



Union des Sociétés Suisses de Biologie Experimentale
Union Schweizerischer Gesellschaften für Experimentelle Biologie

USSBE USGEB

SWISS BIOMEDICAL RESEARCH 2006

37th Annual Meeting of the
Union of Swiss Societies for Experimental Biology
USGEB/USSBE

February 23-24, 2006

CMU Geneva

Organizing Committee

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Urs Ruegg
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Website <http://www.usgeb2006.ch>
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Program Overview

Wednesday 22.02.06

17.00 - 19.00 Meeting of the USGEB Delegates

Thursday 23.02.06

09.00 Registration, Mounting of Posters, Welcome Coffee

09.40 - 12.30 **Plenary Session**

Welcome

09.50 **Engineering Synthetic Biological Systems** Drew Endy

10.40 **Friedrich Miescher Award**

11.00 – 12.30 **Plenary Symposium SA : Synthetic Biology**

12.30 Lunch

12.30 - 14.30 **Poster Session and Commercial Exhibit** (open all day)

13.00 Business meetings : BIO, PHY

14.30 - 16.30 **Parallel symposia S1 - S4**

S1 Bioinformatic Activities in Switzerland

S2 Sweet Functions - the Physiology of Complex Glycans

S3 From Cells to Organs

S4 Proteolysis and Cancer

16.30 Coffee break

17.00 - 18.00 **Plenary Session**

RNAi and miRNA Pathways in Mammalian Cells, Witold Filipowicz

19.00 Cruise on the Lake with Drinks and Dinner

Friday 24.02.06

09.00 - 10.00 **Plenary Session**

Host-Pathogen Interactions : the *Listeria* Paradigm, Pascale Cossart,

10.00 Coffee break

10.30 - 12.15 **Plenary symposium SB : Research in Biomedical Industry; Drug Design, Strategies, and Job Opportunities**

12.15 Lunch

12.15 - 14.15 **Poster Session and Commercial Exhibit** (open all day)

13.00 Business Meetings : ASIRB, SSO-SGO, ZMG

14.15 - 16.15 **Parallel Symposia S5 - S8**

S5 Connexin Channels : from Tissue Physiology to Human Disease

S6 Molecular Basis of Doping: Scientific and Ethical aspects

S7 Cancer : Research for Prevention

S8 Endocytosis and Ubiquitylation

16.15 Coffee break

16.35 - 17.40 **Plenary Session**

16.35 **Novartis Poster Award**

16.50 **Inside the Nucleus**, Ulrich K. Laemmli

17.40 End of the Meeting

Plenary lectures

Thursday February 23, 08.50

Drew Endy , MIT, Cambridge, MA

**Engineering Synthetic
Biological Systems**

Chair: Jean - Dominique Vassalli, UNIGE

Abstract **M - 01**

Thursday, February 23, 17.00

Witold Filipowicz, FMI, Basel

**RNAi and miRNA Pathways in
Mammalian Cells**

Chair: Walter Reith, UNIGE

Abstract **M - 02**

Friday, February 24, 09.00

**Pascale Cossart, Institut Pasteur,
Paris**

**Host - Pathogen Interactions :
the *Listeria* Paradigm**

Chair, Walter Reith, UNIGE

Abstract **M - 03**

Friday, February 24, 16.50

Ulrich K. Laemmli, UNIGE

Inside the Nucleus

Chair: Elisabeth Rungger - Brändle, UNIGE

Abstract **M - 04**

Symposia overview

Thursday, February 23

Society	Title	Chair	Time	Room
S A	O.C. Synthetic Biology	S. Panke, ETHZ	11.00-12.30	A400
S 1	O.C. Bioinformatic Activities in Switzerland	A. Bairoch, UNIGE	14.30-16.30	I-II
S 2	PHY Sweet Functions - the Physiology of Complex Glycans	E.G. Berger, UNIZH	14.30-16.30	IV-V
S 3	ZMG From Cells to Organs	M. Affolter, UNIBAS	14.30-16.30	C150
S 4	BIO Proteolysis and Cancer	F. Levy, LICR, UNIL	14.30-16.30	A250

