



University
of Basel

Department of
Biomedicine



DBM Summer Symposium August 22, 2024

Big Lecture Hall, ZLF
Hebelstrasse 20,
4031 Basel

Program

August 22, 2024

08:00 - 08:05 **Ivan Martin**, Welcome

08:05 - 08:45 **Barbara Treutlein**, ETH-Z, D-BSSE
Key Lecture
Title tbd

Session 1 **Chairs: Aimée Zuniga and tbd**

08:45 - 08:55 **Marion Salvador**, Tumor Heterogeneity Metastasis and Resistance
PROCR-expressing human mammary stem cells give rise to claudin-low breast cancer with poor prognosis

08:55 - 09:05 **Laura Steiger**, Diabetes Research
Exocrine pancreas inflammation impairs insulin secretion without affecting β -cell mass

09:05 - 09:15 **Adrien Moya**, Bone Regeneration
Chondrogenesis, Cell metabolism and Spatial biology using the Hyperion Imaging Mass Cytometry system

09:15 - 09:25 **Terézia Dorčáková**, Systems Pharmacology and Biology of Metabolism
*Systematic gene function annotation in *Mycobacterium smegmatis* by metabolic profiling of CRISPRi-mediated inactivation of essential genes*

09:25 - 09:50 **Break with refreshments**

Session 2 **Chairs: Petya Apostolova and tbd**

09:50 - 10:00 **Amandine Grimm**, Molecular Neurosciences
Exploring the potential of mitochondrial transplantation as a therapeutic approach against neuronal bioenergetic deficits

10:00 - 10:10 **Alessandra Vescovi**, Regenerative Angiogenesis
VEGF chemically modified mRNA-loaded matrix for vascularized bone engineering

10:10 - 10:20 **Lalita Oparija-Rogenmozere**, Cancer- & Immunobiology
Non-redundant functions of PI3K complexes in obesity and metaflammation

10:20 - 10:30 **Marko Hasiuk**, Molecular Immune Regulation
Tmem127 regulates the T cell proteome and homeostatic IL-7 signaling

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10:30 - 10:40 **Sebastian Reinartz**, Brain and Sound
Sensation of elapsed time in the auditory system

Session 3 **Chairs: Tania Rinaldi Barkat and tbd**

10:40 - 10:50 **Rushiesh Sheth**, Developmental Genetics
Robustness and Plasticity of a Self-Organizing System

10:50 - 11:00 **Mattia Marinucci**, Visceral Surgery and Precision Medicine
Combined Casein Kinase 2 and MAPK signaling inhibition as a therapeutic strategy for metastatic colorectal cancer

11:00 - 11:10 **Jose Pedro Pereira Loureiro**, Experimental Immunology
MR1 activates TCR V γ 9V δ 2 cells in an antigen-dependent manner

11:10 - 11:30 **David Hauser**, Molecular Virology - **Business Case**
Advancing Respiratory Disease Vaccines with Propagation-Deficient Viruses

11:30 - 11:50 **Break with refreshments**

11:50 - 12:00 **Inside DBM**

Session 4 **Chairs: Lukas Jeker and tbd**

12:00 - 12:10 **Antonio Sileo**, Cardiac Surgery and Engineering
Enhancing cardiac engineered tissue maturation and functionality using combined passive and active mechanical loading

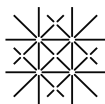
12:10 - 12:20 **Mika Schneider**, Clinical Neuroimmunology
Brain viral infection unleashes latent autoimmune response

12:20 - 12:30 **Raphael Schmid**, Cartilage Engineering
The potential of nasal chondrocyte spheroids for intervertebral disc repair

12:30 - 12:40 **Jan Thomann**, Psychopharmacology Research
In vitro and in vivo metabolism of psilocybin's active metabolite psilocin

12:40 - 13:00 **Award Ceremony and Research Presentation**
DBM Research Prize 2023/2024

The Department of Biomedicine
is a joint venture between the
following institutions:



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Basel**



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