



WELCOME ADDRESS

WELCOME TO THE LS² ANNUAL MEETING AT THE UNIVERSITY OF LAUSANNE ON THE 15/16 FEBRUARY 2016

Life Sciences are evolving! A quantitative revolution in biology is fostering fruitful interactions with other sciences, from mathematics to chemistry, and physics. The 2016 LS² meeting will be a mirror gallery of the blooming efforts of scientists in making biology more quantitative.

In the coming two days, we will hear plenary lectures from experts in other sciences, such as mathematics, physics and chemistry, whose contributions have been fundamental in advancing the life sciences. From mechanics of animal cells and tissues with D. Discher (University of Pennsylvania), and L. Mahadevan, (Harvard University), we will further explore mathematical aspects of cell organization in plant tissues and signaling networks with V. Grieneisen (John Innes Center), and F. Schroeder (Cornell University).

Moreover, the LS² meeting will be the platform for all participants, especially post-docs, PhD students and master students, to discuss and exchange ideas with scientists from all interdisciplinary fields concerned with life sciences! We will explore career options for life scientists in lectures and discussion sessions, discover the future of life science funding and debate the risks and opportunities of Synthetic Biology. Also, come and see the exciting findings presented by the awardees of the Friedrich-Miescher and Lelio-Orci Prizes, and showcase your own results in one of the poster sessions.

We are all looking forward to seeing you in the beautiful setting of Lausanne for this great event!

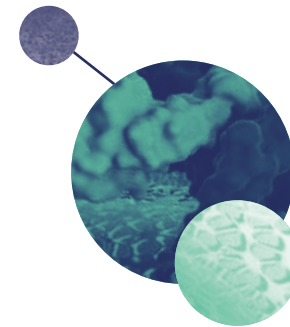
Aurélien Roux / University of Geneva
Chair of the LS² Annual Meeting 2016

Thierry Soldati / University of Geneva
President LS²

Jean Gruenberg / University of Geneva
Vice-president LS²

CONTENT

- 1 WELCOME ADDRESS**
- 4 SPONSORS AND PARTNERS**
- 5 ORGANISING COMMITTEE 2016**
- 6-7 FLOOR PLAN / LIST OF EXHIBITORS**
- 8-9 PROGRAM OVERVIEW**
- 11-19 DETAILED PROGRAMME MONDAY / 15.2.2016**
- 21-28 DETAILED PROGRAMME TUESDAY / 16.2.2016**
- 30-48 POSTERS**





SPONSORS AND PARTNERS

LS² and the organizing committee gratefully acknowledge the sponsors of the LS² Annual Meeting 2016 in Lausanne. We welcome all participants of the conference to visit the industry exhibition in the exhibition hall. The industry exhibition is accessible during the entire meeting.



KGF: Kontaktgruppe für Forschungsfragen



ORGANISING COMMITTEE 2016

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LS² SECTIONS

Molecular and Cellular Biosciences / Physiology / Proteomics

LS² PARTNER SOCIETIES

Swiss Society for Microbiology (SSM)

Swiss Chemical Society (SCS)- division DMCCB

Swiss Laboratory Animal Science Association

Swiss Society for Neurosciences

Swiss Society for Experimental Pharmacology

Swiss Society of Anatomy, Histology and Embryology

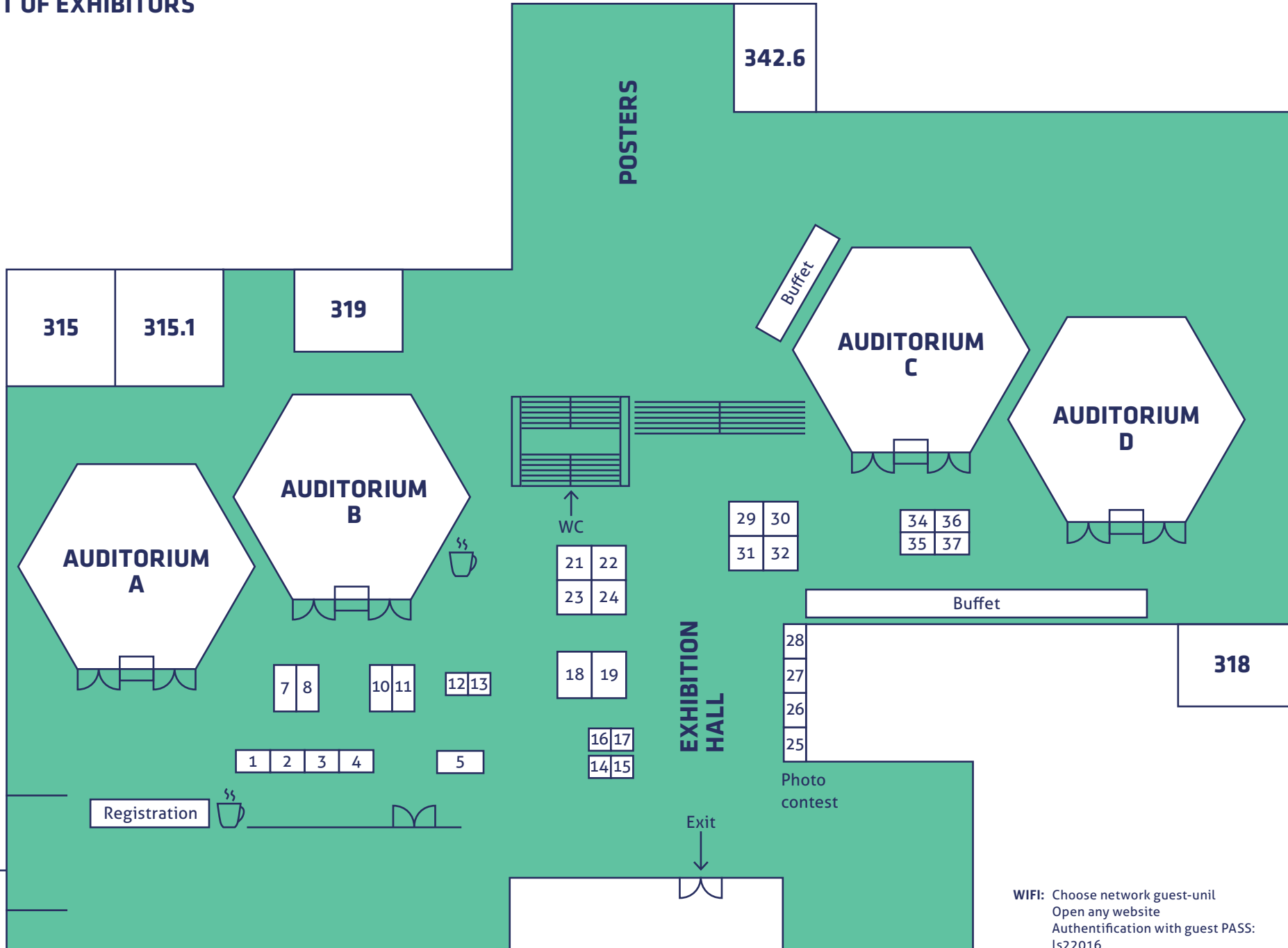
LS² GUEST SOCIETIES AND SYMPOSIA ORGANISERS

Swiss Plant Science Web / SCNAT / SV Postdoc Association / University of Lausanne



FLOOR PLAN / LIST OF EXHIBITORS

- 1 Epithelix Sarl
- 2 Macherey-Nagel GmbH & Co. KG
- 3 Socorex Isba SA
- 4 Promega AG
- 5 Faust AG
- 7 TReND in Africa
- 8 IGZ Instruments AG
- 10 Hamamatsu Photonics
- 11 Takara Clontech
- 12 Adipogen
- 13 Life Systems Design AG
- 14 BSNL
- 15 Access
- 16 Molecular Devices
- 17 Roth AG
- 18 Sigma Aldrich
- 19 BMG Labtech GmbH
- 21 Biotechnie
- 22 Witec AG
- 23 Chemie Brunschwig AG
- 24 Bucher Biotec AG
- 25 Nikon AG – Nanolive SA
- 26 Axon Lab AG
- 27 Enzo Life Sciences
- 28 LabForce AG
- 29 BioTek Instruments GmbH
- 30 Jackson Immuno Research
- 31 BioConcept
- 32 Labgene Scientific SA
- 34 Elchrom abc biopply
- 35 Ruwag Handels AG
- 36 Huberlab
- 37 MedTech Trading



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 ls22016

MONDAY / 15.2.2016

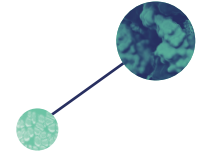
8.00–9.00	Registration / Welcome Coffee	
9.00–9.10	WELCOME ADDRESS	AMPHIMAX
	Aurélien Roux / Thierry Soldati / Jean Gruenberg	
9.10–10.00	PLENARY LECTURE I	AMPHIMAX
	Lakshminarayanan Mahadevan Harvard University, US Towards a physical basis of morphogenesis	
10.00–10.30	Coffee break	
10.30–12.30	MORNING PARALLEL SYMPOSIA	AUDITORIUM
	Unravelling novel paradigms in biology using model organisms	A
	Plant Molecular and Chemical Biology	B
	Microbial division and replication: From biochemistry to molecular biology	C
	MSc – what's next?	342.6
12.30–13.40	Lunch break / Posters with even numbers	
12.40–13.30	ROUND TABLE	AUDITORIUM
	Careers in Science	
	Non-academic careers	315
	Junior career options in academia	315.1
	Senior career options in academia	319
12.40–13.40	Section mol./cell. biosciences general assembly SSEP board meeting	Auditorium A 318
13.40–15.40	AFTERNOON PARALLEL SYMPOSIA	AUDITORIUM
	Unravelling more novel paradigms in biology using model organisms	A
	Sex hormones and Oxytocin/Vasopressin signaling: Implications for ASD	B
	In vitro and in vivo applications of stem cell research	C
	Non-academic careers in the Life Sciences	D
15.40–16.00	Coffee break	
16.00–16.30	FRIEDRICH-MIESCHER AWARD	AMPHIMAX
	Petr Broz University of Basel	
16.30–17.20	PLENARY LECTURE II	AMPHIMAX
	Veronica Grieneisen John Innes Centre, UK Patterns within cells, between cells and over tissues: From plant development to robot swarms	
17.20–19.30	POSTER SESSION	
17.20–19.30	Music / Apéro	

