Faces of Industrial Research

2022 Booklet

28th of March
Forum Rolex,
EPFL campus

Contents

FIR 2022

Many thanks to our sponsors:

BSNL BioScience Network Lausanne

NOVARTIS

Research and Development

Roche

ISPSO
INSTITUT DES SCIENCES PHARMACEUTIQUES DE SUISSE OCCIDENTALE

PROGRAM

09:00	Registration and welcome coffee
09:55	Opening word
10:00	Prof. Gerardo Turcatti - *Director of Biomolecular Screening Platform at EPFL* **Navigating the transition from industry to academia**
10:25	Dr. Nicolas Bonnet – *Senior Scientist in Bone and Joint Physiology at Nestlé* **From bench to bedside to population, how to maximize the impact of your research**
10:50	Dr. Marco Mina – *Director of Computational Biology at HAYA Therapeutics* **Multidisciplinary skills and risky opportunities**
11:15	Break
11:30	Dr. Nathalie Garin – *Global Field Application Manager at Nanolive* **Microscopy, a passion from academia to industry**
11:55	Dr. Ioannis Loisios-Konstantinidis – *Principal Scientist in Modeling & Simulation at Novartis* **From academia to pharmaceutical industry... my journey across Europe**
12:20	Dr. Kara Lassen – *Global Head of Immunology Discovery at Roche* **From academia to industry with a few stops in between: learnings from an unconventional career path**
12:45	Lunch break
15:00	Dr. Nabil Bosco – *R&D Director at Lesaffre* **From bench to bread : how adaptive can be an immunologist**

PROGRAM

15:25	Dr. Adeline Colussi – *Senior Manager in Manufacturing Science and Technology at Lonza* **Journey from microliters to hundreds of millions of doses of Covid-19 vaccine**
15:50	Coffee break
16:05	Dr. Markus Britschgi – *Senior Principal Scientist in Neuroscience at Roche* **My career path from academic scientist to pharma scientist - no regrets!**
16:30	Dr. Vahid Golghalyani – *Team Lead Analytical Development at Lonza* **Mass spectrometry-based characterization of Biopharmaceuticals**
16:55	Dr. Houssam Ibrahim - *Vice President Strategic Supply at Debiopharm* **Pharmacist career path at Debiopharm**
17:20	Closing remarks
17:30	Cocktail
20:00	End of the event

Navigating the transition from industry to academia

Prof. Gerardo Turcatti

Director of Biomolecular Screening Platform at EPFL

Professor Gerardo Turcatti directs the EPFL Biomolecular Screening Facility (BSF) he created in 2006. In the framework of the NCCR-Chemical Biology, he is the project leader of the program ACCESS (an ACademic ChEmical Screening platform for Switzerland). Previously he co-founded and acted as executive director of chemistry and head of sequencing project at Manteia S.A., a Swiss-based company that developed high throughput DNA sequencing technologies currently owned by Illumina and used in the 'Next Generation Sequencing' instruments. Prior to this experience, Dr Turcatti had a long multidisciplinary career in R&D divisions of Biotechnology and Pharmaceutical companies with extensive expertise in several Chemical Biology-related disciplines such as Drug Screening, Bio-analytical Chemistry, DNA and Protein Chemistry. Dr Turcatti earned his Master in Chemical Engineering at the University of Geneva and his PhD in Chemistry and Biochemistry from the EPFL where he received the award for the best doctoral thesis of the year.

From bench to bedside to population, how to maximize the impact of your research (Crosstalk between academia & industry)

Dr. Nicolas Bonnet

Senior scientist in Bone and Joint Physiology at Nestlé

Dr. Bonnet received his PhD degree from the University of Orleans, France, in 2006, after which he has been working as a post-doctoral fellow in the group of Prof. S Ferrari at the research laboratory of the Division of Bone Diseases, in Geneva, Switzerland. Dr Bonnet has a keen interest in the molecular and signaling mechanisms for mechanotransduction of physical activity to the skeleton. He has received is privat docent in 2015 by the faculty of medicine of Geneva on is work on "Periostin, a bone matrix protein involved in bone anabolism, implication in bone health from basic to clinical research". In the same year, he has been promoted senior lecturer where he focused on the role of the bone tissue in glucose homeostasis. In April 2019, he joins the musculo skeletal department in Nestlé research center as a senior scientist in bone and joint physiology. His new areas of research are focus on how nutrition can impact (1) Bone mass acquisition in infant, toddler and children, with the idea that osteoporosis is a pediatric disease. (2) Bone and muscle loss, with the idea to improve mobility, implication in aging and metabolic disease. He is an avid supporter of connection between scientist coming from different horizon, and founder of the ECTS academy in order to advance bone research – together.

Multidisciplinary skills and risky opportunities

Dr. Marco Mina

Director of Computational Biology at HAYA Therapeutics

After receiving his doctoral degree in Computer Engineering from the University of Padova, Dr. Marco Mina joined the Computational Biology department of the University of Lausanne as a postdoc in Cancer Genomics. His research focused on the identification of functional and evolutionary dependencies between mutations in cancer.

