

International Conference of Life Sciences

# The COINS 2023

## INFOBOOK



# FOREWORD

Dear The COINS 2023 conference attendees,

It is my great pleasure to welcome you all to “The COINS 2023. Changing the World One Step at a Time: from Theory to Practice”! It is wonderful to get together in person and share our knowledge and experience in the life sciences field after a two-year pandemic break.

As the Executive Project Manager, I am excited to see such a diverse range of topics and participants at this year's conference. Our program offers a wide spectrum of topics - from ecology, neurosciences, and bioengineering to biomedicine - and attendees will have the opportunity to listen to presentations on the latest research in these fields and its practical applications.

The COINS Conference's primary goal is to promote student involvement in scientific endeavours, and I'm happy to see that this goal is being met by the record number of poster presentations we've received.

Over the next four days, keynote speakers, scientists, and students will engage in lectures, discussions, and networking sessions, allowing us to expand our horizons, get new ideas for our research and become more passionate about science.

Once again, I would like to extend my warmest welcome to all of you and wish you a successful and productive conference!



**Lukas Krasauskas**  
Executive Project Manager

# FOREWORD

## Welcome to "The COINS" – International Conference of Life Science!

My name is Inga Songailienė, and as a research scientist at the Life Sciences Center, I am honoured to be one of the ambassadors of this event.

Before the conference begins, I have to admit something – I didn't actually organize this event, but I did manage to find my way to be in this book! It feels indeed like a secret gene transposition event.

First and foremost, I want to extend my congratulations to the incredible team of Bachelor's and Master's undergraduate students who have put in countless hours of hard work to make this event possible. It's inspiring to see undergraduate students taking the initiative to create opportunities for academic and professional growth beyond the classroom and giving this gift to every member of the Life Sciences Center community. Organizing a conference of this scale while juggling your studies is not an easy feat, and I am truly impressed by your motivation and commitment.

I am confident that this tradition will continue, and you, as big brothers and sisters now, will act as ribosomes, translating your know-how to the younger generations. After all, once this year you will figure out how to cure ageing, use T-cells for clinics or edit stem cells to avoid diseases, I am sure you can continue organizing this conference forever!

Overall, "The COINS" conference is your great chance to learn from experienced researchers, see different angles to approach the same scientific problem or seek out potential internships. I encourage all of you to take advantage of the opportunities available here – don't be shy to strike up conversations and exchange ideas. Who knows, you might even find your future mentor or collaborator here! Just be careful, as the conference may act as a psychedelic on your brain.

Speaking of genes, I see this conference as an essential gene of the Life Sciences Center – those "good genes" that don't need editing. However, in case you have some "bad" ones, this year at "The COINS" you can find out how to deal with them. Who knows, maybe in the future, you could apply these editing tools to erase the traces of bad memories in your brain or go directly from yeast genome to fish. But for that you must at first carefully follow the talks of the keynote speakers!

This has been only my short, not at all scientifically accurate or statistically significant glimpse of everything that awaits you in the upcoming program. Right before we dive into the exciting sessions, I would like to express our heartfelt gratitude to our sponsors for their support. You have provided the foundation that helped to crystallize this event to its finest!

**Thank you, and let's get some scientific bit-COINS!**



**Inga Songailienė**

Ambassador

# FOREWORD

The COINS Conference and its organization committee have been on a mission to cultivate a thriving scientific ecosystem in Lithuania by creating an open and collaborative platform for leading scientific communities around the world to come together and exchange ideas.

For scientists and students alike, attending the COINS Conference is an experience like no other. Not only do attendees get to listen to and engage with some of the world's foremost experts in their field, but they also have the chance to network with peers and build valuable professional relationships that can last a lifetime. For many attendees, the Conference is a fantastic chance to get inspired by the fascinating research and cutting-edge technologies that are being developed around the world.

By fostering collaboration and communication between different scientific fields, the conference provides a platform for interdisciplinary research and innovation. This approach has proven to be incredibly successful, with attendees reporting that they leave the conference feeling energized and inspired to take their research to the next level.

As the COINS Conference continue to grow and evolve, I wholeheartedly believe that they will continue to make significant contributions to the scientific community in Lithuania and around the world.



**Nemira Žilinskaitė**

Ambassador

# PROGRAM

April 24th | Monday

Bioengineering

08:30 - 09:30

Registration

09:30 - 10:00

**OPENING CEREMONY**

10:00 - 10:15

Oral presentation

*Kotryna Čekuolytė*

10:15 - 11:00

**LINDA PARTRIDGE**

*Can We Cure Ageing?*

## COFFEE BREAK

11:15 - 12:45

**Activity: Andrius Ivanovas**

*From Dull Data to 5 ★ Worth Presentations: a  
Different Approach to Scientific Communication*