Friday, February 24

Society	Title	Chair	Time	Room
S B	O.C. Research in Biomedical Industry; Drug Design, Strategies, and Job Opportunities	U. Rüegg, UNIGE U. Schibler, UNIGE	10.30 - 12.15	A 400
S 5	AHE Connexin Channels : from Tissue Physiology to Human Disease	Paolo Meda, UNIGE	14.15-16.15	I-II
S 6	ASIRB Molecular Basis of Doping: Scientific and Ethical aspects	A. Conti, AIP, Olivone	14.15-16.15	C150
S 7	SSO SGO Cancer : Research for Prevention	G. Baerlocher, UNIBE C. Maake, UNIZH	14.15-16.15	A250
S 4	BIO Endocytosis and Ubiquitylation	O. Staub, UNIL	14.15-16.15	IV-V

Symposia detailed program

Thursday 23.02.06 :

11.00-12.30 Plenary Symposium A A400

SA Synthetic Biology

Symposium sponsored by FoGeFo; Chair, Sven Panke, ETHZ

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|-------|---|---------|
| 11.00 | Engineering of Mammalian Transgene Networks
Martin Fussenegger, ETHZ | SA - 01 |
| 11.30 | Engineering Synthetic Multicellular Systems
Ron Weiss, Princeton University, NJ | SA - 02 |
| 12.00 | Insulation in Reaction Networks
Sven Panke, ETHZ | SA - 03 |

14.30 - 16.30 Parallel symposia 1 - 4

S1 Bioinformatic Activities in Switzerland I - II

Organizing Committee symposium; Chair, Amos Bairoch, UNIGE

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|-------|--|---------|
| 14.30 | Activities of the Swiss Institute of Bioinformatics (SIB)
Ernest Feytmans SIB/UNIL | S1 - 01 |
| 14.45 | UniProtKB/Swiss-Prot: the Protein Sequence Knowledgebase
Amos Bairoch, UNIGE | S1 - 02 |
| 15.00 | Molecular Modeling: the Design of Optimized Molecules for Cancer Immunotherapy
Olivier Michielin, LICR, Lausanne | S1 - 03 |
| 15.30 | Towards a Molecular Systems Biology View of Sexual Reproduction
Michael Primig, UNIBAS | S1 - 04 |
| 16.00 | The Orthologous Matrix (OMA) Project - Massive Cross-Comparison of Complete Genomes
Gaston Gonnet, ETHZ | S1 - 05 |

S2 Sweet Functions - the Physiology of Complex Glycans IV - V

PHY – Symposium, Chair; Eric G. Berger, UNIZH

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|-------|--|---------|
| 14.30 | Gains of Glycosylation: A Large Group of Human Pathogenic Mutations
Guillaume Vogt, University René Descartes, Paris | S2 - 01 |
| 15.00 | L- and P-selectins as Mediators of Metastasis
Lubor Borsig, UNIZH | P1 - 34 |
| 15.15 | Do Sweet Kisses Help to Establish Contact?
Max M. Burger, Novartis, Basel | S2 - 02 |
| 15.45 | Exploring Cell Surface Proteomes: Specific Identification of <i>Drosophila</i> Plasma Membrane Glycoproteins via Mass Spectrometry
Ralph Schiess, ETHZ | P3 - 71 |
| 16.00 | The Role of N-Glycans in Protein Secretion and Quality Control
Ari Helenius, ETHZ | S2 - 03 |

Thursday 23.02.06

14.30 - 16.30 Parallel symposia ctd :

