

## Program overview

### YOUNG SCIENTISTS' SATELLITE MEETING (YSS)

**Tuesday, 13 February 2024 - Auditorium A**

**12:00 – 12:30**     **Registration - Young Scientists' Satellite & Welcome Coffee**

*(Registration will remain open during the entire event.)*

*(Speakers and chairs should load their presentations.)*

**12:30 – 12:35**     **Welcome Address**

**Emi Nagoshi** (Chair of the LS<sup>2</sup>AM2024, University of Geneva)

**Mario Tschan** (President of the LS<sup>2</sup>, University of Bern)

**12:35 – 12:40**     **Introduction from YSSM Chairs**

**Valeriia Vartanova** (University of Geneva)

**Joshua Tran** (University of Geneva)

**Elena Barletta** (University of Zurich)

**12:40 – 13:15**     **Keynote Lecture YSS**

**Melina Schuh** (Max Planck Institute for Multidisciplinary Sciences, DE)

"Mammalian oocytes store proteins for the early embryo on cytoplasmic lattices"

Mammalian oocytes are filled with poorly understood structures called cytoplasmic lattices. First discovered in the 1960s, and speculated to correspond to mammalian yolk, ribosomal arrays, or intermediate filaments, their function has remained enigmatic to date. We found that cytoplasmic lattices are sites where oocytes store essential proteins for early embryonic development. Using super-resolution light microscopy and cryo-electron tomography, we show that cytoplasmic lattices are composed of filaments with high surface area, which contain PADI6 and subcortical maternal complex proteins. The lattices associate with many proteins critical for embryonic development, including proteins that control epigenetic reprogramming of the preimplantation embryo. Loss of cytoplasmic lattices by ablation of PADI6 or the subcortical maternal complex prevents the accumulation of these proteins and results in early embryonic arrest. Our work suggests that cytoplasmic lattices enrich maternally-provided proteins to prevent their premature degradation and cellular activity, thereby enabling early mammalian development.

**13:15 – 14:00**     **Scientific Symposium I (talks from abstracts)**

**13:15 – 13:20**     **Welcome words** from chairs

*Speakers selected from abstracts*

**13:20 – 13:30**     **Tomaz Martini** (EPFL)

"A sexually dimorphic hepatic cycle of very low density lipoprotein uptake and assembly"

- 13:30 – 13:40** **Fabrizio Vacca** (University of Lausanne)  
"A lysosome-Golgi connection corrects Cohen Syndrome cellular phenotype"
- 13:40 – 13:50** **Jacqueline Hammer** (ETHZ)  
"Elucidation of Cell Surface Proteotypes Using LUX-CSC"
- 13:50 – 14:00** **Monique Straub** (EPFL)  
"Overcoming preferred orientation in cryo-EM samples through microsecond melting and revitrification"
- 14:00 – 14:30** **Coffee Break**
- 14:30 – 15:15** **Scientific Symposium II (talks from abstracts)**
- 14:30 – 14:35** **Welcome words** from chairs
- Speakers selected from abstracts*
- 14:35 – 14:45** **Horia Hashimi** (EPFL)  
"Mammalian adipogenesis regulators (Aregs) exhibit robust non- and anti-adipogenic properties that arise with age and involve retinoic acid signalling"
- 14:45 – 14:55** **Pierre Alexander Miranda Herrera** (EPFL)  
"Context-dependent mapping of ER-mitochondria-junction-specific stress sensors and their signaling activities"
- 14:55 – 15:05** **Jean Radig** (University of Zurich)  
"Autoencoder-based recovery of epigenomic signatures from low-pass cell-free DNA sequencing"
- 15:05 – 15:15** **Blanca Lago Solis** (University of Geneva)  
"Investigating the molecular mechanisms underlying the rhythmic gene expression in the mushroom body"
- 15:15 – 15:45** **Prix Schläfli 2023 Winner Lecture**  
**Joël Bloch** (The Rockefeller University, US)  
Introduced by **Caroline Reymond** (SCNAT) and **Prof. Irene Adrian-Kalchhauser** (University of Bern)  
  
