

Frontiers in Bioscience 3

Scientific Organizers
Eduardo Arzt & Herbert Jäckle

Monday, September 17

08:15 Registration

Session 1 – Ethology and Neuroscience

Chairs: **Noelia Weisstaub** (INCYT, CONICET - INECO - Fundación Favaloro. Buenos Aires) and **Fernando Pitossi** (IIBBA, CONICET - Fundación Instituto Leloir. Buenos Aires)

09:30 **Bill Hansson** (Max Planck Vice-President / Max Planck Institute for Chemical Ecology. Jena) *Ecologically labeled lines through the insect olfactory system.*

10:00 **Fernando Locatelli** (IFIBYNE, CONICET - UBA. Buenos Aires) *Peripheral adaptation and central plasticity tune olfactory perception.*

10:30 **Coffee break**

Session 2 - Molecular and Cell Biology

Chairs: **Mario Rossi** (IBioBA, CONICET - MPSP. Buenos Aires) and **Alejandro Colman-Lerner** (IFIBYNE, CONICET - UBA. Buenos Aires).

11:00 **María Isabel Colombo** (IHEM, CONICET - UNCu. Mendoza) *Intracellular pathogens: surviving to autophagy surveillance.*

11:30 **Matthias Mann** (Max Planck Institute of Biochemistry. Martinsried) *Proteomics for basic biology and clinical applications.*

12:00 **Helmuth Grubmüller** (Max Planck Institute for Biophysical Chemistry. Göttingen) *Atomistic simulation of biomolecular function: ribosomal translation, ligand binding heterogeneity, and a dynasome perspective.*

12:30 **Lunch break**

Session 3 - Microbiology and Translational Medicine

Chairs: **Paula Barrionuevo** (IMEX - CONICET - Academia Nacional de Medicina de Buenos Aires. Buenos Aires) and **Angeles Zorreguieta** (IIBBA, CONICET - Fundación Instituto Leloir. Buenos Aires).

14:00 **Werner Seeger** (Max Planck Institute for Heart and Lung Research. Bad Nauheim) *Translational perspectives in pulmonary hypertension.*

14:30 **Diego de Mendoza** (IBR, CONICET - UNR. Rosario) *Temperature sensing by membranes.*

15:00 **Stefan Kaufmann** (Max Planck Institute for Infection Biology. Berlin) *How to deal with the most successful pathogen on earth: Rational design of immunologic intervention strategies.*

15:30 **Andrea Gamarnik** (IIBBA, CONICET - Fundación Instituto Leloir. Buenos Aires) *Regulatory functions and evolution of RNA structures in the Dengue virus genome.*

16:00 **Poster Session with coffee**

WELCOMING WORDS

17:15 **Eduardo Arzt** (Director of IBioBA, CONICET - MPSP), **Bill Hansson** (Max Planck Society Vice-President) and **Jürgen Christian Mertens** (Ambassador of the Federal Republic of Germany in Argentina)

PUBLIC LECTURE

Chair: **José Luis Bocco** (CIBICI, CONICET - UNC. Córdoba)

17:30 **Martin Wikelski** (Max Planck Institute for Ornithology. Radolfzell) *The Internet of Animals - Humboldt's vision becoming a reality?*



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Tuesday, September 18

08:15 Registration

Session 4 - Neuroscience

Chairs: **Juan Goutman** (INGEBI - CONICET. Buenos Aires) and **Silvia Wikinski** (Instituto de Farmacología – F. Med - UBA - CONICET. Buenos Aires).

09:00 **David Fitzpatrick** (Max Planck Florida Institute for Neuroscience. Florida) *Functional synaptic architecture of visual cortex.*

09:30 **Belén Elgoyhen** (INGEBI - CONICET. Buenos Aires) *Talking back: the efferent olivocochlear system.*

10:00 **Reinhard Jahn** (Max Planck Institute for Biophysical Chemistry. Göttingen) *How to fill a synaptic vesicle with neurotransmitter in 30 seconds.*

10:30 **Elisabeth Binder** (Max Planck Institute of Psychiatry. München) *Epigenetic embedding of early life adversity.*

11:00 *Coffee break*

Session 5 – Connectivity and Timescales in Biology

Chairs: **Rolando Rivera Pomar** (CREG, CONICET - UNLP. La Plata) and **Daniel Hochbaum** (CONICET - UBA).