The technical and scientific skills acquired allowed him to secure a manager position at SOPHiA Genetics. Here, he led a research team focusing on variant annotation and pathogenicity prediction, developing prototype solutions for the interpretation of patient molecular data.

Most recently Marco joined HAYA Therapeutics, a startup pioneering the discovery of RNA-based therapies for fibrotic diseases. Here he is leading the Computational Biology department, working on the synergistic integration of the different facets of the bioinformatics world, including the statistical analysis of multimodal molecular profiling data, the software engineering aspects of software development and the support to the biological interpretation of the results.

Microscopy, a passion from academia to industry

Dr. Nathalie Garin
Global Field Application Manager at Nanolive

Passionate about learning and technology, Nathalie Garin had the opportunity to lead the microscopy and imaging facility at the Swiss Cancer Research Institute (ISREC), and then at EPFL where she set up the BiOp (BioImaging platform).

In 2009, Nathalie had the opportunity to join a large company, Leica Microsystems, and it was an opportunity for her to see how working in a company was compared to working in academia. It was an exciting time for microscopy as all the super-resolution methods were popping up and she was soon in charge of the super-resolution microscopes for Leica.

For the past 2 years, Nathalie has been managing the field application team of Nanolive, a scale-up from EPFL. Nanolive is developing a fully label-free microscope using holotomography. The ability to visualize cells in 3D at high resolution opens new perspectives in immuno-oncology, drug discovery, metabolism and many other fields.

From academia to pharmaceutical industry... my journey across Europe

Dr. Ioannis Loisios-Konstantinidis

Principal Scientist in Modeling & Simulation at Novartis

Dr. Ioannis Loisios-Konstantinidis is Principal Scientist in Modeling and Simulation at Novartis, Basel, Switzerland. He received his PhD in Quantitative clinical pharmacology from the Goethe University in Frankfurt am Main in Germany and his MSc. in Pharmacometrics from the Aix Marseille University in France.

Prior to his postgraduate studies, Ioannis studied pharmacy at the University of Athens, Greece. His research interests focus on mathematical modeling of physiological systems, pharmacometrics and clinical trials simulations with the aim to bring efficacious and safe drugs faster to patients.

From academia to industry with a few stops in between: learnings from an unconventional career path

Dr. Kara Lassen

Global Head of Immunology Discovery at Roche

Dr. Kara Lassen is an immunologist and the Head of Immunology Discovery in Roche's Pharma Research & Early Development (pRED) in Basel, Switzerland. Before joining Roche, she was a group leader in functional genomics at the Broad Institute of MIT and Harvard, Cambridge, MA, USA working to translate human genetics to therapeutics. Prior to this Kara worked as an editor at the journal Cell and as a group leader at the Gladstone Institute of Virology and Immunology, San Francisco, CA, USA. Kara completed her doctoral studies in Immunology at the Johns Hopkins University School of Medicine in Baltimore, MD, USA.

From bench to bread : how adaptive can be an immunologist

Dr. Nabil Bosco

R&D Director at Lesaffre

Dr. Nabil Bosco received his PhD in Immunology from the University of Grenoble (France) and completed a postdoctoral fellowship in the University of Basel (Switzerland). He then joined Nestle Research (Switzerland) in 2008 where he led preclinical research activities dedicated to gastro-intestinal diseases. Since 2016, Dr Bosco managed a research program on immunity, ageing and nutrition to study the unmet nutrition needs of ageing population in Asia. His team explored how nutrition impacts immune health with a particular focus on frail individuals to develop products and or services for seniors. He was appointed visiting scientist at the Singapore Immunology Network (SIgN), and group manager in the Nestle Institute of Health Sciences. In January 2022, Nabil joined Lesaffre R&D (France) to develop and lead a new research platform around host-microbe interactions in health and diseases.

Journey from microliters to hundreds of millions of doses of Covid-19 vaccine

Dr. Adeline Colussi

Senior Manager in Manufacturing Science and Technology at Lonza

Dr. Adeline Colussi studied biology with focus on chemistry at ETH Zurich. During her PhD at the Laboratory of Molecular Biology in Cambridge, she developed a method to study how proteins recognise membrane curvature. Transitioning from academia to industry, she started as a formulation and process development scientist, performing technology transfer and scale-up of a liposomal drug product against neurodegenerative diseases as well as optimising the manufacturing process for a nanoparticle chemotherapeutic. After joining Lonza Visp as a process expert, she is currently heading the Manufacturing Science and Technology (MSAT) team for the lipid nanoparticle streams of commercial-scale Covid-19 vaccine manufacturing, ensuring safe and timely delivery of the mRNA-LNP vaccine to patients.

My career path from academic scientist to pharma scientist - no regrets!