"Structural insights into protein N-glycosylation in the endoplasmic reticulum"

In eukaryotic protein N-glycosylation a series of glycosyltransferases catalyze the biosynthesis of a lipid-linked oligosaccharide before its transfer onto acceptor proteins. The final seven steps occur in the lumen of the endoplasmic reticulum (ER) and require lipid-linked mannose and glucose as donor substrates. The responsible enzymes—ALG3, ALG9, ALG12, ALG6, ALG8, and ALG10—are glycosyltransferases of the C-superfamily (GT-Cs), which has long been loosely defined as containing membrane-spanning helices and processing isoprenoid-linked carbohydrate donor substrates. We present electron cryo-microscopy (Cryo-EM) structures of yeast ALG6, revealing a novel transmembrane protein fold. A comparison with reported GT-C structures suggests that GT-C enzymes contain a modular architecture with a conserved module and a variable module, each with distinct functional roles. Using synthetic analogs of lipid-linked substrate sugars and reconstituting the ALG pathway in vitro we generate donor and acceptor substrates and recapitulate the activity of ALG6 in vitro. A cryo-EM structure of ALG6 bound to a synthetic analog of its substrate dolichylphosphate-glucose reveals the active site of the enzyme and allows us to speculate on its enzymatic mechanism. Our results define the architecture of ER-luminal GT-C enzymes and provide a structural basis for understanding their catalytic mechanisms.

**15:45 – 16:15**      **Coffee Break**

**16:15 – 17:45**      **Career workshop - “Providing evidence for the skills that stay with you” by hfp consulting (DE)**

**Sašo Kočever** (CEO and Founder, hfp consulting, DE)

**Annika Lübbert** (Consultant, hfp consulting, DE)

**17:45 – 17:50**      Closing Remarks

**17:50 – 19:00**      **Meet & Great Aperó**

*(Upon registration, only to YSS participants and speakers)*

**Program overview**

**MAIN CONFERENCE**

**DAY ONE**

**Wednesday. 14 February 2024**

**08:00 – 09:00**      **Registration & Welcome Coffee**

*(Registration will remain open during the entire event)*

*(Speakers and chairs of the morning sessions should load their presentations)*

**09:00 – 09:10**      **Welcome Address**

Auditorium 351

**Emi Nagoshi** (Chair of the LS<sup>2</sup>AM2024, University of Geneva)

**Mario Tschan** (President of the LS<sup>2</sup>, University of Bern)

**09:10 – 09:45**

**Plenary Lecture: Keynote**

Auditorium 351

**Nicole King** (University of California, Berkeley, US)  
Chair **Emi Nagoshi** (University of Geneva)

"Why choanoflagellates are so rarely "in the mood""

The evolution of animals from their protozoan ancestors marks one of the most pivotal, and poorly understood, events in life's history. As the closest living relatives of animals, choanoflagellates offer unique windows into animal origins and core features of animal cell biology. First, I will describe how the study of choanoflagellates has enriched our understanding of the first animals. Then I will focus on our most recent work, in which we have serendipitously discovered how the onset of mating behavior in choanoflagellates is regulated. This work provides insights into the evolution of gametogenesis in animal progenitors.

