

Institute of Molecular and Cell Biology & Institute of Genomics Annual Conference 2022

Programme

Thursday January 19th, 2023

09:10 – 09:30 **Opening of the conference:** Director of the IMCB Prof. Maia Kivisaar, Director of the IG Prof. Mait Metspalu

Morning session

Session 1

09:30 – 09:55 Associate Prof. **Bayazit Yunusbayev** (IG)
“**Seeking for autoimmunity risk variants with a strong functional effect by pinpointing targets of natural selection**”

09:55 – 10:15 3rd-year PhD student **Danat Yermakovich** (IG)
“**The pleiotropic and long-range regulatory impact of Neandertal DNA in modern humans**”

10:15 – 10:35 3rd-year PhD student **Rita Kreevan** (IG)
“**Leveraging electronic health records and genotype information for sample selection**”

10:35 – 11:00 Coffee Break

Session 2

11:00 – 11:20 PhD student 2nd-year **Siim Kurvits** (IG)
“**Characterising Severity-Based Depression Sybtypes Using Electronic Health Records and Machine Learning in the Estonian Biobank**”

11:20 – 11:45 Research Fellow **Rya Ero** (IMCB)
“**Illuminating the significance of ribosomal RNA modifications**”

11:45 – 12:15 **2 min flash talks session 1 (odd numbers)**

12:15 – 14:00 Lunch Break

Afternoon session

Session 3

- 14:00 – 14:30 **Keynote 1:** Associate Prof. **Kallol Roy** (Institute of Computer Science, University of Tartu)
“Demystifying Machine Learning for Biological Sciences”
- 14:30 – 14:50 4th-year PhD student **Vi Ngan Tran** (IMCB)
“Programmed disassembly of an Interplanar Amida Network coordinates 3D epithelial growth”
- 14:50 – 15:10 3rd-year PhD student **Ingrem Popazova** (IMCB)
“Evolution of bacterial populations in m-cresol-containing Environment”
- 15:10 – 15:40 **2 min flash talks session 2 (even numbers)**
- 15:40 – 17:00 **Kringel & Coffee Break**
- 15:40 – 17:00 **Poster session**

Friday January 20th, 2023

Morning session

Session 4

- 09:10 – 09:30 4th-year PhD student **Anette Kalnapenkis** (IG)
“Genetic determinants of plasma protein levels in Estonian population – from pQTLs to complex traits”
- 09:30 – 09:50 2nd-year PhD student **Hanna Antson** (IMCB)
“Uncovering the mechanism behind the intercellular regulation of apico-basal polarity in *Drosophila* wing imaginal disc”
- 09:50 – 10:10 3rd-year PhD student **Shrinidhi Madhusudan** (IG)
“Deciphering the role of *DLX5* in human GnRH neuron ontogeny with CRISPR activation”

10:10 – 10:40 **Coffee Break**

Session 5

10:40 – 11:10 **Keynote 2:** Research Fellow **Liisa Loog** (University of Cambridge, UK)

“Plato’s Cave: Finding causes of past genetic selection”

11:10 – 11:35 Postdoctoral Research Fellow **Toni de Dios** (IG)

“Ancient organelle DNA from loose sediments using High-Throughput Sequencing”

11:35 – 11:55 2nd-year PhD student **Biancamaria Bonucci** (IG)

“Concretion-covered tissues as resource to study ancient oral microbiomes”

11:55 – 12:15 2nd-year PhD student **Kadri Irdt** (IG)

“Old ‘chewing gums’ as a new source for studying human past”

12:15 – 14:00 **Lunch Break**

Afternoon session

Session 6

14:00 – 14:25 Associate Prof. **Triin Laisk** (IG)

“A map of genetic and phenotypic associations across female reproductive phenotypes”

14:25 – 14:45 3rd-year PhD student **Yan Zhao** (IMCB)

“Ultrasensitive detection of minor fractions of fetal and paternal haplotypes in mixed maternal samples”

14:45 – 15:05 3rd-year PhD student **Natalia Pujol Gualdo** (IG)

“Genome-wide meta-analysis supports the association between MUC1 and ectopic pregnancy”

15:05 – 15:30 **Kringel & Coffee Break**

Session 7

15:30 – 15:50 3rd-year PhD student **Arun Kumar Devarajan** (IMCB) (online)

“The effect of short-term and long-term warming on the relationships between soil microbial communities and plant root parameters”

- 15:50 – 16:10 4th-year PhD student **Kaspar Reier** (IMCB)
“Regulation of translation inhibition in *Escherichia coli* during the stationary phase”
- 16:10 – 16:30 2nd-year PhD student **Tarmo Puurand** (IMCB)
“Finding chrY haplogroup in samples with ultra-low sequencing depth”
- 16:30 – 16:50 **Break time (leftover party)**
- 16:50 – 17:15 Ending of the conference, closing remarks and the **award ceremony**

Flash talks & Poster number

session 1 (odd numbers) - 11:45 – 12:15

- 1 - Mathilde André (4th-year PhD student, IG)
- 3 - Aigerim Galiyeva (1st-year PhD student, IMCB)
- 5 - Ainika Harro (2st-year PhD student, IG)
- 7 - Kerli Ilves (1st-year PhD student, IG)
- 9 - Ivan A. Kuznetsov (1st-year PhD student, IG)
- 11 - Astrid Laidna (1st-year PhD student, IMCB)
- 13 - Surabhi Mahajan (1st-year PhD student, IMCB)
- 15 - Triinu Ojalo (1st-year PhD student, IG)
- 17 - Angela Peeb (4th-year PhD student, IMCB)
- 19 - Stefania Sasso (4th-year PhD student, IG)
- 21 - Baris Yasar (3rd-year PhD student, IMCB)

session 2 (even numbers) - 15:10 – 15:40

- 2 - Jéssica Figuerêdo (1st-year PhD student, IG)
- 4 - Harleen Kaur (1st-year PhD student, IMCB)
- 6 - Johanna Hendrikson (1st-year PhD student, IMCB)
- 8 - Hanna Maria Kariis (3rd-year PhD student, IG)
- 10 - Kertu Liis Krigul (4th-year PhD student, IG)
- 12 - Lea Lopp (1st-year PhD student, IMCB)
- 14 - Miriam Nurm (1st-year PhD student, IG)
- 16 - Fanny-Dhelia Pajuste (4th-year PhD student, IMCB)
- 18 - Kateryna Pantiukh (1st-year PhD student, IG)
- 20 - Jaan Vihalemm (1st-year PhD student, IMCB)
- 22 - Suhbam Saha (2nd-year PhD student, IMCB)

Sponsors: HNK Analüsitehnika OÜ, LanLab OÜ, Lanmer OÜ, Nova Natura OÜ, Quantum Eesti AS, Semetron AS, UPSTREAM OÜ