



# Faces of Industrial Research 2023

Forum Rolex, EPFL  
20<sup>th</sup> March 2023





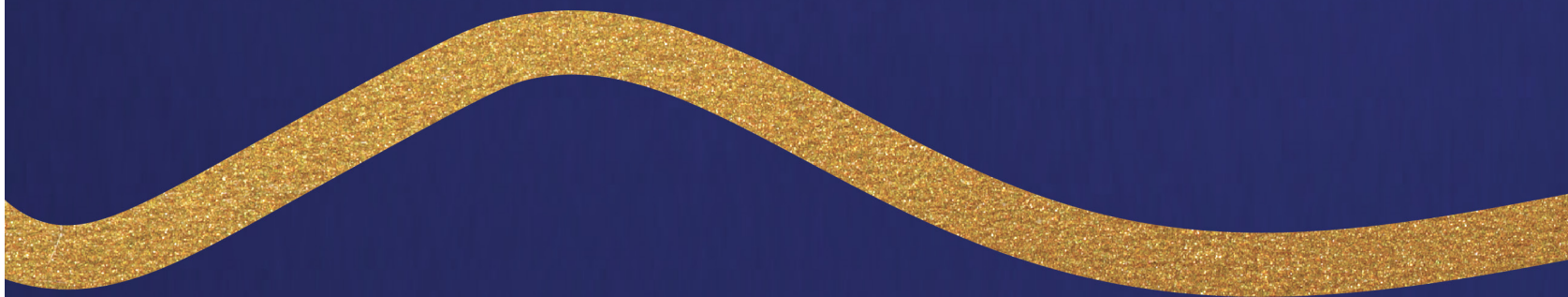
# Research and Development



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## Panel Discussions

Submit your questions to the speakers throughout the day. Go to <https://ahaslides.com/FIR2023> or scan the QR code.





# Program

8:30	Registration and welcome coffee / Booths presentation
9:00	Opening word
9:05	Booth introduction Jonathan Fearn – <b>Nestlé Research</b> Céline Leboeuf – <b>OM Pharma</b> Jean-Aurélien Schwartz – <b>SOPHiA GENETICS</b> Bilal Fares – <b>ND Biosciences</b>
<b>Session 1</b>	
9:15	Prof. Alexander Mathys – Professor of Sustainable Food Processing at ETH Zurich <b>Transfer more Sustainable Food Processing Solutions into Applications / or Society</b>
9:40	Dr. Moez Sanaa – Unit Head, Senior Epidemiologist at WHO <b>Veterinary epidemiologist and Risk Assessor expert: My journey from animal health to global nutrition and food safety</b>
10:05	Dr. Maria Vicario – Gut Physiology Group Leader at Nestlé Research <b>Research in gastroenterology: moving from academia to industry is more than a gut feeling</b>
10:30	<b>Panel discussion 1</b>
11:00	Coffee break / Booths presentation
<b>Session 2</b>	
11:15	Dr. Grégory La Sala – Scientist and Matrix Leader at Roche <b>Protein engineers on the job market: a showcase on improving immunotherapies using PD-1-cis IL-2R agonism</b>
11:40	Dr. Amarande Murisier – Bioanalytical Scientist at Debiopharm <b>From Pharmacist to Analytical Scientist or from proteins to small molecules: learn to adapt</b>
12:05	Dr. Dmitry Kopelyanskiy – Project manager – Business & Corporate Development at HAYA Therapeutics <b>How to get lucky: My path to Dark Genome</b>

