

FEBS Workshop *Biological Surfaces and Interfaces: Interface Dynamics*

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

CONFERENCE PROGRAMME

Sunday, July 02

From 17.00

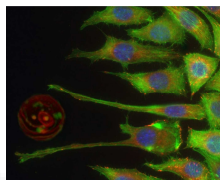
Registration

19.00

Welcome Drink

20.00

Dinner



Monday, July 3

07.00 – 08.00

Breakfast

08.45 – 09.00

Welcome & Information

Session I – Engineering microenvironments to control cell fate

09.00 – 09.50

Matthew J. DALBY

Centre for Cell Engineering, University of Glasgow, UK
Nanoscale control of stem cell differentiation

09.50 – 10.40

Andres J GARCIA

Woodruff School of Mechanical Engineering, Petit Institute for
Bioengineering and Bioscience, Georgia Institute of
Technology, US
Biofunctional dynamic hydrogels for tissue repair

10.40 – 11.10

Coffee Break

11.10 – 11.40

Contributed Speaker I.1

11.40 – 12.30

Pamela HABIBOVIC

MERLN Institute for Technology-Inspired Regenerative
Medicine, Maastricht University, Netherlands
*Design-driven biomaterials development: decoupling and
recombining individual material properties*

12.30

Lunch & Free Time

15.45 – 16.15

Coffee Break

Session II – Membranes, models membranes dynamics

16.15 – 17.05

Ralf RICHTER

School of Biomedical Sciences, and School of Physics and
Astronomy, University of Leeds, UK
*Many Weak Interactions Make a Difference – from “Fuzzy”
Biomolecular Self Assembly to Superselectivity*

17.05 – 17.35

Contributed Speaker II.1

17.35 – 18.25

Peter JÖNSSON

Division of Physical Chemistry, Lund University, Sweden
*Studying intermolecular interactions between membrane-
anchored proteins using hydrodynamic forces*

18.45 – 20.00

Dinner

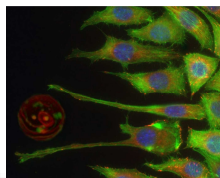
20.15 – 21.15

Molly STEVENS

Dep. of Materials, Dep. of Bioengineering, Institute of
Biomedical Engineering Imperial College London, UK
Exploring and engineering the cell/material interface

21.15

Poster Session I



Tuesday, July 4

07.00 – 08.00

Breakfast

Session III – Extracellular matrix and biomaterials

09.00 – 09.50

Catherine PICART

INP de Grenoble, University of Grenoble, France

*Engineered biomaterials coatings for the control of cell fate:
from molecular mechanisms to regenerative medicine*

09.50 – 10.40

Thomas BARKER

School of Engineering & School of Medicine, University of
Virginia, US

Dynamic molecular complexes in cell interaction with the ECM

10.40 – 11.10

Coffee Break

11.10 – 11.40

Contributed Speaker III.1

11.40 – 12.30

Delphine GOURDON

Dep. of Physics, University of Ottawa, Canada

Fibronectin mechanobiology regulates tumorigenesis

12.30

Lunch & Free Time

15.45 – 16.15

Coffee Break

Session IV – Molecular interfaces: from proteins to cells

16.15 – 17.05

Maria GARCIA-PARAJO

ICFO, The Institute of Photonic Sciences, Spain

*The role of nanoclustering and diffusion on integrin activation
in the immune system*

17.05 – 17.35

Contributed Speaker IV.1

17.35 – 18.25

Tobias WEIDNER

Max Planck Institute for Polymer Research, Germany

Protein control of hard and soft tissue – a molecular view

18.45 – 20.00

Dinner

20.15 – 21.15

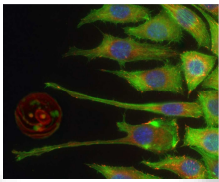
Viola VOGEL

Dep. of Health Sciences and Technology, ETH, Switzerland

*Mechanobiology: the art of forming and forcing bonds to
break*

21.15

Poster Session I (continued)



Wednesday, July 5

07.00 – 08.00

Breakfast

Session V – Migration and physical forces

09.00 – 09.50

Xavier TREPAT

IBEC, Institute for Bioengineering of Catalonia, Spain

Collective guidance of cell migration and invasion

09.50 – 10.40

Laura MACHESKY (IUBMB Lecturer)

Beatson Institute for Cancer Research, Glasgow, UK

Role of the actin cytoskeleton, matrix and stiffness in cancer invasion and metastasis

10.40 – 11.10

Coffee Break

11.10 – 11.40

Contributed Speaker V.1

11.40 – 12.30

Timo BETZ

Institute of Cell Biology, ZMBE, Münster, Germany

Activity at the border: How active cytoskeleton-membrane interaction control cell mechanics

12.30

Lunch & Free Time

14.00

Excursion / Social Event

18.45 – 20.00

Dinner

20.15 – 21.15

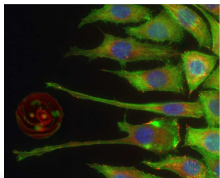
Reinhard FÄSSLER

Max Planck Institute of Biochemistry, Martinsried, Germany

Mechanosensing via cell-matrix adhesions

21.15

Poster Session II



Thursday, July 6

07.00 – 08.00

Breakfast

Session VI – Dynamic interfaces

09.00 – 09.50

Aranzazu DEL CAMPO

INM - Leibniz Institute for New Materials, Germany

Light-triggered dynamic biointerfaces

09.50 – 10.40

Yukiko MATSUNAGA

Institute of Industrial Science, University of Tokyo, Japan

Actin cytoskeleton and cell migration in cancer

10.40 – 11.10

Coffee Break

11.10 – 11.40

Contributed Speaker VI.1

11.40 – 12.00

Contributed Speaker VI.2

12.00 – 12.20

Contributed Speaker VI.3

12.30

Lunch & Free Time

15.45 – 16.15

Coffee Break

Session VII – Translational Interfaces

16.15 – 17.05

Masaru TANAKA

Soft Materials Chemistry, Kyushu University, Japan

Interfacial water at the cell/protein/material interface

17.05 – 17.35

Contributed Speaker VII.1

17.35 – 18.25

Kevin SHAKESHEFF

School of Pharmacy, University of Nottingham, UK

Thermoresponsive materials as injectable matrices for regenerative medicine

18.30 – 19.30

Forward Look Plenary Discussion

20.00

Drinks Reception & Workshop Dinner

Friday, July 7
Breakfast & Departure

Sponsors



/// OWLS & QCM Sensors
- label-free biosensors -



This meeting is endorsed by the American Vacuum Society (AVS), Biomaterial Interfaces Division of the AVS.



The meeting is endorsed by the International Union for Vacuum Science, Technique and Applications (IUVSTA).