## LUNCH BREAK

13:00 - 13:30

Poster session / Lunch break

13:30 - 14:45

**POSTER SESSION**

14:45 - 15:00

Oral presentation

*Artūras Polita*

15:00 - 15:45

**EGIDIJUS ŠIMOLIŪNAS**

*Maxillofacial Bone Regeneration: Insights  
Into Artificial Bone Fabrication*

## COFFEE BREAK

16:15 - 17:00

**NURIA MONTERRAT**

*How to Engineer Human Pluripotent  
Stem Cells to Understand Human  
Development and Disease*

17:00 - 17:15

**CLOSING OF THE DAY**

# April 25th | Tuesday

## Ecology

08:30 - 09:45

Registration

09:45 - 10:00

**OPENING OF THE DAY**

10:00 - 10:15

Oral presentation

*Yahor Levachou*

10:15 - 11:00

**MARTIN HOWARD**

*How to Measure and Remember a  
Fluctuating Temperature Signal*

### COFFEE BREAK

11:15 - 12:30

Demonstration: Valdis  
Bernhofs and Jachin  
Edward Pousson

*Music and the Brain: Interactions with  
Perception, Performance, and the EEG Signal*

### LUNCH BREAK

13:00 - 13:30

Poster session / Lunch break

13:30 - 14:45

**POSTER SESSION**

14:45 - 15:00

Oral presentation

*Ivanna Dmytriieva*

15:00 - 15:45

**ANNE PARLE-MCDERMOTT**

*From the Yeast Genome to Fish: a Career  
Journey of Collaborative Discovery*

### COFFEE BREAK

16:00 - 16:15

Oral presentation

*Mélanie Yvonne Ludivine Duc*

16:15 - 17:00

**KAROLINA MAKOVSKYTĚ**

*How CRISPR-Cas Can Help Reduce  
Climate Change?*

17:00 - 17:15

**CLOSING OF THE DAY**

# April 26th | Wednesday

## Neurosciences

08:30 - 09:45

Registration

09:45 - 10:15

**OPENING OF THE DAY**

10:15 - 11:00

**THOMAS OERTNER**

*Finding the Traces of Memories  
in the Brain*

### COFFEE BREAK

11:30 - 11:45

Oral presentation

*Rimas Prokopovičius*

11:45 - 12:30

**NATHALIE RIESER**

*The Acute Effects of Psychedelics in the  
Brain and Their Clinical Implications*

### LUNCH BREAK

13:00 - 13:30

Poster session / Lunch break

13:30 - 14:45

**POSTER SESSION**

14:45 - 15:00

Oral presentation

*Armenas Šaginianas*

15:00 - 15:45

**MARTIN HOFMANN-APITIUS**

*COVID, the Pandemic, and Neurodegeneration:  
Remarks on Gurus, Politics and the Way we  
do Science*

15:45 - 16:00

**CLOSING OF THE DAY**

16:30 - 18:30

**WALK THROUGH THE  
HEART OF VILNIUS**

19:00 - 00:00

**GALA EVENING**

# April 27th | Thursday

## Biomedicine

08:30 - 09:45

09:45 - 10:15

10:15 - 11:00

Registration

**OPENING OF THE DAY**

**AUDREY LAPINAITE**

Understanding Molecular Mechanism of  
Current Precision Genome Editing Tools

### COFFEE BREAK

11:30 - 11:45

11:45 - 12:30

Oral presentation

*Uzair Ahmed*

**STEPHEN KNOX JONES**

*How Precise is Precise? Revealing the  
Targeting Specificity of CRISPR Nucleases*

