



RI.MED SYMPOSIUM

# ENGINEERING BIOLOGY FOR NEXT-GEN MEDICINE

Palazzo Dei Normanni  
**PALERMO**, SICILY, ITALY



## DRAFT PROGRAM October 16<sup>th</sup> Thursday

Piazza del Parlamento, 1 Palermo

**PALAZZO DEI NORMANNI | 8.30 AM - 4.30 PM**

|                    |   |
|--------------------|---|
| 8.30 AM            | REGISTRATION  |
| 9.00 AM            | INSTITUTIONAL GREETING  |
| 9.10 AM            | WELCOME AND INTRO by Giulio Superti-Furga   |
| 9.30 AM - 11.00 AM |   |
| 9.30 AM            | <b>De novo protein design: from new structures to programmable molecular and cellular functions</b><br>Tanja Kortemme, Ph.D<br>Vice Dean of Research; Professor, Dept. of Bioengineering and Therapeutic Sciences, UCSF   |
| 9.55 AM            | <b>Novel molecular and generative design platforms for immunotargeting and beyond</b><br>Possu Huang, Ph.D<br>Assistant Professor, Dept. of Bioengineering, Stanford University   |
| 10.20 AM           | <b>Mapping and targeting membrane protein nanodomains using DNA nanotechnology approaches</b><br>Ana Teixeira, Ph.D<br>Principal Researcher, Dept. of Physiology and Pharmacology, Karolinska Institutet  |
| 10.45 AM           | SELECTED TALK   |
| 11.00 AM           | COFFEE BREAK  |
| 11.30 AM - 1.00 PM |   |
| 11.30 AM           | <b>Observe, understand, develop: biomimicry in cardiovascular tissue engineering</b><br>Antonio D'Amore, Ph.D<br>Group Leader in Tissue Engineering, Ri.MED Foundation;<br>Full Professor, Dept. of Precision Medicine, University of Palermo;<br>Associate Professor, Dept. Bioengineering, University of Pittsburgh |
| 11.55 AM           | <b>Cardiovascular tissue engineering</b><br>Petra Mela, Ph.D<br>Full Professor, Chair of Medical Materials and Implants, Technical University of Munich   |
| 12.20 PM           | <b>Towards Autonomous Minimal Cells as Next-Gen Therapeutics</b><br>Simone Giaveri, Ph.D<br>Scientist in Syntetic Biology, Ri.MED Foundation; Max Plank Institute   |
| 12.45 PM           | SELECTED TALK   |
| 1.00 PM            | LIGHT LUNCH   |

2.15 PM - 4.30 PM

|         |   |
|---------|---|
| 2.15 PM | <b>THE EMBO KEYNOTE LECTURE</b><br><b>Mutate Everything!</b><br>Ben Lehner, Ph.D<br>Professor, Head of Generative and Synthetic Genomics, Wellcome Sanger Institute   |
| 2.40 PM | <b>Engineering Bacteria for Cancer Treatment</b><br>Maria Lluch-Senar, Ph.D<br>Principal Investigator, Autonomous University of Barcelona   |
| 3.05 PM | <b>Chemical rewiring of protein degradation networks</b><br>Georg Winter, Ph.D<br>Principal Investigator, Chemical biology of oncogenic gene regulation, CeMM   |
| 3.30 PM | <b>Modeling the Black Box of human development to advance Regenerative Medicine</b><br>Mo Ebrahimkhani<br>Associate Professor, Dep. of Pathology, University of Pittsburgh<br>McGowan Institute for Regenerative Medicine |
| 3.55 PM | FLASH TALKS   |
| 4.30 PM | FIRST DAY WRAP-UP   |

### SOCIAL EVENT

**PALAZZO FATTA | starts at 6.30 PM**  
Piazza Marina, 19 Palermo

**POSTER SESSION WITH APERITIF  
AND GALA DINNER**



INFO & REGISTRATION  
<https://www.rimedsymposium.eu/>

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PALAZZO DEI NORMANNI | 9.00 AM - 4.00 PM

9.00 AM REGISTRATION

9.30 AM - 11.00 AM

9.30 AM **Life as a matter of function**

**Petra Schwill, Ph.D**

Director, Cellular and Molecular Biophysics, Max Planck Institute of Biochemistry; Honorary Professor, Ludwig-Maximilians-University, Munich

9.55 AM **Reinventing valve implantation: a Bioengineering journey from model to patient**

**Gaetano Burriesci, Ph.D**

Professor of Bioengineering at UCL and University of Palermo

10.20 AM **From Ancient Microbiomes to Modern Drug**

**Pierre Stallforth, Ph.D**

Professor, Department of Paleobiotechnology, Leibniz Institute for Natural Product Research and Infection Biology, HKI Chair for Bioorganic Chemistry and Paleobiotechnology Friedrich Schiller University Jena

10.45 AM **SELECTED TALK**

11.00 AM **COFFEE BREAK**

11.30 AM - 1.00 PM

11.30 AM **Expanding the universe of functional proteins**

**Bruno Correia, Ph.D**

Associate Professor, Laboratory of Protein Design and Immunoengineering, EPFL

11.55 AM **Engineering the skin microbiota for vaccination**

**Djenet Bousbaine, Ph.D**

Postdoctoral Scholar, Bioengineering, Stanford University

12.20 PM **Biology 2.0: data in age of AI**

**Michael Bronstein, Ph.D**

DeepMind Professor of AI, University of Oxford; Founding Scientific Director AI, Aithya Institute

12.45 PM **SELECTED TALK**

1.00 PM **LIGHT LUNCH**

2.30 PM - 4.00 PM

2.30 PM **Generative Biology: Learning to Program Cells**

**Wendell Lim, Ph.D**

Byers Distinguished Professor, Dept. of Cellular and Molecular Pharmacology; Director, Cell Design Institute, UCSF

3.00 PM **Engineering stem cell fate through niche interactions for diabetes: lessons from islet development**

**Francesca Spagnoli, Ph.D**

Professor of Regenerative Medicine, Guy's Campus, King's College

3.25 PM **Harnessing the CRISPR toolbox to engineer biology**

**Randall Platt, Ph.D**

Associate Professor, Dept. of Biosystems Science and Engineering, ETH; Associate Professor, University of Basel; Investigator, Botnar Research Center for Child Health; Investigator, NCCR Molecular Systems Engineering

3.50 PM **SELECTED TALK**

3.50 PM **CLOSING REMARKS**

## ORGANIZERS

**Tanja Kortemme**

University of California San Francisco

**Ben Lehner**

Wellcome Sanger Institute, Cambridge

**Petra Schwill**

Max Planck Institute of Biochemistry, Munich

**Giulio Superti-Furga**

Ri.MED Foundation, Palermo / CeMM, Vienna

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