TUESDAY / 16.2.2016

9.00–9.50	PLENARY LECTURE III	AMPHIMAX
	Frank Schroeder Cornell University, US Comparative metabolomics reveals a modular library of signaling molecules in nematodes	
9.50–9.55	Lawrence Rajendran	
	Introducing Matters, the next-gen science journal	
9.55–10.25	Coffee break	
10.30–12.30	MORNING PARALLEL SYMPOSIA	AUDITORIUM
	Approaches to circumvent channelopathies	A
	Next generation proteomics: Enabling biological discoveries	B
	Interdisciplinary 3 R	C
	Tomorrow's PIs: The future of Swiss research	D
12.30–14.00	Lunch break / Posters with odd numbers	
12.30–14.00	Lunch time movies	C
12.45–13.45	LS ² Delegates Assembly	318
14.00–16.00	AFTERNOON PARALLEL SYMPOSIA	AUDITORIUM
	Pharmacology in the era of systems biology	A
	The interdisciplinary Chemist	B
	Synthetic Biology	C
	Challenges and opportunities of research funding in Switzerland	D
16.00–16.30	Coffee break	
16.30–16.45	POSTER / TOMORROW'S PI / PHOTO AWARDS	AMPHIMAX
16.45–17.15	LELIO ORCI AWARD	
	Gisou van der Goot EPF Lausanne	
17.15–18.10	PLENARY LECTURE IV	AMPHIMAX
	Dennis Discher University of Pennsylvania, US Cells feel their microenvironment and remodel nuclear structures	
18.10–18.15	CLOSING REMARKS	AMPHIMAX
	Aurélien Roux / Thierry Soldati / Jean Gruenberg	



DETAILED PROGRAMME MONDAY / 15 FEBRUARY 2016



8.00–9.00

Registration / Welcome Coffee
Installation of Posters

9.00–9.10

WELCOME ADDRESS

Aurélien Roux, Chairman
Thierry Soldati, President of LS²
Jean Gruenberg, Vice president LS²

AMPHIMAX

9.10–10.00

PLENARY LECTURE I

Lakshminarayanan Mahadevan Harvard University, US

AMPHIMAX

Towards a physical basis of morphogenesis

The range of shapes in the plant (and animal) world is *enough to drive even the sanest man mad*, wrote Darwin. Motivated by qualitative and quantitative biological observations, I will show that there is a *method in the madness* – using the vertebrate gut, and the inner ear as examples. In each case, we will see how a combination of physical experiments, combined with mathematical models and computations allow us to begin unraveling the quantitative basis for the diversity and complexity of biological morphology.



SystemsX.ch
The Swiss Initiative in Systems Biology

10.00–10.30

Coffee break / Industry Exhibition

EXHIBITION HALL

10.30 – 12.30

MORNING PARALLEL SYMPOSIA

Unravelling novel paradigms in biology
using model organisms

AUDITORIUM A

Plant Molecular and Chemical Biology

AUDITORIUM B

Microbial division and replication:
From biochemistry to molecular biology

AUDITORIUM C

Special session: MSc –what's next?

342.6

10.30–12.30 UNRAVELLING NOVEL PARADIGMS IN BIOLOGY USING MODEL ORGANISMS

Chairs: François Karch / Beat Suter

10.30–11.00 **Ramesh Pillai** EMBL Grenoble

Genome defense by germline small RNAs

11.00–11.30 **Mike O'Connor** University of Minnesota

Vesicle-mediated steroid hormone secretion in *Drosophila melanogaster*

11.30–11.50 **Rohit Chavan** University of Fribourg

Liver-derived ketone bodies are necessary for food anticipation

11.50–12.10 **Ewald Collins** Harvard Medical School

Reduced insulin/IGF-1-signalling implicates extracellular matrix remodelling in longevity

12.10–12.25 **Malathi Raman** Takara Clontech

Change the way you think about Cloning... Discover In-Fusion®

Final discussion

12.30 End of session

10.30–12.30 PLANT MOLECULAR AND CHEMICAL BIOLOGY

Chair: Matthias Erb

10.30–11.00 **Dorothea Tholl** Virginia Tech

How plant scent makes sense: Studies in *Arabidopsis* and beyond

11.00–11.30 **Jurriaan Ton** University of Sheffield

Onset and long-term maintenance of plant immune priming

11.30–11.50 **Cornelia Eisenach** University of Zurich

Identification of a vacuolar malate channel required for plant water balance

11.50–12.10 **Maite Colinas** University of Geneva

Balancing of B6 vitamers is essential for plant development and metabolism in *Arabidopsis*

AUDITORIUM A



AUDITORIUM B

12.10–12.25 **David Heywood** Waters

Effects of light exposure on the lipid metabolism of broccoli sprouts: An untargeted, unbiased metabolomics approach

Final discussion

12.30 End of session

10.30–12.30 MICROBIAL DIVISION AND REPLICATION: FROM BIOCHEMISTRY TO MOLECULAR BIOLOGY

Chair: Gilbert Greub

10.30–11.00 **Patrick Viollier** University of Geneva

The chlamydial division septum: Organisation and regulation

11.00–11.30 **Beate Henrichfreise** University of Bonn

Importance of amidases and peptidoglycan in chlamydial division

11.30–11.45 **Ioan Iacovache** University of Bern

Near-atomic structure of aerolysin mutants reveals a novel protein fold and elucidates its mode of action

11.45–12.00 **Joe Dan Dunn** University of Geneva

Delineating the immunity functions of reactive oxygen species using *Dictyostelium discoideum* as a model phagocyte

12.00–12.30 **Sophie Martin** University of Lausanne

Spatio-temporal control of cell division in fission yeast

10.30–12.30 SPECIAL SESSION: MSC - WHAT'S NEXT?

Chair: Ulrike Toepel

Meet the Alumni: Interactive meetings with University alumni from the Life Sciences that started a *scientific* career inside and outside of academia.

The Alumni session will continue into the lunch break. Presentations of Swiss Life Sciences Doctoral Schools

Waters
THE SCIENCE OF WHAT'S POSSIBLE.®

AUDITORIUM C



342.6

sc|nat
Swiss Academy of Sciences
Akademie der Naturwissenschaften
Accademia di scienze naturali
Académie des sciences naturelles

12.30–13.40 Lunch break / Posters with even numbers/
Industry Exhibition

**12.40–13.30 ROUND TABLE
Careers in Science**

Chair: Dominique Soldati-Favre

This lunch session aims at providing career support and advice to life scientists pursuing a Masters degree, PhD degree, postdoctoral training or a career outside the academic world. The session will be divided into the career level/interest of attendants:

Non-academic careers 315

Junior career options in academia / BSc, MSc, PhD 315.1

Senior career options in academia / PhD, postdocs, Pls 319

The session will be organized as round table discussions, each moderated by at least one mentor.

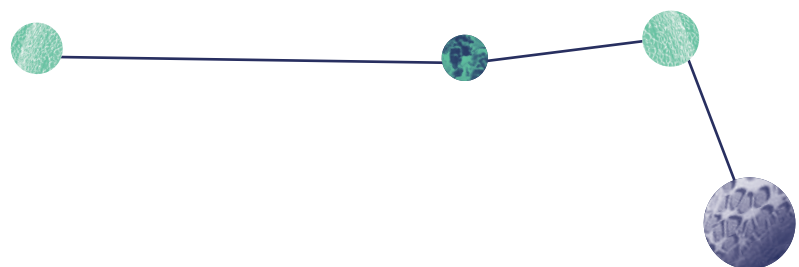
Themes include applying for the next step in your career, how to find a good work-life balance and the opportunities of careers outside of academia.

12.40–13.40 Section Mol./Cell. Biosciences General Assembly
SSEP board meeting

EXHIBITION HALL



**AUDITORIUM A
318**



13.40–15.40 AFTERNOON PARALLEL SYMPOSIA

Unravelling more novel paradigms in biology using model organisms **AUDITORIUM A**

Sex hormones and Oxytocin/Vasopressin signaling: Implications for autism spectrum disorder **AUDITORIUM B**

In vitro and in vivo applications of stem cell research **AUDITORIUM C**

Non-academic careers in the Life Sciences **AUDITORIUM D**

13.40–15.40 UNRAVELLING MORE NOVEL PARADIGMS IN BIOLOGY USING MODEL ORGANISMS AUDITORIUM A

Chairs: François Karch / Beat Suter

13.40–14.10 **Marja Timmermans** University of Tübingen
Small RNAs as mobile, morphogen-like signals in plant development

14.10–14.40 **Emily Ann Bayer** Columbia University Medical Center
His brain, her brain – *C.elegans* as model to study sexual dimorphic nervous system development

14.40–15.00 **Veronika Nemčíková Villímová** EPF Lausanne
Integrative approach to analyze *Trichonympha* centriolar cartwheel

15.00–15.20 **Delphine Aymoz** University of Lausanne
Real-time quantification of protein expression at the single cell level based on dynamic Protein Synthesis Translocation Reporters

15.20–15.40 **Agnès Michel** ETH Zurich
NGS for *No-pain Genetic Screens*: Using transposons and Next-Gen Sequencing to unveil all important yeast loci in one go

15.40 Final discussion
End of session



13.40–15.40 SEX HORMONES AND OXYTOCIN/VASOPRESSIN SIGNALING: IMPLICATIONS FOR AUTISM SPECTRUM DISORDER

Chairs: Ron Stoop / Robert Lütjens

13.40–14.10 Lance Martin University of North Carolina
Quantifying the total load of oxytocin and vasopressin in biological samples

14.10–14.40 Markus Heinrichs University of Freiburg
Social neuropeptides in the human brain: Translational perspectives for new treatment approaches

14.40–15.00 Jack von Honk University of Utrecht
Effects of steroid and peptide hormones on cognitive and affective empathy

15.00–15.20 Chloé Hegoburu University of Lausanne
Optogenetic and electrophysiological dissection of oxytocin in brain circuits underlying social buffering of fear in male and female rats

15.20–15.35 Christophe Grundschober Roche Research
Vasopressin antagonism for autism: Social behavior rescue in the rat valproate model of autism and clinical translation

Final discussion

15.40 End of session

13.40–15.40 IN VITRO AND IN VIVO APPLICATIONS OF STEM CELL RESEARCH

Chair: Karl-Heinz Krause

13.40–14.10 Marcel Leist University of Konstanz
Use of stem cells to predict human toxicity and to explore the epigenetic basis of drug-induced neurodevelopmental disturbances

14.10–14.40 Louis Casteilla INSERM Toulouse
Adipose derived stroma/stem cells: From fat to cell therapy

AUDITORIUM B



AUDITORIUM C

14.40–15.00 Jakub Zimoch University of Zurich
Utilization of adipose-derived cells to bio-engineer skin substitutes that consist of the epidermis, the dermis and the hypodermis

15.00–15.20 Andrea Coluccio EPF Lausanne
The KRABZFP/KAP1 system preserves epigenetic memory in embryonic stem cells

15.20–15.35 Mathurin Baquie Neurix
Human engineered neural tissues as novel model systems for biomedical research

Final discussion

15.40 End of session

13.40–15.40 NON-ACADEMIC CAREERS IN THE LIFE SCIENCES

Chairs: Madeleine Scriba / Pamela Valdès

Several speakers will describe why they chose a career outside of academia, how they transitioned from the University to their recent workplace and what challenges they meet in their jobs.