**09:45 – 10:15**

**Plenary Lecture: LELIO ORCI AWARD 2023**

Auditorium 351

**Wanda Kukulski** (University of Bern)  
Introductory words by **Pierre Cosson** (University of Geneva)

"Linking membrane architecture and function"

Cellular membranes compartmentalise eukaryotic cells and host a large variety of functions. Many of these functions are tightly linked to membrane architecture. Despite their importance, little is known about how membrane shape, protein composition and supramolecular organization impact each other, and how their interplay supports cellular processes. Our aim is to understand mechanisms by which membrane architecture contributes to cellular functions. In particular, we study the architecture of organelle contact sites and mitochondrial membrane dynamics. We use CLEM to localize fluorescent signals in electron tomograms, and thereby link the presence or absence of key proteins to 3D membrane ultrastructure. To image protein assemblies within their native membrane environment, we use cryo-electron tomography of cells thinned by cryo-focused ion beam milling. We complement these methods with biochemistry, genetic perturbations, and live fluorescence microscopy. I will present how we use this approach to address questions in cellular membrane biology.

**10:15 – 10:45**

**Coffee Break & Industry Exhibition**

**10:45 – 12:45**

**Special Plenary Session**

Auditorium 351

**Prix Schläfli 2023 award nomination**

Introduced by **Caroline Reymond** (SCNAT) and **Prof. Irene Adrian-Kalchhauser** (University of Bern)

**"PIs of Tomorrow (PIOT) - The Future of Swiss Research"**

*Finalists:*

**Madalena Madeira Reimão Pinto** (Harvard University / University of Basel)

"The cis regulatory code of translational control during embryogenesis"

**Nicola Galvanetto** (University of Zurich)

"Connecting Nanoscale Dynamics to Pathways to Disease"

**Sandhya Manohar** (ETH Zurich)

"When Big Cells Break Bad: Investigating size-dependent genome homeostasis defects"

**Ludger Goeminne** (Harvard Medical School – Brigham and Women's Hospital)

"DamAge: a multi-omic pan-tissue aging clock that quantifies macromolecular damage"

Chairs:

**Erin Wosnitzka** (University of Lausanne)

**Kathrin Tomasek** (EPF Lausanne)

**Maria Giovanna De Leo** (University of Lausanne)

**Nesli Ece Şen** (University of Geneva)

**12:45 – 14:25**

**Lunch Break / Industry Exhibition / Poster Viewing**

*(Catering for industry representatives will be open from 12:15)*

*(Speakers and chairs of the afternoon sessions should load their presentations)*

**Grab your food and visit our booths!!**

**13:15 – 14:25**

**Feedback Session Pls of Tomorrow**

Auditorium 319

*(For jury, chairs and finalists only)*

**13:25 – 14:25**

**ICMT Board Meeting**

Auditorium 315

*(Upon invitation only)*

**13:25 – 14:25**

**MCB Board Meeting**

Auditorium 318

*(Upon invitation only)*

**14:25 – 16:10**

**PARALLEL SYMPOSIA SESSION I**

**14:25 – 16:10**

**Genome stability and non-coding RNAs**

Auditorium A

Organized and chaired by **Pei-Hsuan Wu** (University of Geneva) and **Ramesh Pillai** (University of Geneva)

**14:25 – 14:30**

**Welcome words** from chairs

Invited speaker

**14:30 – 14:55**

**Florian Steiner** (University of Geneva)

Transgenerational epigenetic inheritance of chromatin states

*Speakers selected from abstracts*

- 14:55 – 15:07** **Irene Kalchhauser** (University of Bern)  
"High nucleotide diversity accompanies differential DNA methylation in naturally diverging populations"
- 15:07 – 15:19** **Giulia Perillo** (University of Geneva)  
"Characterizing PIWI-interacting RNAs in mouse sperm and"
- 15:19 – 15:31** **Adrian Stefanov** (University of Bern)  
"The roles of small RNA pathways in programmed genomic excisions"
- 15:31 – 15:43** **Feyza Polat** (Institute of Molecular Biology, DE)  
"Unravelling differences in SNRPB and SNRPN gene paralogs for RNA splicing"
- 15:43 – 15:55** **Vincent Rapp** (University of Bern)  
"Epigenomic profiling identifies a non-coding region that calibrates Tbx5 gene dosage in the developing heart and limb"
- 15:55 – 16:10** Closing remarks

