First OSU/UC Interdisciplinary Meeting

Casa Central & Campus San Joaquín
Pontificia Universidad Católica de Chile

Organizers

César A. Ramírez-Sarmiento (Assistant Prof., IIBM)
Loreto P. Parra (Assistant Prof., IIBM & School of Engineering
Mario Vera (Assistant Prof., IIBM & School of Engineering)

UC Speakers

INSTITUTE FOR BIOLOGICAL AND MEDICAL ENGINEERING

Pablo Irarrazaval (Director)
César A. Ramírez-Sarmiento (Assistant Prof.)
Loreto P. Parra (Assistant Prof., IIBM & School of Engineering)
Mario Vera (Assistant Prof., IIBM & School of Engineering)

SCHOOL OF BIOLOGICAL SCIENCES

Luis F. Larrondo (Associate Prof., Dept. of Mol. Genetics & Microbiology)
Alexis M. Kalergis (Director, Millennium Inst. Immunology & Immunotherapy)
Nelson P. Barrera (Associate Prof., Dept. of Physiology)
Andreas Schüller (Assistant Prof., Dept. of Mol. Genetics & Microbiology)

SCHOOL OF MEDICINE

Aniela Wozniak (Assistant Prof., Dept. of Clinical Laboratories)
Marcelo López-Lastra (Associate Prof., Millennium Inst. Immunology & Immutherapy)

OSU Speakers

Irina Artsimovitch (Prof., Department of Microbiology)
Kou-San Ju (Assistant Prof., Department of Microbiology)
Marcos Sotomayor (Assistant Prof., Dept. of Chemistry & Biochemistry)
Daniel Wozniak (Prof., Center for Microbial Interface Biology)
Paul Stoodley (Prof., Center for Microbial Interface Biology)

DATES & LOCATION

October 11 Auditorio 7, 4th Floor, Centro de Extensión UC, Casa Central, Pontificia Universidad Católica de Chile

October 12 Sala de Usos Múltiples, Escuela de Ingeniería, Campus San Joaquín, Pontificia Universidad Católica de Chile

ACTIVITIES

Day 1 – Wednesday, October 11th – Casa Central

09:00 – 09:30 **Registration**

09:30 – 10:00 **Welcoming Remarks**

10:00 – 11:30 **Biofilms 1: From basic research to applications. Chair: Mario Vera**

10:00 – 10:30 **Aniela Wozniak**
Our experience in biofilms, medical devices and infectious diseases

10:30 – 11:00 **Paul Stoodley**
Studying biofilms in orthopaedic and device related infections

11:00 – 11:30 **Coffee Break**

11:30 – 12:30 **Biofilms 2: From basic research to applications. Chair: Mario Vera**

11:30 – 12:00 **Daniel Wozniak**
Biofilms and immunity in chronic infections

12:00 – 12:30 **Mario Vera**
Acidophile biofilms and their applications

13:00 – 14:30 **Lunch Time**

14:30 – 16:30 **Molecular Genetics, Microbiology & Virology: From molecular mechanisms to diseases. Chair: César A. Ramírez-Sarmiento**

14:30 – 15:00 **Irina Artsimovitch**
Mechanism and regulation of RNA chain synthesis

15:00 – 15:30 **Marcelo López-Lastra**
Translation initiation in viral mRNAs, understanding non-canonical translation initiation

15:30 – 16:00 **Alexis M. Kalergis**
Development of respiratory virus vaccines in Chile: paving the road from basic research towards community vaccination

16:00 – 16:30 **Luis F. Larrondo**
FUN-LOV: Fungal LOV domains for the optogenetic control of transcription.

16:30 – 17:00 Coffee Break

ACTIVITIES

Day 2 – Thursday, October 12th – Campus San Joaquín

09:00 – 10:30 **Computational & Experimental Biochemistry/Biophysics. Chair: César A. Ramírez-Sarmiento**

09:00 – 09:30 **César A. Ramírez-Sarmiento**
Computational & experimental protein biophysics: from transcription factors to protein engineering

09:30 – 10:00 **Nelson P. Barrera**
Novel insights of membrane protein structural biophysics

10:00 – 10:30 **Marcos Sotomayor**
Structural biology at Ohio State and the biochemistry of hearing

10:30 – 11:00 **Coffee Break**

11:00 – 12:30 **Biotechnology & Systems Biology: Computational & Experimental Approaches. Chair: Loreto P. Parra**

11:00 – 11:30 **Loreto P. Parra**
Protein engineering of Baeyer-Villiger monooxigenases for their use in biocatalysis

11:30 – 12:00 **Kou-San Ju**
Systems Biology for Natural Products Discovery: From Genomes to New Antibiotics

12:00 – 12:30 **Andreas Schüller**
Computational chemogenomics: *in silico* target prediction for small molecules

12:30 – 12:40 **César A. Ramírez–Sarmiento, Loreto P. Parra & Mario Vera**
Concluding Remarks