13.40–13.55 Frédéric Pailoux Voisin Life Science Consulting

13.55–14.10 Stéphane Bernard Debiopharm International SA

14.10–14.25 Adrian Moriette Ecoscan SA

14.25–14.40 Julie Deuquet Nestlé Institute of Health

14.40–14.55 Marie Fischborn IUCN

14.55–15.10 Davide Staedler Tibio

15.10–15.25 Gioia Althoff Sophia Genetics

15.25–15.40 Final discussion

15.40–16.00 Coffee break / Industry exhibition

16.00–16.30 FRIEDRICH-MIESCHER AWARD

Petr Broz University of Basel

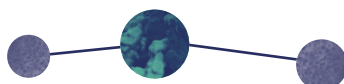
Sensing the enemy within: Innate immune detection of intracellular bacteria

AUDITORIUM D



EXHIBITION HALL

AMPHIMAX



16.30 – 17.20 PLENARY LECTURE II

Veronica Grieneisen John Innes Centre, UK

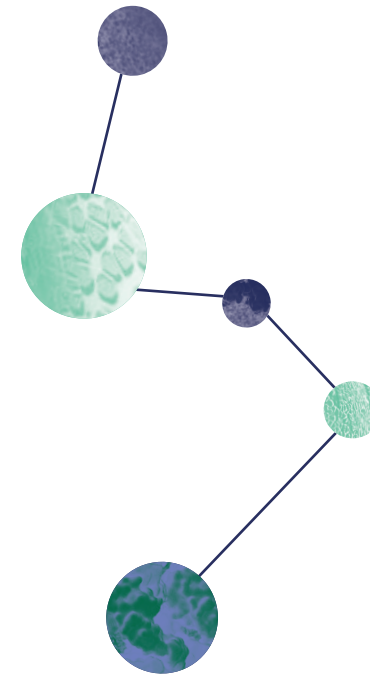
**Patterns within cells, between cells and over tissues:
From plant development to robot swarms**

Computational approaches combined with molecular studies and in vivo microscopy can help us understand polarity and patterning on three different levels: On the scale of the tissue, the cellular and subcellular tissue level. At the single cell level, I will show how a spatially uniform activation and patterning of GTPases can cause polarity to emerge spontaneously, independent of spatial pre-patterns or localized polarizing signals. Moreover, similar mechanisms of cell polarity can be uncovered with mathematical analysis in plant and animal cells. Being capable of intracellular partitioning, neighbouring plant cells that are separated by cell wall can then coordinate their polarities – through indirect cell-cell coupling. This is resultant from changes in concentration level of a phytohormone, auxin, in between cells. In the specific case of pavement cells of leaves, this phenomenon comes about as interdigitation, and requires the opposite response of identical neighbouring cells to the same local auxin signal in the cell wall, between the cells. Our theoretical work identifies key requirements for such indirect cell-cell signalling that that gives rise to correct interdigitation. These requirements, based on known molecular interactions, can then be extrapolated to other multi-cellular tissues, to understand the interdependency between cell and tissue polarity. We will then extrapolate these findings and show how animal cells, capable of direct cell-cell coupling, can establish, through similar principles, robust tissue coordination. And finally, we will show how such principles can be applied to independent and relatively simple agents, such as robots, that through local communication can manifest complex morphodynamics on a swarm of robots. The relevance of biology to technological innovations becomes apparent.

AMPHIMAX

17.20–19.30 POSTER SESSION

17.20–19.30 Music / Apéro
20.00 Delegates' Dinner (Gina's ristorante)



DETAILED PROGRAMME TUESDAY / 16 FEBRUARY 2016

9.00–9.50

PLENARY LECTURE III

Frank Schroeder Cornell University, US

AMPHIMAX

Comparative metabolomics reveals a modular library of signaling molecules in nematodes

The nematode *Caenorhabditis elegans* is one of the most important model organisms for biomedical research, because of its biological tractability and because many of its physiological pathways show strong homology to corresponding pathways in humans. We found that worms are amazingly skilled chemists: Using simple building blocks from conserved primary metabolism and a strategy of modular assembly, *C. elegans* and other nematode species create complex molecular architectures to regulate almost every aspect of their development and behavior, including larval arrest, adult body shape, lifespan, mating, aggregation, dispersal, and other behaviors. The identified compounds are based on the dideoxysugars ascarylose or paratose, which serve as scaffolds for combinatorial attachment of moieties from amino acid, carbohydrate, neurotransmitter, lipid, and nucleoside metabolism, including an unusual xylopyranose-based adenosine derivative. The resulting signaling molecules can be active at femtomolar concentrations. Their identification and quantification in genome-wide mutant screens will, akin to transcriptional profiling, represent a major advance toward the study of metabolism and evolutionarily conserved signaling pathways in this model organism. Moreover, the identification of many new variants of primary metabolism-derived structures that serve important signaling functions in *C. elegans* provides a strong incentive for a comprehensive re-analysis of metabolism in higher animals, including humans.

9.50–9.55

Lawrence Rajendran University of Zurich

Introducing Matters, the next-gen science journal

9.55–10.25

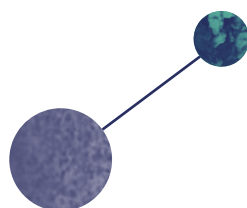
Coffee break / Industry exhibition

EXHIBITION HALL

10.30–12.30	MORNING PARALLEL SYMPOSIA	
	Approaches to circumvent channelopathies	AUDITORIUM A
	Next generation proteomics: Enabling biological discoveries	AUDITORIUM B
	Interdisciplinary 3 R	AUDITORIUM C
	Tomorrow's PIs: The future of Swiss research	AUDITORIUM D

10.30–12.30 APPROACHES TO CIRCUMVENT CHANNELOPATHIES AUDITORIUM A
Chair: Marc Chanson

10.30–11.00	Frédéric Becq University of Poitiers Structure, dysfunction and correction of F508del-CFTR
11.00–11.30	Luigi Maiuri University of Foggia Targeting autophagy to circumvent F508del-CFTR defect
11.30–11.45	Maud Frieden University of Geneva Ion channels gated by the new STIM1L isoform
11.45–12.00	Emilia Boiadjieva University of Zurich Cooperation of basolateral epithelial amino acid transporters TAT1 and LAT2 investigated in a double knockout mouse model
12.00–12.15	Jean-François Denis University of Geneva Connexin40 controls endothelial activation by dampening nuclear translocation of NFκB
12.15–12.30	Anneline Nansen Zealand Pharma A/S Peptide therapeutics-current status and future directions
	Final discussion
12.30	End of session



10.30–12.30 NEXT GENERATION PROTEOMICS: ENABLING BIOLOGICAL DISCOVERIES AUDITORIUM B
Chair: Paola Picotti

10.30–11.00	Anne-Claude Gingras Mount Sinai Hospital, Toronto A physical map of the human cell
11.00–11.30	Robert Beynon University of Liverpool Balancing the books in proteomics: The accountancy of proteostasis
11.30–11.50	Peter Blattmann ETH Zurich Targeted mass spectrometric analysis of the cellular response to the perturbations of the LXR and SREBP pathway
11.50–12.10	Michel Schneider SIB Expert curation of proteins in UniProtKB/Swiss-Prot
12.10–12.25	Oliver Rinner Biognosys Next-generation proteomics technologies for comprehensive proteome quantification
	Final discussion
12.30	End of session



10.30–12.30 INTERDISCIPLINARY 3 R AUDITORIUM C
Chairs: Beat Riederer / Gisèle Ferrand

10.30–11.00	Matt Leach Newcastle University Pain recognition in small laboratory animals
11.00–11.30	Paul Flecknell Newcastle University Real and imagined barriers to pain management in rodents
11.30–11.50	Christoph Schneider & Daniel Brönnimann Alumni Biomedical Sciences 4R: Reduce, Replace, Refine – Rethink?
11.50–12.20	Beat Riederer Laboratory Animals LTD Laboratory Animals, the Journal and the Company
	Final discussion
12.30	End of session



10.30–12.30	TOMORROW'S PIS: THE FUTURE OF SWISS RESEARCH Chairs: Pamela Valdès / Madeleine Scriba
10.30–10.50	Paloma Ordóñez-Morán EPF Lausanne Counteracting stem cell traits in colon cancer
10.50–11.10	Marco Capogrosso EPF Lausanne A theoretical approach to translational neuroscience
11.10–11.30	Joshua L. Payne University of Zurich Adaptive landscapes of transcriptional regulation
11.30–11.50	Oscar Vadas University of Geneva Structural insights into phosphoinositide 3-kinases (PI3Ks) regulation
11.50–12.10	Giulia Pasqual MIT Boston In vivo tracking of cell-cell communication in the immune system by enzymatic labeling of ligand-receptor interactions
12.10–12.30	Marie Barberon University of Lausanne The endodermis as a checkpoint for nutrients
12.30	Final discussion / Jury meeting
12.30–14.00	Lunch break / posters with odd numbers / Industry exhibition
12.30–14.00	Lunch time movies <i>Synthetic Biology</i> presented by Bio-Fiction
12.45–13.45	LS ² Delegates Assembly

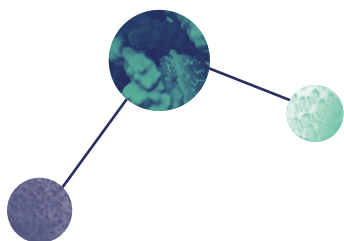
AUDITORIUM D



EXHIBITION HALL

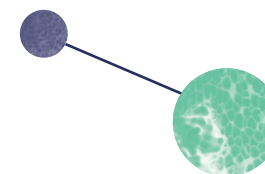
AUDITORIUM C

318



14.00–16.00	AFTERNOON PARALLEL SYMPOSIA	
	Pharmacology in the era of systems biology	AUDITORIUM A
	The interdisciplinary Chemist	AUDITORIUM B
	Synthetic Biology	AUDITORIUM C
	Challenges and opportunities of research funding in Switzerland	AUDITORIUM D