11:30 **Benjamin Kaupp** (CAESAR - Center of Advanced European Studies and Research. Bonn) *Signaling in a tiny ciliary volume – insights from proteomic quantification.*

12:00 **Fernanda Ceriani** (IIBBA, CONICET - Fundación Instituto Leloir. Buenos Aires) *Mechanisms underlying the daily remodeling of neuronal terminals.*

12:30 **Adam Antebi** (Max Planck Institute for Biology of Ageing. Cologne) *Convergent mechanisms of longevity.*

13:00 **Moritz Helmstaedter** (Max Planck Institute for Brain Research. Frankfurt) *Cerebral cortex connectomics.*



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Wednesday, September 19

08:15 Registration

Session 6 – Ecology and Plant Biology

Chairs: Pablo Manavella (IAL, CONICET - UNL. Santa Fe) and Leonardo Erijman (INGEBI - CONICET. Buenos Aires)

- 09:00 **Raquel Chan** (IAL, CONICET - UNL. Santa Fe) *A cyclic pipeline linking fundamental research with crop improvement involving plant transcription factors from the homeodomain-leucine zipper family.*
- 09:30 **Regine Kahmann** (Max Planck Institute for Terrestrial Microbiology. Marburg) *How fungi colonize plants: unexpected features of secreted effectors.*
- 10:00 **Rudolf Amann** (Max Planck Institute for Marine Microbiology. Bremen) *Phytoplankton and bacterioplankton interactions in coastal seas.*

10:30 **Coffee break**

Session 7 - Nano and Structural Biology

In Memoriam Elisa Izaurrealde

Chairs: Jose Maria Delfino (IQUIFIB, CONICET - UBA. Buenos Aires) and Julio Caramelo (IIBBA, CONICET - Fundación Instituto Leloir. Buenos Aires).

- 10:50 **Words in Memoriam Elisa Izaurrealde**
- 11:00 **Holger Stark** (Max Planck Institute for Biophysical Chemistry. Göttingen) *High-resolution structure determination of large and dynamic macromolecular complexes.*
- 11:30 **Stefan Raunser** (Max Planck Institute of Molecular Physiology. Dortmund) *The power of cryo-EM to elucidate biological mechanisms.*
- 12:00 **Fernando Stefani** (CIBION - CONICET. Buenos Aires) *MINFLUX: a new generation of fluorescence nanoscopy.*
- 12:30 **Andrei Lupas** (Max Planck Institute for Developmental Microbiology. Tübingen) *On the origin of folded proteins.*

13:00 **Lunch Break**

Session 8 - Ecology and Plant Biology

Chairs: Julia Questa (IFIBYNE, CONICET - UBA. Buenos Aires) and Gabriela Amodeo (IBBEA, CONICET - UBA. Buenos Aires).

- 14:00 **Detlef Weigel** (Max Planck Institute for Developmental Biology. Tübingen) *Genetic and epigenetic adaptation to the environment.*
- 14:30 **Sandra Díaz** (IMBIV, CONICET - UNC. Córdoba) *Searching for general patterns in ecology: the global spectrum of plant form and function.*
- 15:00 **Jorge Muschietti** (INGEBI - CONICET. Buenos Aires) *Autocrine control of pollen tube growth. Role of Arabidopsis RALF4/19 and LRX pollen proteins.*

15:30 **Poster Session with coffee**

Session 9 - Neuroscience

Chairs: Sebastián Romano (IBioBA, CONICET - MPSP. Buenos Aires) and Daniel Tomsic (IFIBYNE, CONICET - UBA. Buenos Aires).

- 16:45 **Cecilia Bouzat** (INIBIBB, CONICET - UNS. Bahía Blanca) *Why is the alpha7 nicotinic receptor so complex and unique?*
- 17:15 **Emilio Kropff** (IIBBA, CONICET - Fundación Instituto Leloir. Buenos Aires) *Acceleration drives theta oscillation frequency in the rat medial entorhinal cortex.*



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