Studying a programmable biomaterial to aid fibroblast migration and wound healing
14	Carles Mas-Moruno	Biomolecular coatings to engineer biomaterials with integrin subtype specificity and multifunctionality: new perspectives in tissue repair and regeneration
15	Stephanie Maynard	Super-Resolution Microscopy of Integrin $\alpha 5 \beta 1$ Clustering: Implications for Mesenchymal Stem Cell Immunomodulation
16	Rosa María Morales Román	Biocolonizable membranes with suitable mechanical properties for implantation in cornea or skin
17	Wich Orapiriyakul	Towards 3D nanokicking: Optimizing physicochemical properties using genipin crosslinked hydroxyapatite-collagen hydrogels
18	Jennifer Puetzer	Development of a Continuous Dual-Gradient Peptide Scaffold for Directed Osteochondral Interface Regeneration
19	Imma Ratera	Electroactive Molecular Bio-Interfaces for Controlled Environments Towards Spatial and Temporal Control of Cell Behavior
20	Patricia Rico	Borax-loaded material systems trigger ion-channel activation and stimulate vascularisation in combination with VEGF
21	Christophe Tribet	Reversible Optical Switch of Membrane Permeabilization and Protein-Binding by Azobenzene-containing Copolymers.
22	Sara Trujillo-Muñoz	Fibronectin-based hydrogel systems as new 3-dimensional microenvironments for tissue regeneration.
23	Monica P Tsimbouri	Bifunctional Ti nanotopography with osteogenic potential and anti-microbial actions.
24	Ramon Weishaupt	Protein-nanocellulose bio-hybrid materials for advanced therapeutic applications
25	Serge Weydert	A PMOXA based polymer as the proposed new standard for quick and versatile non-fouling modification of cell culture surfaces



Tuesday, July 4

Poster Session II

1	Nesrine Aissaoui	Towards engineering nanoporous membranes with specific permselectivity
2	Mark Bennett	Mobility Dependent Cellular Behaviour on Supported Lipid Bilayers
3	Patrik Bjöörn	Nanoplasmonic Sensing combined with Quartz-Crystal Microbalance for Advanced Surface Interaction Studies
4	Ciro Chiappini	Generating molecular replicas of tissues by nanoneedle interfacing.
5	Andrea Cordes	Surface-based analytical studies of carbohydrate induced attachment of carcinoma cells
6	Alessia Donati	Studying Platelet Activation at the Single Platelet Level
7	Livie Dorwling-Carter	Towards nano-mimicking the cell bilayer architecture for spontaneous probe insertion and gigaseal formation for force-controlled patch clamp
8	Rickard Frost	Probing diffusion of biomolecules in nanoscale confined spaces – The case of nuclear transport
9	Stephanie Hwu	Non-specific binding based biosensing
10	Simon Isaksson	Ordered mesoporous silica facilitates membrane protein studies
11	Britta Koch	Combinatorial Material-Topography Screening: The ChemoTopo Chip
12	Quentin Lubart	A nanofluidic device for the fluorescence-based study of small biological vesicles
13	Ines Lüchtefeld	Single neuron manipulation with force-controlled nanopipette
14	Karin Norling	The Properties and Cellular Uptake Characteristics of Lipid-based Mucosal Vaccines
15	Hudson Pace	The Structure and Composition of Polymer-Supported Lipid Bilayers Derived from Cellular Membranes
16	Ilya Reviakine	Detecting a model anesthetic with a quartz crystal microbalance via its effect on the lipid phase transition.
17	Ilya Reviakine	Studying Platelet Activation by Time-of-Flight Secondary Ion Mass Spectrometry with Principle Component Analysis
18	Inna Székács	A label-free high-throughput optical biosensor for cytotoxicity studies
19	Eva Uhl	Immobilizing platelets on supported phospholipid bilayers
20	Nathan Wittenberg	Interactions between myelin-associated glycoprotein and brain gangliosides in vesicles and supported bilayers
21	Tomaso Zambelli	FluidFM for 3D additive manufacturing of micro-objects as well as single-cell analysis
22	Ning Zhang	Integrated mechanical and electrical biosensors for multifunctional heart-on-a-chip platform
23	Yijun Zheng	Light-driven force application on individual cell-ECM contacts



Wednesday, July 5

### Poster Session III

1	George Altankov	Insights into the dynamic behaviour of vitronectin at cell-biomaterial interface
2	Hilary Anderson	Dynamic Surfaces for Mesenchymal Stem Cell Self-Renewal and Differentiation
3	Mateusz Bieniek	The role of water in fibronectin III 9-10 adhesion and its relation to network assembly
4	Marco Cantini	Vitronectin as a Micromanager of Cell Response in Material-driven Fibronectin Nanonetworks
5	Annie Zhe Cheng	Self-assembled monolayers mimic synthetic polymers in promoting fibronectin reorganisation
6	Hannah Donnelly	Bioengineering the bone marrow niche.
7	Chia-Chen Hsu	Microgrooves Regulate Epigenetic Landscape and Notch Signalling in Human Neural Stem Cells
8	Sarah Keary	Dissecting the dynamics of integrin clustering and focal adhesion formation at the nano-scale
9	Natasha Lewis	Co-culture within Endosteal and Perivascular Bone Marrow Niche Models Influences Cell Behaviour
10	Laurent Limozin	T cell receptors and integrins regulate differently the mechanoreponse of T lymphocyte at surfaces
11	Juan Carlos Marin Paya	3D culture of human bone marrow msc on protein or polysaccharide functionalized microgel
12	Dimitris Missirlis	Mechanism of avb3 integrin recruitment to a5b1 integrin based focal adhesions
13	Aleixandre Rodrigo-Navarro	Efficient growth factor display on recombinant fibronectin fragments
14	Nico Strohmeyer	Upon binding fibronectin $\alpha 5 \beta 1$ integrins sense tension and signal fibroblasts to reinforce adhesion in less than a second
15	Ricky Unadkat	Growth by stretch: an interdisciplinary approach to improve current practice
16	Roshna Vakkeel	Microenvironments to study integrin-specific responses and mechanotransduction
17	Marisela Velez	A Surface to Twist FtsZ Filaments: A Good Strategy to Generate Force in bacterial cell division

## Sponsors



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This meeting is endorsed by the American Vacuum Society (AVS),  
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