14.00–16.00	PHARMACOLOGY IN THE ERA OF SYSTEMS BIOLOGY Chairs: Oliver Staub / Leonardo Scapozza	AUDITORIUM A
14.00–14.50	Andrea Califano Columbia University New York Quantitative and systems pharmacology in the post-genomic era: New approaches to discovering drugs and understanding therapeutic mechanisms	
14.50–15.05	Anna Keppner University of Lausanne Role of the serine protease prostaticin (CAP1/Prss8) in DSS-induced chronic colitis	
15.05–15.20	Victor Greiff ETH Zurich A bioinformatic framework for immune repertoire diversity profiling enables detection of immunological status	
15.20–15.35	Chiara Ambühl University of Geneva Biochemical characterization of the putative AMP-activated protein kinase complex of <i>Trypanosoma brucei</i>	
15.35–15.50	Yibo Wu ETH Zurich Systems proteomics and trans-omic data integration illuminate genetic mechanisms linking mitochondrial function and metabolism	
	Final discussion	
16.00	End of session	



14.00–16.00 THE INTERDISCIPLINARY CHEMIST

Chair: Yves Auberson

14.00–14.30 **Stefan Kubicek** CeMM, Vienna
Transforming cell fate by targeting chromatin modifiers

14.30–15.00 **Christian Hackenberger** FMP Berlin
Functional protein synthesis

15.00–15.20 **Jessica Willi** University of Bern
Oxidized bases in the ribosome's peptidyl transferase center and their effects on translation

15.20–15.40 **Dimitri Moreau** University of Geneva
High content compound screen reveal a new modulator of LBPA homeostasis

15.40–15.55 **Gebhard Thoma** Novartis
Discovery of a Syk inhibitor active in a collagen-induced arthritis model in rats

Final discussion

16.00 End of session

14.00–16.00 SYNTHETIC BIOLOGY (SCNAT/FORUM GENETIC RESEARCH)

Chair: Patrick Matthias

How will synthetic biology transform medicine, the environment, industry, society and our concept of life?

Algae farms that produce biofuel, bacteria that clean up environmental pollutants and cell-based medical devices that monitor our health status and correct imbalances – these are just some of the possible applications of synthetic biology. Synthetic biology – like other breakthrough technologies – has the potential to offer new solutions for society's challenges. But it also raises concerns about safety and ethical implications.

AUDITORIUM B



AUDITORIUM C

The Forum for Genetic Research and LS² cordially invite you to explore these questions together with young scientists at a round-table discussion. With Jan Roelof van der Meer (University of Lausanne) and the EPFL iGEM 2015 team.

Discussion leader Pia Viviani Science & Cité

14.00–16.00 CHALLENGES AND OPPORTUNITIES OF RESEARCH FUNDING IN SWITZERLAND

Chairs: Jean Gruenberg / Thierry Soldati

14.00–14.30 **Mauro Dell'Ambrogio** SEFRI
The future of Swiss research funding regarding recent changes in the EU-funding scheme for Switzerland

14.30–14.45 Q&A

14.45–15.15 **Aysim Yilmaz** SNF
Challenges and opportunities for *young* life science researchers in Switzerland

15.15–15.30 Q&A

15.30–16.00 Round table discussion

16.00–16.30 Coffee break / Industry exhibition

16.30–16.45 POSTER / TOMORROW'S PI / PHOTO AWARDS

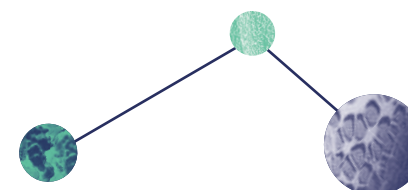
16.45–17.15 **LELIO ORCI AWARD**
Gisou van der Goot EPF Lausanne



AUDITORIUM D



AMPHIMAX



17.15-18.10

PLENARY LECTURE IV

Dennis E. Discher University of Pennsylvania, US

Patterns within cells, between cells and over tissues: From plant development to robot swarms

Soft tissues such as fat bear little physical stress, whereas stiffer tissues like muscle and bone sustain high stress. We have begun to uncover systematic relationships between such tissue properties and differentiation processes, having first shown that a soft matrix helps specify soft tissue lineages while a stiff matrix helps specify stiff tissue lineages^[1]. Proteomics analyses of embryonic and mature tissues^[2] have now revealed that while collagens directly determine tissue elasticity E the nucleoskeletal protein lamin-A follows polymer physics-type scaling versus E . Lamin-A has been reported for decades to vary widely between tissues, and mutations in lamin-A cause diseases of multiple stiff tissues as well as accelerated aging syndromes with defects in stiff tissue repair. Differentiation of various stem cell types is generally modulated by lamin-A levels downstream of matrix E and soluble factors such as retinoids^[2,3], and we have uncovered multiple pathways that are co-regulated by lamin-A. Complementary insights are obtained from analyses in stem cells of the contractile cytoskeleton which not only physically stresses the nucleus but often contributes to key polarized processes of stem cells^[4]. Matrices and forces^[5] thus combine with growth factors control lineages, lamins, and cell fates.

[1] A. Engler et al. (2006) Cell

[2] J. Swift, et al. (2013) Science

[3] J-W. Shin et al. (2013) PNAS

[4] J-W. Shin et al. (2014) Cell Stem Cell

[5] D.E. Discher et al. (2009) Science

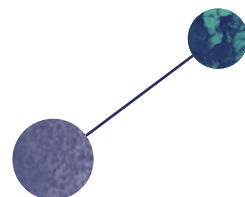
18.10-18.15

CLOSING REMARKS

Aurélien Roux Chairman

Thierry Soldati President LS²

Jean Gruenberg President elect LS²



AMPHIMAX

SAVE THE DATE: LS² ANNUAL MEETING 2/3 FEBRUARY 2017 UNIVERSITY OF ZURICH

CONFIRMED PLENARY SPEAKERS:

SVANTE PÄÄBO

DENIS DUBOULE

ANDREW MACPHERSON



POSTERS

ANIMAL MODELS

1

Role of the serine protease prostatic (CAP1/Prss8) in DSS-induced chronic colitis

Keppner, Anna

Keppner, Anna (1); Malsure, Sumedha (1); Nobile, Antoine (2); Hummler, Edith* (1)

(1) University of Lausanne, Department of pharmacology and toxicology
(2) CHUV, Institut universitaire de pathologie

2

The EvoDevo & Physics of skin appendages and skin colours in vertebrates

Milinkovitch, Michel

Milinkovitch, Michel (1)

(1) Swiss Institute Bioinformatics (SIB) and Laboratory of Artificial & Natural Evolution (LANE), Dept of Genetics & Evolution, University of Geneva

3

How the dragon got its frill: Development of a hypertrophied skin fold in *Chlamydosaurus*

Montandon, Sophie

Montandon, Sophie (1); Fofonjka, Anamarija (1); Milinkovitch, Michel* (1)

(1) Swiss Institute Bioinformatics (SIB) and Laboratory of Artificial & Natural Evolution (LANE), Dept of Genetics & Evolution, University of Geneva

ANIMAL WELFARE

4

4R: Reduce, Replace, Refine - Rethink?

Brönnimann, Daniel

Brönnimann, Daniel* (1); Schneider, Christoph* (1)

(1) Alumni Biomedical Sciences

CHEMICAL BIOLOGY

5

Synthesis of epoxy diols, azido-aminocyclitol derivatives and their alpha-glucosidase and alpha-amylase inhibitory activity

Aydin, Gökay

Aydin, Gökay* (1); Sevmezler, Sedat* (1); Baran, Arif* (1); Balci, Metin* (2)

(1) Sakaraya University
(2) Middle East Technical University

6

Molecular mechanisms of the redox activity of human DNA repair protein APE1/Ref-1 and its role in cancer cells response to photodynamic therapy

Bazlekowa, Milena

Bazlekowa, Milena (1); Prorok, Paulina (2); Shahmoradi Ghahe, Somayeh (1); Tudek, Barbara (1); Saparbaev, Murat (2)

(1) University of Warsaw, Faculty of Biology, Institute of Genetics and Biotechnology
(2) Institut Gustave Roussy, UMR 8200 Genetic Stability and Oncogenesis

7

Ceramides and anoxia survival

Hannich, J. Thomas

Hannich, J. Thomas (1); Galih, Augustinus (1); Mellal, Denia (2); Martinou, Jean-Claude (3); Zumbuehl, Andreas (2); Riezman, Howard* (1)

(1) University of Geneva, Department of Biochemistry
(2) University of Fribourg, Department of Organic Chemistry
(3) University of Geneva, Department of Cell Biology

8

High content compound screen reveal a new modulator of LBPA homeostasis

Moreau, Dimitri

Moreau, Dimitri (1); Gruenberg, Jean (1)

(1) University of Geneva, Biochemistry

9

Formation of intraluminal vesicles in early endosomes

Ustunel Eren, Cansel

Ustunel Eren, Cansel (1); Pons, Véronique (2); Gruenberg, Jean* (1)

(1) University of Geneva, Biochemistry
(2) INSERM, Institut de Maladies Métaboliques et Cardiovasculaires

10

Nanoemulsions of lipid droplets covered by a monolayer of sphingomyelin and cholesterol

Vežočník, Valerija

Vežočník, Valerija (1); Sitar, Simona (2); Tušek-Žnidarič, Magda (3); Sepčić, Kristina (1); Grundner, Maja (1); Pahovnik, David (2); Kogej, Ksenija (4); Hodnik, Vesna (1); Žigon, Dušan (5); Šentjurc, Marjeta (6); Žagar, Ema (2); Maček, Peter* (1)

(1) Biotechnical Faculty, Department of Biology
(2) National Institute of Chemistry, Laboratory for Polymer Chemistry and Technology
(3) National Institute of Biology, Department of Biotechnology and Systems Biology
(4) Faculty of Chemistry and Chemical Technology, Department of Physical Chemistry
(5) Institute Josef Stefan, Department of Environmental Sciences
(6) Institute Josef Stefan, Laboratory of Biophysics

11

Oxidized bases in the ribosome's peptidyl transferase center and their effects on translation

Willi, Jessica

Willi, Jessica (1); Koch, Miriam (1); Leumann, Christian (1); Polacek, Norbert* (1)

(1) University of Bern, Department of Chemistry and Biochemistry

12

Study of the mechanisms of mono- and poly(ADP-ribosylation) of DNA strand breaks by PARP family proteins

Zarkovic, Gabriella

Keppner, Anna (1); Malsure, Sumedha (1); Nobile, Antoine (2); Hummler, Edith* (1); Zarkovic, Gabriella (1); Talhaoui, Ibtissam (1); Lebedeva, Natalia (2); Saint-Pierre, Christine (3); Kutuzov, Mikhail (2); Sukhanova, Maria (2); Matkarimov, Bakhyt (4); Gasparutto, Didier (3); Saparbaev, Murat (1); Lavrik, Olga (2); Ishchenko, Alexander* (1)