**14:25 – 16:10** **Functional tools and therapeutic applications at the crossroads of chemistry and biology**

Auditorium D Organized by the Division of Medicinal Chemistry and Chemical Biology (DMCCB) of the Swiss Chemical Society (SCS)

- 14:25 – 14:30** **Welcome words** from session chair **Yimon Aye** (EPFL)

*Invited speakers*

- 14:30 – 14:55** **Raphaël Rodriguez** (Institut Curie / CNRS, FR)  
"Chemical control of cell plasticity"
- 14:55 – 15:20** **Angela Steinauer** (EPFL)  
"Engineered Protein Cages for RNA Delivery"

*Sponsored talk*

- 15:20 – 15:30** **Thomas Frischmuth** (Baseclick, DE)  
"Novel bioconjugation strategies for modification, detection and targeting of Nucleic acids"

*Speakers selected from abstracts*

- 15:30 – 15:42** **Lalita Oparija Rogenmozere** (University of Basel)  
"Non-redundant functions of PI3Kgamma complexes in obesity and metaflammation"
- 15:42 – 15:54** **Dalu Chang** (EPFL)

"Reprogramming Protein translation in spatiotemporal stress response"

*Industry speaker*

15:54 – 16:02

**Philip R. Skaanderup** (Novartis)

"Genetic reprogramming to map target exons amenable to splicing modulation"

16:02 – 16:10

Closing remarks

14:25 – 16:10

**Crossing membranes: Structural and functional insights into transporters and channels**

Auditorium 351

Organized by Ion Channels and Membrane Transporters Section of LS<sup>2</sup> and sponsored by solgate (AT)

14:25 – 14:30

**Welcome words** from chairs **Manuele Rebsamen** (University of Lausanne) and **Cristina Manatschal** (University of Zurich)

*Invited speaker*

14:30 – 15:00

**Cristina Paulino** (Heidelberg University Biochemistry Center (BZH), DE)  
"Think like a channel, act like a carrier"

*Speakers selected from abstracts*

15:00 – 15:12

**Eleonora Centonze** (University of Lausanne)

"Probing protonation-driven conformational changes in the ASIC1a  $\beta$ -turn domain through fluorescence measurements"

15:12 – 15:24

**Ales Drobek** (University of Lausanne)

"The role of lupus-associated SLC15A4-TASL-IRF5 signaling axis in TLR7/9 dependent immune responses"

15:24 – 15:36

**Iva Ganeva** (University of Bern)

"The architecture and mechanism of lipid transfer at interfaces between lipid droplets"

15:36 – 15:48

**Loann Laubry** (University of Geneva)

"STIM1 and STIM1L in skeletal muscle: central regulators of calcium circuitry"

15:48 – 16:00

**Miriam Lisci** (University of Lausanne)

"Nutrient-genetic screens highlight the role for mitochondrial transporter in surviving glutamine deprivation"

16:00 – 16:10

Closing remarks

16:10 – 16:40

**Coffee Break, Industry Exhibition & Posters**

16:40 – 17:15

**Plenary Lecture: EMBO KEYNOTE LECTURE**

Auditorium 351 **Pavel Tomancak** (Max Planck Institute of Molecular Cell Biology and Genetics, DE)  
Chair **Emi Nagoshi** (University of Geneva)

"Evolution of Morphogenesis"

My presentation will examine how physico-chemical feedback loops that underly most of development are initiated in ontogeny and how they evolve. It shall be a tale of hydras and flies.