12:30	Panel discussion 2
13:00	Lunch / Booths presentation
	<b>Session 3</b>
14:00	Dr. Margaux Duchamp – CEO and Co-founder of ArcoScreen <b>Combining microtechnology and molecular biology to revolutionize G Protein Coupled Receptor drug discovery</b>
14:25	Prof. Hilal Lashuel – Professor of Neuroscience at EPFL and Founder and CSO of ND BioSciences <b>The joy of crossing boundaries and embracing complexity. My career journey from chemistry to neuroscience to biotech</b>
14:50	Dr. Amy E. Barton Alston – Associate Medical Director in Nanomedicine Science at CSL Vifor <b>Let's get renal: A multi-faceted career path in nephrology</b>
15:15	Panel discussion 3
15:45	Coffee break / Booths presentation
	<b>Session 4</b>
16:00	Dr. Ana Claudia Marques – Genome Expert Research Lead at SOPHiA GENETICS <b>The art of scientific storytelling: a space traveler's perspective</b>
16:25	Dr. Mario Romani – Preclinical Scientist in Business Development and Innovation Department at OM Pharma <b>Immunomodulatory effects of the bacterial lysate OM-85 - My(tochondrial) way from academia to industry</b>
16:50	Dr. Clara Galán Navarro – Project Manager in Innovation at Alcimed <b>Innovation consulting: using scientist brains to answer industry main questions</b>
17:15	Panel discussion 4
17:45	Closing remarks and invitation to the social event
17:55	Dr. Pierre-Jean Wipff – Innovation and Partnerships Director at Biopôle <b>Biopôle presentation</b>
	<b>Social event (Sponsored by Biopôle)</b>
20:00	End of the event

# Alexander Mathys

Professor of Sustainable Food Processing at ETH Zurich



## Transfer more Sustainable Food Processing Solutions into Applications / or Society

Prof. Dr.-Ing. Alexander Mathys is food technologist and received his doctoral degree in food processing in 2008. He is Professor in Sustainable Food Processing at ETH Zurich since 2016, where he is working on more efficiency and sustainability of value chains in food and feed. Dr. Mathys acts as President of the Swiss Academy of Sciences National Committee of IUFoST. He was Head of the Bioeconomy Department at German Institute of Food Technologies DIL in 2012-2015 and worked as expert in non-thermal preservation and sterilization technologies at the Nestlé Research Centre Lausanne in 2009-2012. Dr. Mathys is the author of more than 110 publications, 10 book chapters, and 12 patents. He was winner of the ETH Zurich Dandelion Entrepreneurship Award 2022 and International Institute of Food Technologists Food Security Award 2020. In 2010 he was selected as “Young Researcher” at the 60th Meeting of Nobel Laureates in Lindau.



# Moez Sanaa

Unit Head, Senior Epidemiologist at WHO



## Veterinary epidemiologist and Risk Assessor expert: My journey from animal health to global nutrition and food safety

Dr. Sanaa is the Head of the Standards and Scientific Advice on Food and Nutrition (SSA) Unit at the Department of Nutrition and Food Safety, World Health Organization. He was previously the head of the Food Risk Assessment Unit at the French Agency for Food, Environmental, and Occupational Health and Safety (ANSES), where he led the work on chemical and microbiological contaminants risk assessment, as well as the safety assessment of enzymes, processing aids, food contact materials, and GMOs. Earlier, he was a professor at the National Veterinary School of Alfort (France), where he taught biostatistics, epidemiology, and risk analysis and oversaw various national and European research initiatives in veterinary public health.

Between 2005 and 2018, he contributed significantly to the work of the European Food Safety Authority's (EFSA) on Animal Health and Animal Welfare and Biological Hazards expert panels, and he participated in several capacity building projects in food safety systems in various African, East European, and Middle East countries. He worked as a Senior Epidemiologist on Genomic Data Usage in Risk Assessment at the Food and Drug Administration Center for Food Safety and Applied Nutrition (FDA-CFSAN, Maryland, USA) to improve transatlantic collaboration (2017-2018). He was a highly active member of the EFSA Advisory Forum between 2019 and 2018 for fostering the scientific cooperation between member states, building a data ecosystem for food safety, and ensuring the sustainability of risk assessment.