(1) Institut de Cancérologie Gustave Roussy, UMR 8200 Genetic stability and Oncogenesis
(2) SB RAS Institute of Chemical Biology and Fundamental Medicine
(3) Université Grenoble Alpes, CEA, INAC/SCIB, UMR E3/LAN
(4) Nazarbayev University Research and Innovation System

COMPUTATIONAL BIOLOGY

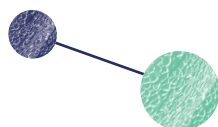
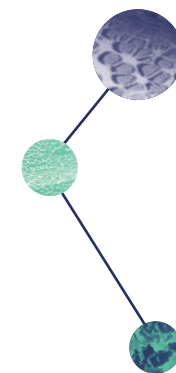
13

Pharmacologically advantageous AutoDock inhibition of acetylcholinesterase with trichlorfon

Butt, Yasha Nazir

Butt, Yasha Nazir (1); Niaz, Saima* (2); Khalid, Madeeha* (1); Shafiq, Imtiaz* (1)

(1) University of the Punjab, Institute of Biochemistry and Biotechnology
(2) Forman Christian College University



14
MetaPIGA 4.0: Maximum likelihood and Bayesian Phylogenomics using Genetic-algorithm and Monte-Carlo samplers

Grbic, Djordje
Grbic, Djordje* (1);
Milinkovitch, Michel* (1)

(1) Swiss Institute Bioinformatics (SIB) and Laboratory of Artificial & Natural Evolution (LANE), Dept of Genetics & Evolution, University of Geneva

GENETICS

15
Loss-of-function mutations in IFIH1 predispose to severe viral respiratory infections in children

Asgari, Samira
Asgari, Samira (1); Fellay, Jacques* (1)
(1) EPFL, SV

16
Liver-derived ketone bodies are necessary for food anticipation

Chavan, Rohit
Chavan, Rohit* (1); Albrecht, Urs* (1)
(1) University of Fribourg, Biology

17
Mechanisms of regulation in the iab-8-ncRNA of the bithorax complex

El Bali, Yohan
El Bali, Yohan (1); Gligorov, Dragan (1);
Maeda, Robert (1); Karch, François* (1)

(1) University of Geneva

18
Tissue-specific regulatory circuits reveal variable modular perturbations across complex diseases

Marbach, Daniel
Marbach, Daniel (1); Lamparter, David (1);
Quon, Gerald (2); Kellis, Manolis (2);
Kutalik, Zoltan (3); Bergmann, Sven (1)

(1) University of Lausanne, Department of Medical Genetics
(2) Broad Institute of MIT and Harvard
(3) University Hospital of Lausanne, Institute of Social and Preventive Medicine

19
NGS for No-pain Genetic Screens: Using transposons and Next-Gen Sequencing to unveil all important yeast loci in one go

Michel, Agnes
Michel, Agnès (1); Kornmann, Benoît* (1)
(1) ETHZ, Institute for Biochemistry

20
The corn snake genome v2.0, an improved resource for EvoDevo studies in squamates

Ullate Agote, Asier
Ullate-Agote, Asier (1); C. Milinkovitch, Michel (1); C. Tzika, Athanasia* (1)
(1) Swiss Institute Bioinformatics (SIB) and Laboratory of Artificial & Natural Evolution (LANE), Dept of Genetics & Evolution, University of Geneva

INFECTIOUS DISEASES

21
Analysing steps in evolution of multidrug antibiotic resistance in a clinical patient infected with *Klebsiella pneumoniae*

Creus, Marc
Creus, Marc* (1); Nicolet, Stefan* (1)
(1) University of Basel, Biozentrum and SIB

22
Inherited heterozygous mutation in CEBPE induces granule reorganization and substantial proteome changes in neutrophils

Dieckmann, Régis
Dieckmann, Régis* (1); Serwas, Nina* (2);
Mejstrikova, Ester (3); Garncarz, Wojciech (2);
Bennett, Keiryn (2); Litzman, Jiri (4);
Kerjaschki, Dentscho (1); Boztug, Kaan* (2)
(1) Medical University of Vienna, Austria, Clinical Institute of Pathology
(2) CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences
(3) University Hospital Motol, Prague Czech Republic, Department of Pediatric Hematology and Oncology
(4) St. Anne's University Hospital, Brno, Czech Republic, Department of Clinical Immunology and Allergology

23
Structure-function relationships of the *Toxoplasma gondii* aspartyl protease 3

Mukherjee, Budhaditya
Mukherjee, Budhaditya (1); Dogga, Sunil Kumar (1); Pino, Paco (1); Tessaro, Francesca (2); Chiriano, Gianpaolo (2);
Scapozza, Leonardo (2); Soldati-Favre, Dominique (1)
(1) University of Geneva, Department of Microbiology and Molecular Medicine
(2) University of Geneva, Pharmaceutical Biochemistry

24
Acetyl-CoA metabolism in the apicomplexan parasite *Toxoplasma gondii* and its impact in metabolism, gene expression and acetylome

Oppenheim, Rebecca
Oppenheim, Rebecca (1); Kumar Dogga, Sunil (1); Sindikubwabo, Fabien (2);
Hakimi, Mohamed-Ali (2); Creek, Darren (3);
Soldati-Favre, Dominique* (1)
(1) University of Geneva, Microbiology and Molecular Medicine
(2) Jean Roget Institute, Epigenetic and Parasites Team
(3) Monash Institute of Pharmaceutical Sciences, Drug Delivery, Disposition and Dynamics

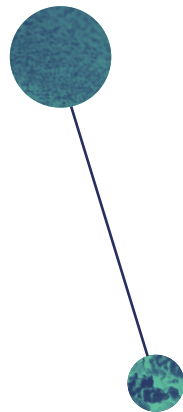
MICROBIOLOGY

25
Isolation and identification of a novel microcystin-degrading bacterium from a saudi eutrophic lake

Alamri, Saad
Alamri, Saad* (1); Mohamed, Zakaria* (2)
(1) King Khalid University, Biology
(2) Sohag University, Biology

26
Antimicrobial and anti-biofilm activities of new synthesis calix[4]arene-based thiazole derivatives

Ceylan, Ozgur
Ceylan, Ozgur (1); Bozkurt, Selahattin (2);
Sahin, Mehtap D. (3); Akdamar, Gultekin (4)
(1) Mugla Sitki Kocman University, Apiculture
(2) Usak University, Scientific Analysis Technological Application and Research Center
(3) Usak University, Faculty of Education
(4) Mugla Sitki Kocman University, Biology



27

The metabolism and toxicity of sphingolipids accumulation in eukaryotes

de Angelis, Stefania
de Angelis, Stefania* (1); Schneider, Roger* (1)
(1) University of Fribourg, Biochemistry

28

Delineating the immunity functions of reactive oxygen species using *Dictyostelium discoideum* as a model phagocyte

Dunn, Joe Dan
Dunn, Joe Dan (1); Zhang, Xuezhi (1); Soldati, Thierry* (1)
(1) Université de Genève, Biochimie

29

Polyphenol oxidase activity in tomato roots inoculated with meloidogyne incognita and *Arthrobotrys spp.*

Eken, Cafer
Eken, Cafer (1); Demir, Dudu (1); Alkan, Nurdan* (1); Söğüt, Mehmet Ali (2); Göze Özdemir, Fatma Gül* (2)
(1) Süleyman Demirel University, Faculty of Agriculture, Department of Agricultural Biotechnology
(2) Süleyman Demirel University, Faculty of Agriculture, Department of Plant Protection

30

Functional investigation of the importance of protein palmitoylation for the biogenesis of the inner membrane complex of *Toxoplasma gondii*.

Frenal, Karine
Frenal, Karine (1); Dogga, Sunil Kumar (1)
(1) University of Geneva, Microbiology and Molecular Medicine

31

Food-borne Colibacillosis

Gagua, Giorgi
Gagua, Giorgi* (1); Sichinava, Tatuli* (1); Gvinjilia, Rusudan* (1); Asanidze, Besarion* (1)
(1) Tbilisi State Medical University, Public Health

32

Near-atomic structure of aerolysin mutants reveals a novel protein fold and elucidates its mode of action.

Iacovache, Ioan
Iacovache, Ioan (1); Zuber, Benoit* (1); De Carlo, Sacha ; Ciraqui, Nuria; dal Peraro, Matteo; van der Goot, Gisou (2)
(1) University of Bern, Experimental Morphology
(2) EPFL

33

Long-range inhibition of Ras activity by Gap1 coordinates fusion with cell-cell contact

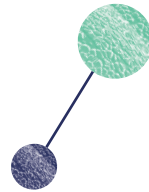
Merlini, Laura
Merlini, Laura (1); Martin, Sophie G* (1)
(1) University of Lausanne, Department of Fundamental Microbiology

MOLECULAR AND CELLULAR BIOSCIENCES

34

Biochemical characterization of the putative AMP-activated protein kinase complex of *Trypanosoma brucei*

Ambuehl, Chiara
Ambuehl, Chiara (1); Scapozza, Leonardo (1); Perozzo, Remo* (1)
(1) University of Geneva, Pharmaceutical Biochemistry



35

Integrin-dependent adhesion and function in insulin secretion and beta-cell survival

Arous, Caroline
Arous, Caroline (1); Kastberger, Birgit (1); Wehrle-Haller, Bernhard* (1)
(1) University of Geneva (CMU), Physiology and Metabolism

36

Structural-functional analysis of VEGF receptors

Asthana, Mayanka
Asthana, Mayanka (1); Markovic-Müller, Sandra (1); Ballmer-Hofer, Kurt* (1)
(1) Paul Scherrer Institute, Laboratory of Biomolecular Research

37

The use of structural information for the development of highly specific allosteric VEGFR-2 inhibitors

Avramovic, Dragana
Avramovic, Dragana (1)
(1) Paul Scherrer Institute, MCB

38

The CoREST-Histone deacetylase complex is involved in the activation of estrogen receptor alpha by cAMP

Bennesch, Marcela
Bennesch, Marcela* (1); Picard, Didier* (1)
(1) University of Geneva, Faculty of Sciences, Cell Biology

39

Sex- and tissue-specific regulation of RNA interference

Bezler, Alexandra
Bezler, Alexandra (1); Keller, Laurent* (1)
(1) University of Lausanne, Department of Ecology and Evolution

40

Bipolar spindle assembly and maintenance: Kinetochores involvement and investigation of unknown factors

Bondaz, Alexandra
Bondaz, Alexandra (1); Zanin, Esther; Meraldi, Patrick (1); Monica, Gotta (1)
(1) University of Geneva (CMU), Physiology and Metabolism Department

41

Phagocytosis and cross-presentation: Does ER fuse with the phagosome?