**17:15 – 19:15** **Apero, Poster Session I & Industry Exhibition**  
(Posters: 17:45 - 18:25 odd numbers, 18:25 - 19:15 even numbers)

## DAY TWO

**Thursday. 15 February 2024**

**08:15 – 09:00** **REGISTRATION**  
(Registration will remain open during the entire event)  
(Speakers and chairs of the morning sessions should load their presentations)

**09:00 – 09:05** **Welcome Address**  
Auditorium 351 Chair **Emi Nagoshi** (University of Geneva)

**09:05 – 09:40** **Plenary Lecture: Keynote**  
Auditorium 351 **Samer Hattar** (The National Institute of Mental Health, US)  
Chair **Emi Nagoshi** (University of Geneva)

"Beyond vision: impacts of light on animal behavior"

**09:40 – 10:20** **Coffee Break, Industry Exhibition & Poster Viewing**

**10:20 – 12:05** **PARALLEL SYMPOSIA SESSION II**

**10:20 – 12:05** **DNA integrity**  
Auditorium A Organized by MCB Section of LS<sup>2</sup>

**10:20 – 10:25** **Welcome words** from chair **Petr Cejka** (Institute for Research in Biomedicine (IRB), Università dell Svizzera italiana)

*Invited speaker*

**10:25 – 10:55** **Aura Carreira** (Centro de Biologia Molecular Severo Ochoa (CSIC-UAM), SP)  
"What cancer variants can teach us about genome integrity maintenance mechanisms"

*Speakers selected from abstracts*

**10:55 – 11:10** **Chiara Auwerx** (University of Lausanne)



"Rare copy-number variants as modulators of common disease susceptibility"

- 11:10 – 11:25** **Philippe JeanRichard** (University of Bern)  
"The link of BOK to Uridine metabolism and mitochondrial function in cancer"
- 11:25 – 11:40** **Thomas Pesket** (ETH Zurich)  
"How old yeast decide"
- 11:40 – 11:55** **Cathy Marulli** (ETH Zurich)  
"Probing protein interactome dynamics using an experimental library of protein complex interfaces"
- 11:55 – 12:05** Closing remarks
- 10:20 – 12:05** **Artificial intelligence (AI) tools for drug discovery**  
Auditorium D Organized by Swiss Society of Experimental Pharmacology (SSEP)
- 10:20 – 10:25** **Welcome words** from chairs **Georgia Konstantinidou** (University of Bern) and **Carole Bourquin** (University of Geneva)
- Invited speaker*
- 10:25 – 10:55** **Amedeo Caflich** (University of Zurich)  
"Structure-based design of small-molecule ligands of epitranscriptomics targets"
- Speakers selected from abstracts*
- 10:55 – 11:10** **Paulina Pacak** (ETH Zurich)  
"First steps in Sperm-Egg Adhesion: Molecular Dynamics of JUNO-IZUMO1 complexation"
- 11:10 – 11:25** **Jibira Yakubu** (University of Bern)  
"Curcumin nanoformulation improves in-vitro suppression of steroidogenic Cytochrome P450s in dehydroepiandrosterone synthesis"
- 11:25 – 11:40** **Shun Yi** (University of Bern)  
"Oncogenic DMTF1 $\beta$  supports a breast and prostate cancer tumor-initiating cell phenotype"
- 11:40 – 11:55** **Nevena Srejjic** (ETHZ)  
"Cells under pressure — Elucidating cellular signaling mechanisms activated by compressive mechanical stress"
- 11:55 – 12:05** Closing remarks
- 10:20 - 12:05** **Cardiovascular insights from single cell analysis**