Moez Sanaa, who is originally from Tunisia, earned his Doctor of Veterinary Medicine from the National School of Veterinary Medicine (Tunis). He studied infectious diseases and epidemiology at the Veterinary School of Alfort (France) while earning his Master's and PhD degrees in Epidemiology and Biostatistics from the Université of Paris XI, Faculty of Medicine (France).

# Maria Vicario

Gut Physiology Group Leader  
at Nestlé Research and Development



## Research in gastroenterology: moving from academia to industry is more than a gut feeling

Dr. Maria Vicario graduated in Pharmacy at Complutense University in Madrid and obtained her Master's degree and PhD in Physiology of the Gastrointestinal Tract at the University of Barcelona. She further trained in gastrointestinal barrier mechanisms and mucosal immunology at McMaster University (Canada), Cincinnati Children's Medical Center (USA) and Linköping University (Sweden). In 2011, Dr. Vicario gained a tenure-track position supported by the Science National Program in Spain to establish her research group at Vall d'Hebron University Hospital (Barcelona). Her research has identified structural and functional gut barrier alterations underlying most common disorders of the brain-gut interaction, mainly IBS and Functional Dyspepsia. Since 2019 she leads the Gut Physiology group at Nestlé Research (Lausanne). During her career, she has published over 60 original scientific articles, mentored students along the research career path (undergraduate, master, PhD and postdoctoral), led national and international consortiums and received recognition from gastroenterology societies such as the Rome Foundation, the American and the European Neuro-gastroenterology and Motility societies, the American Gastroenterology Association and the Spanish Society of Digestive Pathology.



# Grégory La Sala

Scientist and Matrix Leader at Roche



## Protein engineers on the job market: a showcase on improving immunotherapies using PD-1-cis IL-2R agonism

Dr. Grégory La Sala received his Master's in Medical biology from the University of Lausanne (UNIL) and was awarded a PhD in molecular life sciences from the Ecole polytechnique fédérale de Lausanne (EPFL) in the field of protein-based therapeutics against cancer. There, his work exploited antibody mimetics (monobodies) to target intracellular protein classes regarded as undruggable. He later joined a biotech company, working on next generation multispecific antibody-based therapeutics, at the interface between structural/computational drug design and display libraries generation. He is currently a matrix leader at Roche focusing on engineering antibody scaffolds to contribute to therapeutic binder discovery.

# Amarande Murisier

Bioanalytical Scientist at Debiopharm



## From Pharmacist to Analytical Scientist or from proteins to small molecules: learn to adapt

Dr. Amarande Murisier studied pharmacy at the University of Geneva. Always thrilled by therapeutic proteins, such as monoclonal antibodies (mAbs), she started a PhD in analytical chemistry straight after her master. She completed her PhD at the Institute of Pharmaceutical Sciences of Western Switzerland, in Geneva. She worked on method development in both analytical techniques of liquid chromatography and mass spectrometry, for therapeutic protein characterization. Passionate about putting forward the limit of analytical methods for various mAbs derivatives formats, she also worked in collaboration with several industrial partners such as Roche, Ferring and Pierre Fabre. After her PhD, she has expanded her areas of interest from large molecules to small molecules, within the position of Bioanalytical Scientist in Debiopharm. Her main activity is to manage bioanalysis studies/study phases in Drug Discovery and Drug Development projects within oncology and infectious diseases fields. In parallel to her bioanalytical activities, she is also setting up a high-resolution mass spectrometry platform at Debiopharm.

# Dmitry Kopelyanskiy

Project Manager – Business & Corporate Development  
at HAYA Therapeutics



## How to get lucky: My path to Dark Genome

After receiving his MD in Preventive Medicine in Moscow Medical Academy in Russia, Dr. Dmitry Kopleyskiy turned to science and biology and went on a journey acquiring research experience in University of Jerusalem, Israel, MSc in University of Bonn, Germany and PhD in University of Lausanne, Switzerland. His doctoral research was centered around mechanisms of innate immune response to tropical pathogens. During his PhD Dmitry was actively involved in organisation of educational and social events as well as has distinguished himself as an award-winning science communicator and public speaker. After his PhD Dmitry joined HAYA Therapeutics - a startup pioneering the discovery of genomic therapies for fibrotic diseases. As a Business and Corporate Development Project manager Dmitry uses his communication and analytical skills to help the company maintain its exponential growth.