Bouvet, Samuel
Bouvet, Samuel (1); Nunes, Paula* (1); Bermont, Flavien (1); Castelbou, Cyril (1); Demaurex, Nicolas (1)
(1) University of Geneva, Department of Cell Physiology and Metabolism

42

A Period2 phospho-regulation mediated by CDK5 dictates circadian timing

Brenna, Andrea
Brenna, Andrea* (1); Chavan, Rohit* (1); Okabe, Takashi* (1); Ripperger, Jürgen* (1); Albrecht, Urs* (1)
(1) University of Fribourg, Biology, Biochemistry



43
Regulation of Syndecan-4 expression in pancreatic beta cells

Brioudes, Estelle
Brioudes, Estelle* (1); Bosco, Domenico* (1)
(1) University of Geneva (CMU) Surgery Department

44
CMG2 Beta-Integrin-like interaction with the actin cytoskeleton is impeded by Hyaline Fibromatosis Syndrome missense mutations

Burgi, Jerome
Bürgi, Jérôme* (1); Abrami, Laurence* (1); Yan, Shixu (1); Abriata, Luciano (1); dal Peraro, Matteo (1); van der Goot, Gisou* (1)
(1) EPFL

45
The KRABZFP/KAP1 system preserves epigenetic memory in embryonic stem cells

Coluccio, Andrea
Coluccio, Andrea (1); Turelli, Priscilla (1); Trono, Didier* (1)
(1) EPFL, GHI

46
Lipid binding by the CAP family member, Pry1

Darwiche, Rabih
Darwiche, Rabih (1); Schneider, Roger* (1)
(1) University of Fribourg, Switzerland, Biochemistry

47
Identification of heparanase inhibitors able to prevent heparan sulfate degradation in Sanfilippo syndrome: Establishment of suitable model cell lines

de Agostini, Ariane
Mbosso, Jennifer (1); Dentand Quadri, Isabelle (2); Mao, Xianqing (3); Cornu, Anthony (4); Tille, Jean-Christophe (4); de Agostini, Ariane* (4)
(1) University of Geneva – Sciences Faculty, Biochemistry
(2) University of Geneva Faculty of Medicine, Gynaecology and Obstetrics
(3) Luxembourg Institute of Health, Cellular and Molecular Oncology
(4) University of Geneva (CMU), Clinical Pathology

48
Role of hepatic miRNAs in adaptation to daytime feeding in mice

Du, Ngoc-Hien
Du, Ngoc-Hien (1); Hoekstra, Marieke (1); Arpat, Bulak (1); De Matos, Mara (1); Franken, Paul (1); Gatfield, David* (1)
(1) University of Lausanne, Center for Integrative Genomics, Faculty of Biology and Medicine

49
Mechanisms regulating clearance of misfolded polypeptides from the mammalian endoplasmic reticulum

Fregno, Ilaria
Fregno, Ilaria (1); Molinari, Maurizio* (1)
(1) Institute for Research in Biomedicine, Bellinzona, Switzerland
(2) SoHag University, Biology

50
Revealing mechanisms involved in recovery from transient ER stress in mammalian cells

Fumagalli, Fiorenza
Fumagalli, Fiorenza (1); Noack, Julia (2); Molinari, Maurizio* (1)
(1) Institute for Research in Biomedicine, Bellinzona, Switzerland
(2) Max Planck Institute for Biology of Ageing, Cologne, Germany

51
Junctate boosts phagocytosis by recruiting endoplasmic reticulum Ca²⁺ stores near phagosomes

Guido, Daniele
Guido, Daniele (1); Demaurex, Nicolas* (1); Nunes, Paula* (1)
(1) University of Geneva, Department of Cell Physiology and Metabolism

52
p73 regulates basal and starvation-induced liver metabolism

He, Zhaoyue
He, Zhaoyue (1); Simon, Hans-Uwe* (1)
(1) Institute of Pharmacology, University of Bern

53
Banana-shaped proteins that regulate molecular scissors: The role of N-BAR proteins in dynamin-mediated membrane fission

Hohendahl, Annika
Hohendahl, Annika (1); Humbert, Frédéric (1); Roux, Aurélien* (1)
(1) University of Geneva, Biochemistry

54
Matrix metalloproteinase 9 gene polymorphisms in asthmatic children

Jendrisek, Gorana
Jendrisek, Gorana (1); Vljajnic, Marina (1); Nikolic, Aleksandra* (1)
(1) Institute of Molecular Genetics and Genetic Engineering, University of Belgrade, Laboratory for Molecular Biology

55
ALIX recruits ESCRTIII to endosomes depending on its interaction with LBPA

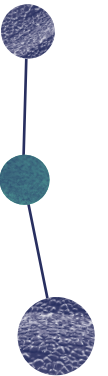
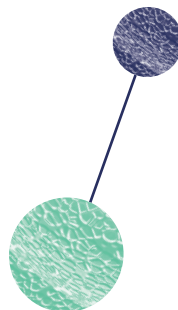
Larios, Jorge
Larios, Jorge (1); Roux, Aurélien (1); Gruenberg, Jean* (1)
(1) University of Geneva, Biochemistry

56
MultiPrime: A Baculovirus-based multigene expression system for mammalian cells

Mansouri, Maysam
Mansouri, Maysam (1); Rizk, Aurélien (1); Xie, Ye (1); Neuhauss, Stephan (2); Cianciolo, Chiara (2); Berger, Imre (3); Ballmer-Hofer, Kurt (1); Berger, Philipp* (1)
(1) Paul Scherrer Institute, Molecular Cell Biology
(2) University of Zurich, Institute of Molecular Life Sciences
(3) EMBL

57
COPII vesicle formation is aided by conical lipids

Melero Carrillo, Alejandro
Melero, Alejandro (1); Humbert, Frédéric (1); Riezman, Isabelle (2); David, Fabrice (3); Roux, Aurélien* (1); Riezman, Howard* (1)
(1) University of Geneva, Biochemistry
(2) University of Geneva
(3) EPFL



58

Actin controls membrane organization during endosome biogenesis

Muriel López, Olivia

Muriel López, Olivia (1); Tomas, Alejandra (2); Scott, Cameron (1); Gruenberg, Jean* (1)
(1) University of Geneva, Biochemistry
(2) Imperial College London, Cell Biology

59

Integrative approach to analyze *Trichonympha* centriolar cartwheel

Nemčíková Villímová, Veronika

Nemčíková Villímová, Veronika (1); Gönczy, Pierre* (1)
(1) EPFL, ISREC SV

60

Rev-erb-alpha destabilizes glucocorticoid receptor via competition for binding to HSP90, thereby affecting ethanol-induced TNF-alpha production

Okabe, Takashi

Okabe, Takashi (1); Chavan, Rohit (1); Brenna, Andrea (1); Albrecht, Urs* (1)
(1) University of Fribourg, Department of Biology, Institute of Biochemistry

61

The molecular organization of the exocyst determined by live cell imaging

Picco, Andrea

Picco, Andrea* (1); Gallego, Oriol* (2); Irastorza, Ibai* (3); Specht, Tanja (4); Devos, Damien (3); Kaksonen, Marko* (1)
(1) University of Geneva, Switzerland, Department of Biochemistry
(2) Institute for Research in Biomedicine (IRB), Barcelona, Spain
(3) Centro Andaluz de Biología del Desarrollo CABD, Sevilla, Spain
(4) European Molecular Biology Laboratory (EMBL), Cell Biology and Biophysics

38

62

In vivo tracking of immune cell interactions for a better understanding of immunity

Pizzagalli, Diego Ulisse

Pizzagalli, Diego Ulisse (1); Krause, Rolf* (2); Thelen, Marcus* (1); Gonzalez, Santiago Fernandez* (1)

(1) Università della Svizzera Italiana, Institute for Research in Biomedicine
(2) Università della Svizzera Italiana, Institute of Computational Science

63

Effect of tyrosine kinase inhibitors in cell-niche adhesion and signaling through Kit-ligand and the c-kit receptor

Calderin Sollet, Zuleika

Calderin Sollet, Zuleika* (1); Wehrle-Haller, Bernhard* (1)
(1) University of Geneva (CMU), Physiology and Metabolism

64

Cell culture processes and viable CHO cells growth in different temperature conditions

Radenovic, Milena

Radenovic, Milena* (1); Bonner, Kindra* (2)
(1) University of Sarajevo, Biochemistry and Physiology
(2) NC State University, Biochemistry

65

The role of AKAP2 in prostate cancer

Reggi, Erica

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(1) University of Lausanne

66

Stressed to death: Metabolic impact of Drp1 ablation in the adult mouse forebrain

Restelli, Lisa Michelle

Restelli, Lisa Michelle* (1); Oettinghaus, Björn* (1); Licci, Maria (2); Schulz, Jan (3); Savoia, Claudia (4); Handschin, Christoph (5); Bischofberger, Josef (3); Tolnay, Markus (1); Ishihara, Naotada (6); Mihara, Katsuyoshi (7); Schmidt, Alexander (5); Eckert, Anne (8); Scorrano, Luca (9); Frank, Stephan* (1)

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(2) Basel University Hospital, Neurosurgery
(3) Basel University Hospital, Biomedicine
(4) Nestlé Research Center
(5) University of Basel, Biozentrum
(6) Kurume University, Protein Biochemistry
(7) Kyushu University, Molecular Biology
(8) Psychiatric University Clinics Basel, Biomedicine
(9) Padua University, Biology

67

Cortical distribution of force generator components and their regulators in one-cell stage *C. elegans* embryos

Scholze, Melina

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68

Investigating the cooperative action of HCF-1 and its THAP harem in cell proliferation

Senez, Harmonie

Senez, Harmonie (1); Herr, Winship* (1)
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69

Molecular insights into mitochondrial phospholipid synthesis

Serricchio, Mauro

Serricchio, Mauro (1); McQuibban, G. Angus (1)
(1) University of Toronto, Biochemistry

70

Phytoprotective and antioxidant effects of German chamomile extract against dimpylate-induced hepato-nephrotoxicity in rats

Shati, Ali

Shati, Ali (1)
(1) King Khalid University, Biology

71

The DYRK-family kinase Pom1 phosphorylates the F-BAR protein Cdc15 to prevent division at cell poles

Ullal, Pranav

Ullal, Pranav* (1); Martin, Sophie* (1)
(1) University of Lausanne

72

Cyclodextrin-induced exocytosis of endocytic organelles and cholesterol storage clearance in Niemann-Pick C cells

Vacca, Fabrizio

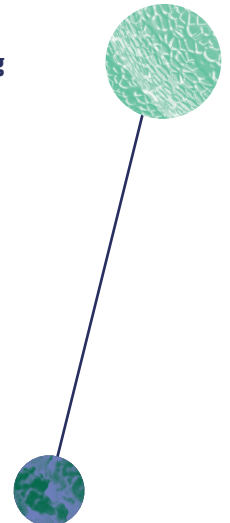
Vacca, Fabrizio (1); Gruenberg, Jean (1)
(1) University of Geneva, Biochemistry