- Auditorium 351 Organized by Cardiovascular Biology Section of LS<sup>2</sup>
- 10:20 – 10:25** **Welcome words** from chairs **Marie-Luce Bochaton-Piallat** (University of Geneva) and **Christophe Montessuit** (University of
- Invited speaker*
- 10:25 – 10:50** **Menno de Winther** (Amsterdam UMC, NL)  
"Single cell approaches to understand macrophage function in atherosclerotic disease"
- Speakers selected from abstracts*
- 10:50 – 11:02** **Matteo Zoia** (University of Bern)  
"Multiome profiling identifies the cardiac enhancer landscapes underlying mammalian heart morphogenesis"
- 11:02 – 11:14** **Ksenia Kapitanova** (University of Geneva)  
"Role of S100A4 in the crosstalk between smooth muscle and inflammatory
- 11:14 – 11:26** **Clémence Bechelli** (University Hospital Lausanne)  
"Short-term carboloading diet promotes formation of natural bypass in a mouse model of hindlimb ischemia"
- 11:26 – 11:38** **Jérémy Kessler** (University of Geneva)  
"New aspects of TGFβ signaling in muscle regeneration"
- Industry Talk*
- 11:38 – 11:48** **Luisa Spisak** (Bucher Biotec AG)  
"Unlocking the Future of Cardiovascular Sample Preparation for Genetic Analysis with the Singulator by S2 Genomics"
- 11:48 – 12:05** Closing remarks
- 12:05 – 13:05** **Lunch Break & Industry Exhibition**  
*(Catering for industry representatives will be open from 11:35)  
(Speakers and chairs of the afternoon sessions should load their presentations)*
- Grab your food and visit our booths!!**
- 12:30 – 13:05** **SSEP Council and Physiology Board Meeting**  
Auditorium 318 *(Upon invitation only)*
- 13:05 – 14:05** **Poster Session II**  
*(Posters: 13:05 - 13:35 odd numbers, 13:35 - 14:05 even numbers)*
- 14:05 – 15:50** **PARALLEL SYMPOSIA SESSION III**

- 14:05 – 15:50** **Windows to the Wonders of Life**  
Auditorium A Organized by Swiss Institute of Bioinformatics (SIB)
- 14:05 – 14:10** **Welcome words** from chair **Katja Baerenfaller** (University of Zurich /SIB)
- Invited speaker*
- 14:10 – 14:35** **David Niklas Wissel** (University of Zurich, ETH Zurich / Swiss Institute of Bioinformatics)  
"Machine learning for curator-centric ontology-aware cell-type single-cell annotation"
- Speakers selected from abstracts*
- 14:35 – 14:50** **Anjalie Schlaeppli** (EPFL)  
"Implementing and supporting imaging-based spatial transcriptomics in core-facilities"
- 14:50 – 15:05** **Valeria Timonina** (EPFL)  
"Detection of mosaic Loss of Y chromosome from Exome sequencing data"
- 15:05 – 15:20** **Arun Singh Maurya** (University of Lausanne)  
"Detecting high resolution copy number variations (CNV) from visium spatial gene expression data"
- 15:20 – 15:30** **Daphne Laan** (EPFL)  
"Determining how physical constraints shape organism behaviour"
- 15:30 – 15:40** **Anil Tuncel** (EPFL)  
"Deciphering Neuronal Signals with the Electrophys Feature Extraction Library (eFEL)"
- 15:40 – 15:50** Closing remarks
- 14:05 – 15:50** **Molecules in motion: Revealing time-resolved processes in biology**  
Auditorium D Organized by Biophysics Section of LS<sup>2</sup>
- 14:05 – 14:10** **Welcome words** from chairs **Beat Fierz** (EPFL) and **Stefanie Jonas** (ETHZ)
- Invited speaker*
- 14:10 – 14:35** **Franka Voigt** (University of Zurich)  
"Deciphering RNA localization codes via live single-molecule imaging in organoids"
- Speakers selected from abstracts*
- 14:35 – 14:47** **Polina Isaikina** (PSI)

"Structural basis of the regulation of human chemokine receptor and HIV-1 co-receptor CCR5"