# Margaux Duchamp

CEO and Co-founder of ArcoScreen



## Combining microtechnology and molecular biology to revolutionize G Protein Coupled Receptor drug discovery

Dr. Margaux Duchamp has a background in bioengineering. Early in her studies she leaned towards highly translational projects like 3D in-vitro breast cancer models (Harvard medical school and MIT) or immunostaining for cancer diagnosis (Lunaphore). During her PhD she focused on using microfluidics for cancer immunotherapy applications in a close collaboration with the CHUV. In 2020 she decided to push further the boundaries of translating research into products and launched her own startup: ArcoScreen. ArcoScreen provides pharmaceutical companies with new microfluidic tools for the screening G Protein Coupled Receptors (GPCRs) directly in primary patient cells.

# Hilal Lashuel

Professor of Neuroscience at EPFL and Founder  
and CSO of ND BioSciences



## The joy of crossing boundaries and embracing complexity. My career journey from chemistry to neuroscience to biotech

Hilal A. Lashuel is an Associate Professor and director of the Laboratory of Molecular and Chemical Biology of Neurodegeneration at the Institute of Bioengineering-EPFL. He is the founder and CSO of ND BioSciences SA, a biotech company focusing on developing novel diagnostics and therapies for neurodegenerative diseases. In addition to his appointment at the EPFL, he spent a year as visiting professor at the Department of Neurological Sciences at Stanford University. He also served as the Executive Director of Qatar Biomedical Research Institute (Qatar Foundation) and a member of the Board of Trustees for the Qatar Biobank and Qatar Genome Project from 2014-2016. Prof. Lashuel's scientific contribution includes i) 206 publications in peer-reviewed journals, several patents, more than 250 invited lectures, and > 25000 citations (h-Index =85). He is the recipient of numerous awards including Takreem Foundation: Scientific & Technological Achievement Award, Kuwait Prize in Fundamental Sciences (Biological Sciences) and was named Young Global Leader (YGL) by the World Economic Forum.

# Amy E. Barton Alston

Associate Medical Director in Nanomedicine Science  
at CSL Vifor



## Let's get renal: A multi-faceted career path in nephrology

Dr. Amy Barton is a nephrology-trained clinical pharmacist. Prior to joining Vifor Pharma as the Science Lead for Nanomedicine, Dr. Barton had a 20+ year career as an academic researcher focused on translational investigations of intravenous iron-carbohydrate nanomedicines. She was previously funded by the Food and Drug Administration to advance bioequivalence evaluation for intravenous iron-carbohydrate nanomedicines using in vitro and pre-clinical models. During her tenure as an academician, Dr. Barton maintained a clinical practice providing care to patients across the chronic kidney disease continuum with a focus on the in-center hemodialysis population. Dr. Barton holds a Master's degree in Healthcare Innovation and is a fellow of the American Society of Nephrology, National Kidney Foundation and the American College of Clinical Pharmacy.



# Ana Claudia Marques

Genome Expert Research Lead at SOPHiA GENETICS



## The art of scientific storytelling: a space traveler's perspective

Dr. Ana Claudia Marques is the Head of Knowledge Transfer at SOPHiA GENETICS. She received her PhD in Life Sciences in the University of Lausanne, Switzerland and her diploma in Chemical Engineering from the Technical University of Lisbon, Portugal.

Before joining SOPHiA GENETICS, she was a group leader, initially at the University of Oxford, UK, and from 2014-2019 Assistant Professor in the Department of Computational Biology at the University of Lausanne.