73

Role of Paxillin in the signalling by the integrin/talin/kindlin complex

Vazquez, Patricia

Vazquez, Patricia (1); Wehrle-Haller, Bernhard* (1)
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39

74

Target Of Rapamycin Complex 2 (TORC2) signaling in membrane tension homeostasis

Vegunta, Yogesh

Vegunta, Yogesh (1); Gaubitz, Christl (1); Kusmider, Beata (1); Scapozza, Leonardo (2); Thore, Stephane* (3); Vadas, Oscar* (2); Loewith, Robbie* (1)

(1) University of Geneva, Department of Molecular Biology

(2) University of Geneva, Department of Pharmaceutical Sciences

(3) Institut Europeen de Chimie et Biologie, IECB-U869

75

Live imaging based high throughput screening for novel regulators of mitotic spindle positioning

Wolf, Benita

Wolf, Benita (1); Gönczy, Pierre* (1); Burri, Olivier (1); Seitz, Arne (1)

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NEUROSCIENCE

76

Analysis of gating of Acid-Sensing Ion Channels (ASICs) under rapid and slow pH changes

Alijevic, Omar

Alijevic, Omar* (1); Kellenberger, Stephan* (1)

(1) University of Lausanne, Department of Pharmacology and Toxicology

77

The antidiabetic drug metformin impacts glucose metabolism in astrocytes

Allaman, Igor

Allaman, Igor (1); Grenningloh, Gabriele (1); Magistretti, Pierre* (1)

(1) EPFL, Brain Mind Institute

78

Drosha post-transcriptionally regulates embryonic neural stem cells

Erni, Andrea

Erni, Andrea (1); Rolando, Chiara (1); Taylor, Verdon* (1)

(1) University of Basel, Department Biomedizin

79

Study of behavior and biochemical correlates of aggressive and nonaggressive animals in view of radon hormesis

Nikolasihvili, Marine

Nikolaishvili, Marine* (1); Chichinadze, Kostantine* (1); Nadareishvili, David* (1); Jikia, Gogi* (1); Koptonashili, Lali* (1); Museliani, Tea* (1)

(1) I.Beritashvili Center of Experimental Biomedicine, Laboratory of Radiobiology

80

Emotional-motivation behavior of aggressive and non-aggressive animals and their neurochemical correlates under condition of EMF

Nikolasihvili, Marine

Nikolaishvili, Marina* (1); Chichinadze, Konstantine* (1)

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81

Isolating plasma membrane and cell cortex for cryo electron tomography

Peitsch, Camille

Peitsch, Camille (1); Beckmann, Sven (1); Zuber, Benoît* (1)

(1) Experimental Morphology, Institute of Anatomy, University of Bern

82

Optogenetic characterization of subcicular-thalamic connections: Novel function of limbic TRN in head-direction system?

Vantomme, Gil

Vantomme, Gil* (1); Rovó, Zita* (1); Fernandez, Laura (1); Lüthi, Anita* (1)

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83

Memory stabilization and forgetting in *Drosophila melanogaster*

Widmer, Yves

Widmer, Yves (1); Diegelmann, Sören (1); Bilican, Adem (2); Bruggmann, Rémy (2); Sprecher, Simon* (1)

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(2) University of Bern, Bioinformatics

PHYSIOLOGY

84

Cooperation of basolateral epithelial amino acid transporters TAT1 and LAT2 investigated in a double knockout mouse model

Boiadjieva, Emilia

Boiadjieva, Emilia* (1); Vilches, Clara* (2); Bodoy, Susanna (3); Camargo, Simone (1); Oparija, Lalita (1); Jando, Julia (1); Nunes, Virginia* (2); Verrey, Francois* (1); Palacin, Manuel* (3)

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Institute of Physiology

(2) IDIBELL Bellvitge Biomedical Research Institute

(3) Institute for Research in Biomedicine Barcelona

85

Orai1 Mutations associated with tubular aggregate myopathy

Bulla, Monica

Bulla, Monica* (1); Böhm, Johann* (2); Szlauer, Anastazja (1); Koch, Catherine (2); Malfatti, Edoardo (3); Mora, Marina (4); Newman, William G. (5); Ripolone, Michela (6); Violano, Raffaella (6); Moggio, Maurizio (6); Romero, Norma (3); Demaurex, Nicolas* (1); Laporte, Jocelyn* (2)

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(2) University of Strasbourg (IGBMC), Translational Medicine and Neurogenetics

(3) Groupe Hospitalier Pitié-Salpêtrière, Centre de Référence de Pathologie Neuromusculaire Paris-Est

(4) Fondazione IRCCS Istituto Neurologico C. Besta, Neuromuscular Diseases and Neuroimmunology

(5) University of Manchester, Manchester Centre for Genomic Medicine

(6) University of Milan (IRCCS), Neuromuscular Unit

86

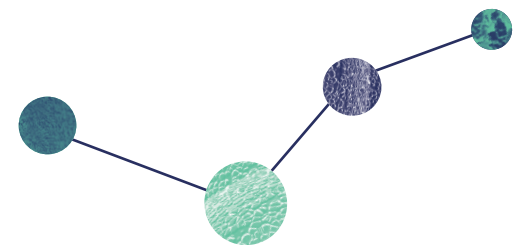
AKAP-Lbc-mediated signaling protects cardiomyocytes against doxorubicin-mediated toxicity

Caso, Stefania

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87

Connexin40 controls endothelial activation by dampening nuclear translocation of NFκB.

Denis, Jean-François

Denis, Jean-François* (1); Scheckenbach, Ludwig* (1); Pfenninger, Anna (1); Meens, Merlijn (1); Krams, Rob (2); Miquerol, Lucile (3); Taffet, Steven (4); Chanson, Marc (5); Delmar, Mario (6); Kwak, Brenda* (1)

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(3) Aix Marseille Université, Developmental Biology
(4) SUNY Upstate Medical University, Department of Microbiology
(5) University of Geneva, Department of Pediatrics
(6) New York University, Division of Cardiology

88

Ion channels gated by the new STIM1L isoform

Frieden, Maud

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(1) Geneva Medical Center, Cell Physiology and Metabolism

89

Identification of early metabolic biomarkers for beta-cell death in pre-diabetic mice

Li, Lingzi

Li, Lingzi* (1); Martin-Levilain, Juliette (1); Krznar, Petra (2); Agazzi, Andrea (3); Supale, Sachin (1); Zamboni, Nicola (2); Maechler, Pierre* (1)

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(2) ETH Zurich, Institute of Molecular Systems Biology
(3) University of Geneva, Section of Mathematics

90

Role of AKAP2 in cardiac function and protection

Maric, Darko

Maric, Darko (1); Arambasic, Miroslav (1); Perez López, Irene (1); Boéchat, Céline (1); Diviani, Dario* (1)

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91

STIM1 promotes phagosomal maturation and antigen cross-presentation in dendritic cells

Nunes, Paula

Nunes, Paula (1); Castelbou, Cyril (1); Bouvet, Samuel (1); Guido, Daniele (1); Basoy, Esen Y. (1); Lippens, Carla (2); Page, Nicolas (2); Hugues, Stephanie (2); Merkler, Doron (2); Martinvalet, Denis (1); Demaurex, Nicolas* (1)

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(2) University of Geneva, Department of Pathology and Immunology

92

Impact of phosphorylation site mutations on human amino acid uniporter LAT4 expression, localization and function

Oparija, Lalita

Oparija, Lalita (1); Guetg, Adriano (1); Verrey, François* (1)

(1) Zurich Center for Integrative Human Physiology (ZIHP), University of Zurich, Institute of Physiology

93

Essential integrins beta 1 and beta 4 perceive basement membrane composition and stiffness to recapitulate the mechano-biological hallmarks of living epithelium

Plodinec, Marija

Plodinec, Marija (1); Oertle, Philipp (2); Halfter, Willi (3); Assgeirsson, Daphne (2); Eppenberger-Castori, Serenella (4); Obermann, Ellen C. (4); Lim, Roderick Y.H.* (2)

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(2) University of Basel, Biozentrum and the Swiss Nanoscience Institute
(3) University of Pittsburgh, Department of Neurobiology
(4) University Hospital Basel

94

The Mouse Metabolic Evaluation Facility (MEF) of University of Lausanne / CHUV

Preitner, Frederic

Willemin, Gilles* (1); Pimentel, Anabela* (1); Niederhauser, Guy* (1); Preitner, Frédéric* (1)

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95

Novel role for Sirtuin7 in the regulation of renal electrolyte homeostasis

Rajaram, Renuga Devi

Rajaram, Renuga D. (1); Melo, Zesergio (2); Tovar, Armando R. (3); Mercado, Adriana (2); Martin, Virginie (1); Debonneville, Anne (1); Cheval, Lydie (4); Doucet, Alain (4); Torres, Nimbe (3); Ryu, Dongreyol (5); Auwerx, Johan (5); Noriega, Lilia G. (3); Gamba, Gerardo (2); Staub, Olivier (1)

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(2) Instituto Nacional de Ciencias Médicas y Nutrición, México, Unidad de Fisiología Molecular; (3) Instituto Nacional de Ciencias Médicas y Nutrición, México., Fisiología de la Nutrición
(4) Centre de Recherche des Cordeliers, Paris, France., Métabolisme et physiologie rénale
(5) EPFL, Laboratory of Integrative and Systems Physiology

96

Ineffective correction of PPAR-gamma signaling in cystic fibrosis airway epithelial cells undergoing repair *

Sofoluwe, Aderonke

Bou Saab, Joanna* (1); Sofoluwe, Aderonke* (1); Bacchetta, Marc* (1); Chanson, Marc* (1)

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*poster presented in odd poster session

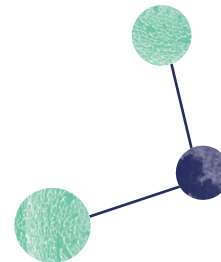
97

A new role of the PIM-3 kinase in renal salt and water homeostasis

Spirli, Alessia

Spirli, Alessia (1); Ronzaud, Caroline (1); Debonneville, Anne (1); Staub, Olivier* (1)

(1) University of Lausanne, Department of Pharmacology and Toxicology



98

Role of the adaptor protein ND-FIP2 in salt transport regulation along the Aldosterone Sensitive Distal Nephron (ASDN)

Vacle, Sarah

Vacle, Sarah (1); Cheval, Lydie (2); Doucet, Alain (2); Fenton, Robert A. (3); Staub, Olivier* (1)