- 14:47 – 14:59** **Sarah Barrass** (EPFL)  
"Fast Viral Dynamics Revealed by Microsecond Time-Resolved Cryo-EM"
- 14:59 – 15:11** **Alexandra Teslenko** (EPFL)  
"Single-molecule enzymology of chromatin ubiquitination by PRC1: Unraveling the dynamics in real-time"
- 15:11 – 15:23** **Anne-Laure Boinet** (University of Geneva)  
"Characterization of the dynamic behaviour of clathrin and its adaptors along the endocytic timeline in yeast"
- 15:23 – 15:35** **Alicia Borgeaud** (University of Bern)  
"The behaviour of Apaf1 in apoptotic cells unveil apoptosome organization and dynamics in vivo"
- 15:35 – 15:50** Closing remarks
- 14:05 – 15:50** **The Contribution of One Health for Life Sciences: Fostering from collaboration between Switzerland and the Global South**  
Auditorium 351 Organized and chaired by **Salome Duerr** (University of Bern) and **Hugues Abriel** (University of Bern)
- 14:05 – 14:10** **Welcome words** from chairs
- Invited speaker*
- 14:10 – 14:35** **Pascale Vonaesch** (University of Lausanne)  
"The microbiome of pastoralist communities living in the Horn of Africa"
- Speakers selected from abstracts*
- 14:35 – 14:50** **Jean Claude Makangara Cigolo** (University of Bern)  
"Development and evaluation of metagenomics approaches for pathogen surveillance at the human-animal interface in limited-resource countries"
- 14:50 – 15:05** **Harish Tiwari** (Indian Institute of Technology Guwahati, IN)  
"Rabies awareness in schools: exploring educators' perspective"
- 15:05 – 15:20** **Marc Yambayamba** (University of Zurich)  
"Evaluation of One Health initiatives: A case study from the DR Congo"
- 15:20 – 15:35** **Rahila Loum Gazida / Salome Dürr** (University of Bern)

"Seroprevalence and risk factors associated with fasciolosis in nomadic livestock populations across the Lake Chad region using multiple diagnostic methods"

**15:35 – 15:50** Guided discussion round and closing remarks

**15:50 – 16:10** **Coffee Break / Industry Exhibition / Poster Viewing**

**16:10 – 16:40** **Plenary Lecture: FRIEDRICH MIESCHER AWARD 2024**

Auditorium 351

**Charlotte Aumeier** (University of Geneva)

Introductory words from **Daniel Legler** (Biotechnology Institute Thurgau at the University of Konstanz)

"Motor proteins modulating Microtubule Shaft Dynamics"

Tubulin dimers assemble into dynamic microtubules which are used by molecular motors as tracks for intracellular transport. Organization and dynamics of the microtubule network is commonly thought to be regulated at the polymer ends, but recent results show that renewal of the microtubule shaft also impacts microtubule dynamics. However, the impact of shaft dynamics on the microtubule network is not understood, especially in a cellular context. We show that, kinesin1 is not just using microtubules as tracks, but controls renewal of the microtubule track they are walking on. The kinesin-microtubule system is very efficient, within 15 min 20% of the microtubule is renewed. Thereby kinesin1 controls the lifetime, length, and organization of the cellular microtubule network. The car is not just using the street but reconstructing the street and organizing the street network.

**16:40 – 17:10** **Award Ceremony**

Auditorium 351

**Prizes:**

Pls of Tomorrow: Jury and Public

Experimental Pharmacology: Best poster prize

Cardiovascular Biology & Physiology: 2x Best poster prize

Molecular and Cellular Biosciences (MCB): 2x Best poster prize

Ion Channels and Membrane Transporters: 2x Best poster prize

Bioinformatics: Best poster prize

Biophysics: Best poster prize

Microscopy: Best poster prize

Proteomics: Best poster prize

Systems Biology: Best poster prize

Best Poster Design: Public prize

Exhibition quiz prizes

Honorary Memberships

**17:10 – 17:15** **Closing Remarks & Acknowledgements**

Auditorium 351

**Emi Nagoshi** (Chair of the LS<sup>2</sup>AM2024, University of Geneva)

**Mario Tschan** (President of the LS<sup>2</sup>, University of Bern)

**Simon Sprecher** (Vice-president of the LS<sup>2</sup>, University of Fribourg)