Dr. Markus Britschgi

Senior Principal Scientist in Neuroscience at Roche

Dr. Markus Britschgi is a Senior Principal Scientist in the Neuroscience & Rare Disorders Research Department at Roche in Basel, Switzerland where he, since 12 years, performs research and leads drug discovery projects towards identifying therapies for Parkinson's and Alzheimer's disease. From his PhD at the University of Bern and later his studies as postdoc at Stanford University, Markus has a background in immunology and proteinopathies of the brain. He is particularly interested in the role of immune pathways in neurodegenerative disorders. In addition to his basic research together with academic groups and students and postdocs in his lab, Markus leads several drug discovery projects in this area and contributes to a clinical trial in people suffering from Parkinson's disease. Markus likes to convey his passion for research and actively fosters the development of the next generation of 'drug hunters' at Roche and in academia.

Mass spectrometry-based characterization of Biopharmaceuticals

Dr. Vahid Golghalyani

Team Lead Analytical Development at Lonza

Dr. Vahid Golghalyani started his PhD thesis after finishing his pharmacy study in Frankfurt in the Karas lab. He developed a new sample preparation method in mass spectrometry-based bottom-up proteomics. At the end of this thesis he started as a characterization scientist in the biopharmaceutical development department at AstraZeneca in Cambridge. Next to activities in method development, he was leading the subject matter expert team in automation and he was representing his team in CMC meetings. After two years being in Cambridge he started as a Senior Scientist in Mammalian Development Services at Lonza in Visp. He joined this department in the start-up phase, so he was involved in the lab implementation and design. After successful launch of the new service, Vahid got promoted to a Team Lead of the LC-MS and automation group. His main activities are support of the existing platform and establishing new technologies in preclinical development of new drug candidates.

Pharmacist career path at Debiopharm

Dr. Houssam Ibrahim

Vice President Strategic Supply at Debiopharm

Dr. Houssam Ibrahim's education background includes a Pharmacist degree from the University of Geneva, followed by a Ph.D. in Pharmaceutical Sciences. Houssam started working at Serono as an internal audit and GMP trainer. He then joined the team preparing a new parenteral drug production facility for inspection by the Food and Drug Administration. At the Serono headquarters, he was appointed to the position of Chemistry, Manufacturing & Control (CMC) Technical Expert to support the US submission of a growth hormone produced by mammalian cell lines.

After joining Debiopharm, Houssam oversaw the CMC development, launch, and commercial supply chain for oxaliplatin. In his roles, he is co-inventor of several patents, including the first commercialized oxaliplatin aqueous formulation. In addition, he also led the CMC outsourcing activities for Debiopharm's clinical portfolio projects.

In 2021, Houssam became the coordinator and representative of the Innovation Debiopharm Academia Leman initiative (IDEAL) launched by Debiopharm.

BOOTHS

KYLYS

KYLYS is a University of Geneva spin-off which aims at providing people and patients with highly effective and safe products based on hyaluronic acid (HA) pearls. Check KYLYS booth to hear more about HA pearl application in medical, surgical, and cosmetic needs in the fields of rheumatology, tissue regeneration, and aesthetic medicine.

Check the booth of an EPFL spin-off start-up – Xana technology. Xana combines pioneering therapeutic efficacy, monitoring capabilities, and information management to maximize user experience and tailor treatments to confidently face the challenges that Health and Wellness will generate in the coming decade.

xana
BY ARTIFICIAL NEUROSTIMULATION

SOPHiA GENETICS™

Data-driven medicine draws insights from disparate, complex datasets to improve diagnosis, treatment, and drug development provided by Sophia Genetics. Check their booth to learn more about Sophia Genetics.

Nestlé Research performs fundamental science at the highest level to accelerate the translation of discoveries into breakthrough innovations. Check their booth to discover the scientific profiles they are looking for and hear about the Nestlé Institute of Health Sciences PhD program.

Research and Development

Debiopharm™
WE DEVELOP FOR PATIENTS

Check out Debiopharm booth to hear more about their IDEAL program aiming to collaborate with lemanic institutions to accelerate the translation of scientific innovation into new anti-cancer and anti-infective treatments.

ORGANIZERS

The FIR 2022 organizing team is composed of:

- Lucie Chanvillard, PhD student at Nestlé Research / EPFL – **Head of Coordination**
- Marija Petrovic, PhD student at UNIGE – **Programme Manager**
- Katia Monsorno, PhD Student at UNIL – **Financial Affairs Manager**
- Mouna Hadiji, PhD student at EPFL – **Local Affairs Manager**
- Sélima Zahar, PhD student at Nestlé Research / EPFL – **Start-up Organization Manager**
- Denis Cmunt, PhD Student at UNIL – **Marketing Manager**
- Senka Čaušević, PhD Student at UNIL – **Marketing Manager**

NOTES

NOTES

facesofindustrialresearch.com

www.linkedin.com/company/facesofindustrialresearch

www.instagram.com/facesofindustrialresearch

www.facebook.com/FIRorganisation

twitter.com/FacesofIndRes