### LUNCH BREAK

13:15 - 14:45

14:45 - 15:00

15:00 - 15:45

15:45 - 16:00

16:00 - 16:30

**COMPANY FAIR**

Oral presentation

*Ayush Kumar Ganguli*

**PIOTR TRZONKOWSKI**

*From Bench to Bedside - T Regulatory Cells  
in the Clinic*

Oral presentation

*Evelina Šimkutė*

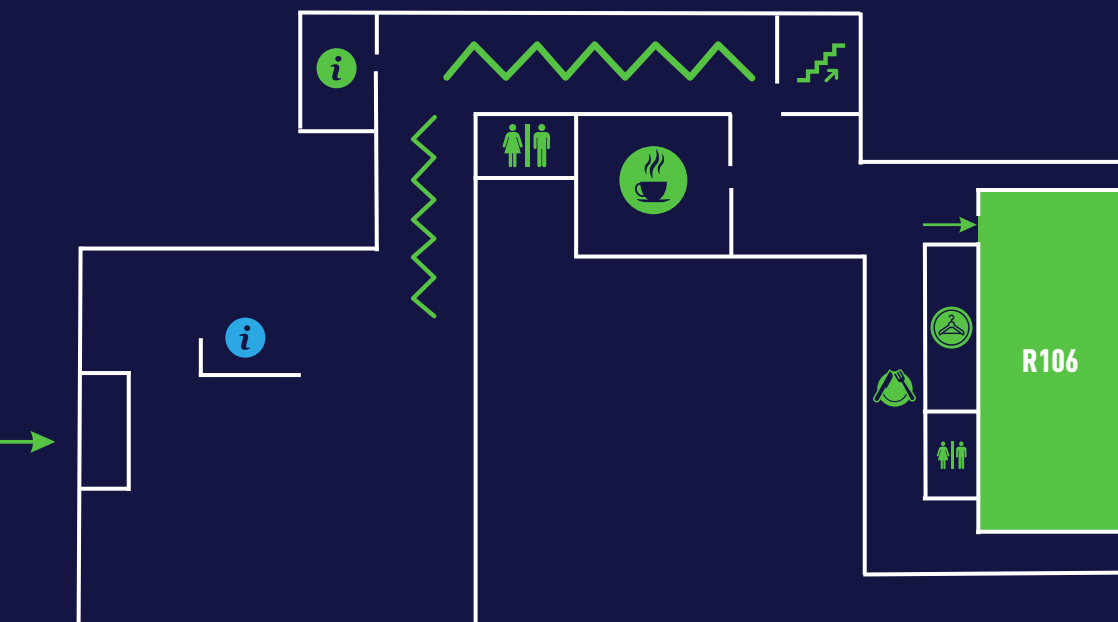
**CLOSING CEREMONY / AWARDS**



on 27<sup>th</sup> of April




# MAP OF THE CONFERENCE



→ Entrance

 Registration desk

 Information centre

 Coffee area

 Lunch area

 Wardrobe

 Toilets

 Stairs

 Conference hall

 Poster session

## PARTICIPANTS OF COMPANY FAIR

# ThermoFisher SCIENTIFIC

At Thermo Fisher, everything we do is driven by our Mission to enable our customers to make the world healthier, cleaner and safer. It is our purpose—the heart of who we are as a Company—and it inspires our more than 125,000 colleagues to bring their best every day. As the world leader in serving science, we know we are here to help make the world a better place.



Caszyme is a life sciences company specializing in CRISPR Cas technology development and applications. Caszyme aims to develop new discoveries, innovative applications, and top-quality research in the field of CRISPR based Molecular Tools. Caszyme seeks to create outstanding value for researchers and companies practicing gene-editing worldwide.



S P A R N A I A T R A D I M A M S

Linea libera is your partner working in the field of life sciences. We are offering both instruments and consumables as well as supporting our customers with field application service.

We are laboratory people. We have knowledge and 30 years of experience. Striving in creating value and achieving success in your work.

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Delta Biosciences is a biotech startup using biology to develop innovative solutions in drug discovery, biomanufacturing, and environmental remediation. They focus on novel therapeutics for diseases, sustainable biologics production, and pollution cleanup, with an emphasis on innovation and positive impact.



Lanmer provides technical solutions to Baltic Scientific Research Community, supports Baltic Biotech and Pharmaceutical industries, and Baltic Deep-Tech Startup Community. They offer full-workflow solutions, lab equipment, and expertise in project management, scientific research, and regulatory compliance for biotech and pharma companies.



Mobili bioklasė is a mobile laboratory that goes to various schools in Lithuania. It enables students to get acquainted with real scientific instruments, dive deep into the latest research methods, and even helps to conduct their scientific experiments. Mobilioji bioklasė is breaking down barriers and inspiring the next generation of scientists by delivering hands-on science education straight to schools.



Mediq is a leading Lithuanian healthcare company that provides a wide range of medical products and services to patients and healthcare professionals. Every day we are supplying people with the daily support and care they need to successfully self-manage their chronic condition. With over 25 years of experience in the industry, Mediq has established itself as a trusted and reliable partner in the Lithuanian healthcare sector. We are providing value beyond medical products, devices and services.



Expertus Vilnensis is a sales and service company specializing in four technology areas:

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Vilnius-Lithuania iGEM is an annually selected team of young scientists participating in a world-class synthetic biology contest. So far Lithuanian teams have successfully competed against teams from the best universities in the world. Vilnius iGEM projects not only are the highlight of the contest but are also an inspiration for startups.



EVUGENE performs data analysis of biomedical experiments. An international team of bioinformatics specialists creates statistical and artificial intelligence models, interprets results and advises scientists conducting genetics, epigenetics, and metabolomics research. Together, we ask questions - and find valuable insights!

# TEAM



**Lukas Krasauskas**  
Executive Project Manager



**Simona Šalčiūnaitė**  
Public Relations Representative



**Evelina Prosevičiūtė**  
Human Resources Coordinator



**Julija Arbačiauskaitė**  
Keynote Speakers Coordinator



**Gabija Gervinskytė**  
Public Awareness Activities Coordinator



**Ugnius Sejonas**  
Financial Affairs Coordinator



**Eglė Pociūtė**  
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**Viktorija Rainytė**  
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**Eivinas Zableckas**  
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**Fausta Michnevičiūtė**  
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**Rokas Bertašius**  
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Latvia, Lithuania and Estonia



International Conference of Life Sciences

# The COINS 2023



## Book of Abstracts