# Mario Romani

Preclinical Scientist in Business Development  
& Innovation Department at OM Pharma



## Immunomodulatory effects of the bacterial lysate OM-85 - My(tochondrial) way from academia to industry

Dr. Mario Romani works as translational Preclinical Scientist in the Business Development & Innovation department at OM Pharma (Meyrin, Switzerland). He is involved in the characterization of the immunomodulatory effects of OM Pharma's proprietary bacterial lysates, coordinating in particular immunometabolism research thanks to his scientific expertise. Before joining OM Pharma, Mario was Research Associate in the Laboratory of Aging and Bone Metabolism at the CHUV (Lausanne, Switzerland) where he led R&D activities. Here he focused on integrating functional data from patients and molecular data from their immune cells, to translate findings to clinical practices ameliorating age-related disorders. Mario completed his PhD in Biotechnology & Bioengineering in the Laboratory of Integrative Systems Physiology / Nestlé Chair in Energy Metabolism at the EPFL, (Lausanne, Switzerland) characterizing for the first time the connection between cellular and mitochondrial proteostasis in the context of Alzheimer's disease and muscle age-associated disorders.

# Clara Galán Navarro

Project Manager in Innovation at Alcimed



## Innovation consulting: using scientist brains to answer industry main questions

Dr. Clara Galán Navarro has a combined background in bioengineering and business. After receiving her MSs in biotechnology, she complemented her scientific background with business knowledge by pursuing an MBA with an emphasis on pharmaceutical companies. Following the master level studies, she joined a PhD Program in the School of Bioengineering and Biotechnology (EDBB) of EPFL, and in a close collaboration with the CHUV, Lausanne university hospital she focused on the development of innovative vaccine platforms for emerging viral pathogens and breakthrough diagnostic tests. In 2018 she decided to join Alcimed as an innovation consultant helping key players in the healthcare and agrifood industries to innovate by exploring their uncharted territories. She is now a project manager, leading a team of several consultants and currently building a new business unit focusing on Pharma, MedTech and Biotech industries of the Swiss landscape.



# Pierre-Jean Wipff

Innovation and Partnerships Director at Biopôle



Dr. Pierre-Jean Wipff joined Biopôle SA at the start of 2022 as Director of Innovation and Partnerships. With a background in cell and molecular biology, he focuses on understanding the different journeys being made by Biopôle's members and partners and seeing where the opportunities lie for them to innovate together.

## Biopôle SA



Founded in 2004 by the canton of Vaud public authorities, Biopôle SA is a private, not-for-profit organisation, which owns, manages and promotes the life sciences campus. A total of approximately 2'500 talents are employed in more than 130 companies and research organisations hosted on campus in 2023.

# Booths

## Nestlé Research

Unlocking the power of food through fundamental research and breakthrough innovation



Research and  
Development

## OM Pharma

Bacterial lysates for the prevention of respiratory diseases



## SOPHiA GENETICS

Democratizing Data-Driven Medicine, Together!



## ND Biosciences

EPFL spinoff innovating therapeutics and diagnostics for neurodegenerative diseases



# Organizers

## **Denis Cmun**

PhD Student at UNIL, **Head of Coordination, Graphic Designer**

## **Lucie Chanvillard**

PhD Student at EPFL and Nestlé Research, **Financial Affairs Manager**

## **Sélina Zahar**

PhD Student at EPFL and Nestlé Research, **Program Manager**

## **Mouna Hadiji**

PhD Student at EPFL, **Local Affairs Manager**

## **Oliwia Majchrzak**

PhD Student at UNIGE, **Financial Affairs Manager**

## **Chrysanthi Champidou**

PhD Student at Oniris-INRAE and Nestlé Research, **Booth Manager**

## **Alcidia Ramos**

PhD Student at UNIGE, **Registration Manager**

## **Senka Causevic**

PhD Student at UNIL, **Marketing Manager**





## Your notes

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