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(3) Aarhus University, Department of Biomedicine and Center for Interactions of Proteins in Epithelial Transport

99

A new rat model for primary generalized glucocorticoid resistance

Verouti, Sophia

Verouti, Sophia (1); Ancin del Olmo, David (1); Merillat, Anne-Marie (1); Ponce de Leon, Veronica (1); Wang, Qing (2); Aleksic, Zeljko (1); Kratschmar, Denise (3); Odermatt, Alex (3); Hummler, Edith* (1)

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(2) University of Lausanne (CHUV)

(3) University of Basel, Department of Pharmaceutical Sciences

100

Conformational changes occurring on a ASIC1a gating domain during channel activation

Vullo, Sabrina

Vullo, Sabrina (1); Bonifacio, Gaetano* (1); Kellenberger, Stephan* (1)

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(1) University of Fribourg, Switzerland, Biochemistry

PLANT SCIENCES

101

How to observe the invisible: A novel tag-and-trace system to investigate the chemical biology of root-herbivore interactions

Bont, Zoe

Bont, Zoe (1); Erb, Matthias* (1)

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Institute for Plant Sciences

102

Balancing of B6 vitamers is essential for plant development and metabolism in *Arabidopsis*

Colinas, Maite

Colinas, Maite* (1); Eisenhut, Marion (2); Tohge, Takayuki (3); Fernie, Alisdair R. (3); Weber, Andreas P. M. (2); Fitzpatrick, Teresa B.* (1)

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(2) Heinrich-Heine-University Düsseldorf, Institute of Plant Biochemistry

(3) Max-Planck-Institute for Molecular Plant Physiology, Golm

103

Identification of a vacuolar malate channel required for plant water balance.

Eisenach, Cornelia

Eisenach, Cornelia* (1); Martinoia, Enrico* (1)

(1) University of Zurich, Institute of Plant Biology



104

Unravelling the adaptations of a generalist root feeder (*Melolontha melolontha*; Coleoptera) to dandelion (*Taraxacum* sect. *Ruderalia*; Asteraceae)

Hervé, Maxime

Hervé, Maxime (1); Erb, Matthias* (1)

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Institute of Plant Sciences

105

Soil legacy effects of root secondary metabolites

Hu, Lingfei

Hu, Lingfei (1); Schlaeppli, Klaus (2); Robert, Christelle A. M. (1); Erb, Matthias (1)

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(2) Institute for Sustainability Sciences, Agroscope

106

O-methylation of DIMBOA-GLC as a key regulator of herbivore resistance in maize and wheat

Li, Beibei

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Institute of Plant Sciences

107

Auxin is induced rapidly by herbivore attack and regulates a subset of systemic, jasmonate-dependent defenses

Machado, Ricardo

Machado, Ricardo AR (1,2); Robert, Christelle AM (1); Arce, Carla CM (2); Ferrieri, Abigail P (2); Xu, Shuqing (2); Jimenez-Aleman, Guillermo H (2); Baldwin, Ian T (2); Erb, Matthias (1)

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(2) Max Planck Institute for Chemical Ecology

108

Induced tolerance to root herbivory involves carbon reallocation and delayed over-compensatory regrowth

Robert, Christelle A. M.

Robert, Christelle A.M. (1)

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109

Expert curation of proteins in UniProtKB/Swiss-Prot

Schneider, Michel

Schneider, Michel (1); UniProt, Consortium* (2)

(1) Swiss Institute of Bioinformatics, Swiss-Prot

(2) EBI, PIR, SIB

110

Towards the function of evolutionary conserved effectors of the oomycete plant pathogen *Phytophthora*

Tomczynska, Iga

Tomczynska, Iga (1); Stumpe, Michael (1); Doan, Tu Giang (1); Mauch, Felix* (1)

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PROTEOMICS

111

Evolution of the selectivity of insect chemosensory ionotropic glutamate receptors

Bargeton, Benoîte

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Center of Integrative Genomics

(2) EPFL, Institute of Bioengineering, School of Life Sciences



112

Targeted mass spectrometric analysis of the cellular response to the perturbations of the LXR and SREBP pathway

Blattmann, Peter

Blattmann, Peter* (1); Henriques, David (2); Zimmermann, Michael (1); Auwerx, Johan (3); Saez-Rodriguez, Julio (4); Aebersold, Ruedi* (5)

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(2) Spanish National Research Council, IIM-CSIC
(3) EPF Lausanne, Laboratory of Integrative and Systems Physiology (LISP/NCEM)
(4) RWTH-Aachen, Joint Research Centre for Computational Biomedicine (JRC-COMBINE) and EMBL, European Bioinformatics Institute (EBI)
(5) ETH Zurich, Department of Biology and University of Zurich, Faculty of Science

113

Quantitative phosphoproteomics reveals the p38-MK2 signaling role in the transcription regulation after UV irradiation

Borisova, Marina

Borisova, Marina (1); Beli, Petra* (1)

(1) Institute of Molecular Biology (IMB), Mainz, Chromatin Biology and Proteomics

114

Systems proteomics and trans-omic data integration illuminate genetic mechanisms linking mitochondrial function and metabolism

Wu, Yibo

Wu, Yibo* (1); Aebersold, Ruedi* (1)

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STEM CELLS

115

Ex-vivo expansion of human cardiac biopsy-derived Stem cells In physico-chemically defined nutrient media

Bardelli, Silvana

Bardelli, Silvana * (1); De Jesus Da Cruz Monteiro, Beatriz (1); Duarte Jorge, Samuel (1); Messi, Ferruccio (2); Moccetti, Tiziano (1,3); Moccetti, Marco (1,3)

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(2) Cell Culture Technologies LLC, Gravesano
(3) Cardiology Unit, Cardiocentro Ticino Foundation, Lugano

116

Deficit in mitophagy leads to accumulation of depolarized mitochondria in skin-derived stem cells

Liu, He

Liu, He (1); Simon, Hans-Uwe* (1)

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117

Differentiation therapy via HoxA5 overcomes stem cell traits in Wnt-driven colorectal cancer

Ordóñez-Morán, Paloma

Ordóñez Morán, Paloma (1); Huelsen, Joerg* (1); Dafflon, Caroline (1); Imajo, Masamichi (2); Nishida, Eisuke (3)

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(2) University of Kyoto, Bioimaging and Cell Signaling
(3) University of Kyoto, Cell and Developmental Biology



118

Utilization of adipose-derived cells to bio-engineer skin substitutes that consist of the epidermis, the dermis and the hypodermis

Zimoch, Jakub

Zimoch, Jakub (1); Klar, Agnes (1); Meuli-Simmen, Claudia (3); Meuli, Martin (1); Scherberich, Arnaud (2); Reichmann, Ernst* (1)

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STRUCTURAL BIOLOGY

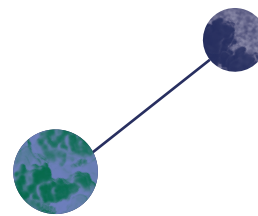
119

New insights into pRN1 priming: Structural changes support specific DNA recognition and catalysis

Boudet, Julien

Boudet, Julien (1); Devillier, Jean-Christophe (2); Lipps Georg (2); Allain, Frédéric H-T. (1)

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(2) University of Applied Sciences of Northwestern Switzerland (FHWN), School of Life Sciences, Institute of Biochemistry and Bioanalytics



SYNTHETIC BIOLOGY

120

Real-time quantification of protein expression at the single cell level based on dynamic protein synthesis translocation reporters

Aymoz, Delphine

Aymoz, Delphine (1); Wosika, Victoria (1); Durandau, Eric (1); Pelet, Serge* (1)

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121

Dynamic measurement of kinases activity in live single cell using Synthetic Kinase Activity Relocation Reporter (SKARS)

Durandau, Eric

Durandau, Eric* (1); Ma, Min (1); Aymoz, Delphine (1); Pelet, Serge* (1)

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122

Deciphering the human anticarbohydrate repertoire of IgG, IgA & IgM

Schneider, Christoph

Schneider, Christoph (1); Wehrli, Marc (1); Smith, David F (2); Cumming, Richard D (2); Straumann, Alex (3); Zürcher, Adrian (4); von Gunten, Stephan* (1)

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(2) Emory University School of Medicine, Protein-Carbohydrate Interaction Core H
(3) Kantonsspital Olten, Department of Gastroenterology
(4) CSL Behring, Research and Development

123

Single-cell monitoring of transcription and translation dynamics from a single DNA locus

Wosika, Victoria

Wosika, Victoria (1); Aymoz, Delphine (1); Pelet, Serge* (1)

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SYSTEMS BIOLOGY

124

Differential effects of synchrotron microbeam and minibeam irradiation on mature and immature tissue in vivo

Brönnimann, Daniel

Brönnimann, Daniel* (1); Bouchet, Audrey* (1); Djonov, Valentin* (1); Schneider, Christoph (2); Bräuer, Elke (3); Serduc, Raphael (4); Graber, Werner (1); von Gunten, Stephan (2); Djonov, Valentin (1)

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(2) University of Bern, Institute of Pharmacology
(3) European Synchrotron Radiation Facility, Biomedical Beamline
(4) Université Joseph Fourier, Institut des Neurosciences

125

A comparison of Multi-view stereo reconstruction algorithms (PMVS vs. EMVS)

Fofonjka, Anamarija

Fofonjka, Anamarija (1); Milinkovitch, Michel C. (1)

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126

A bioinformatic framework for immune repertoire diversity profiling enables detection of immunological status

Greiff, Victor

Greiff, Victor (1); Bhat, Pooja (2); Cook, Skylar C. (1); Menzel, Ulrike (1); Kang, Wenjing (3); Reddy, Sai T.* (1)

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(2) Institute of Molecular Biotechnology
(3) Stockholm University, Department of Molecular Biosciences

127

Lipid droplets are accessible to ER luminal probes

Khaddaj, Rasha

Mishra, Shirish (1); Khaddaj, Rasha (1); Jacob, Claire (1); Schneiter, Roger* (1)
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128

Shedding light on local MAPK activity using a bimolecular synthetic kinase activity relocation sensor

Mira, Nadim

Mira, Nadim (1); Pelet, Serge* (1)
(1) University of Lausanne, Department of Fundamental Microbiology

MICROBIOLOGY

129

Evaluation of commercial bacteriophage cocktail against *Staphylococcus aureus* isolates susceptible or resistant to Methicillin (MSSA or MRSA) or Vancomycin (VISA or VRSA)

McCallin, Shawna

Shawna McCallin (1); Frank Oechslin (1); Yok-Ai Que (1,2); Philippe Moreillon (1); Jose Manuel Entenza (1); Gregory Resch (1)

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