S 3	From Cells to Organs ZMG – Symposium, Chair, Markus Affolter, UNIBAS	C150
14.30	MicroRNAs in Development Alexander Schier, Harvard University, Cambridge MA	S3 - 01
15.00	Transcriptional Control of B Cell Identity by Pax-5 Meinrad Busslinger, IMP, Vienna, Austria	S3 - 02
15.30	Stem Cells and their Niche Andreas Trumpp, ISREC Lausanne	S3 - 03
16.00	Using Mammalian and Yeast Systems to Study MEMO, a Novel Erb2B Effector Protein Maria Meira, FMI, Basel	P1 - 31
16.15	Molecular Genetic Analysis of the Role of Hox Genes in Mammalian Gut Development Giovanna Zacchetti, UNIGE	P2 - 09
S 4	Proteolysis and Cancer BIO - Symposium; Chair, Frédéric Levy, LICR, UNIL	A250
14.30	The Cancer Degradome: New Insights into Protease Function in Cancer Biology Dylan R. Edwards, University of East Anglia, Norwich	S4 - 01
15.00	An Unexpected Role for Caspases in Anti-Cancer Chemotherapy: Regulation of Tumor Immunogenicity Guido Kroemer, Institut Gustave Roussy, Villejuif	S4 - 02
15.30	Dynamic Imaging of Protease Function in Cancer Invasion Peter Friedl / Katarina Wolf, University of Würzburg, Würzburg	S4 - 03
16.00	BARD1 Acts in a Common Pathway with BRCA2 and Aurora B in Regulating Mitosis and Genomic Instability Irmgard Irminger-Finger, HUG, UNIGE	P1 - 27
16.15	The Metalloprotease Meprin beta Targets Adherent Junctions in Polarized Epithelial Cells and Generates a Novel E-Cadherin Fragment Maya Huguenin, UNIBE	P1 - 37

Friday 24.02.06

10.30 - 12.15 Plenary symposium B

Chair, Urs Rüegg and Ueli Schibler, UNIGE

SB Research in Biomedical Industry; Drug Design, Strategies, and Job Opportunities B400

- 10.30 **The Approach to Drug Discovery at Novartis**
Brian Richardson, Novartis, Basel SB - 01
- 11.05 **Research in Biotech: Bedside to Bench and Back**
Serge Halazy, Serono, Geneva SB - 02
- 11.45 **Vaccination-induced Antibodies as a Therapeutic Principle**
Martin Bachmann, Cytos, Zurich SB - 03

14.15 - 16.15 Parallel Symposia 5 - 8

S 5 Connexin Channels : from Tissue Physiology to Human Disease I - II
SGAHE - Symposium; Chair, Paolo Meda, UNIGE

- 14.15 **Connexins : the Bare Essentials**
Paolo Meda, UNIGE S5 - 01
- 14.17 **Connexins in Tissue Development**
Cecilia W. Lo, NIH, Washington S5 - 02
- 14.45 **Role of Connexin Proteins in Cardiac Impulse Propagation**
André G. Kléber, UNIBE S5 - 03
- 15.15 **Connexins and Human Disease**
David P. Kelsell, University of London, UK S5 - 04
- 15.45 **Cx36 Protects Pancreatic b-Cells against Cytotoxic Attacks**
Philippe Klee, UNIGE S5 - 05
- 16.00 **Cx43 and Cx40 Interact to Control Renin-dependent Hypertension**
Jacques-Antoine Haefliger, UNIL S5 - 06

S 6 Molecular Basis of Doping: Scientific and Ethical Aspects C150
ASIRB - Symposium; Chair, Ario Conti, Alpine Institute of
Phytopharmacology, Olivone

- 14.15 **Changes in Doping Through the Last Fifty Years**
Laurent Rivier, Scientific Consulting, Lausanne S6 - 01
- 14.40 **Doping and Anti-Doping in Sport and Life. What progress has been made?**
Martial Saugy, Laboratoire Suisse d'Analyse du Dopage, UNIL S6 - 02
- 15.05 **Determination of Anabolic Steroids in Dietary Supplements by LC/MS/MS**
Simona Martello, Università Cattolica del Sacro Cuore, Roma S6 - 03
- 15.30 **Doping by Somatic Gene Transfer: Are we there yet ?**
Sandro Rusconi, UNIFR S6 - 04
- 15.55 **An Analysis of Current Anti-Doping Strategies from a Public Health Perspective**
Bengt Kayser, UNIGE S6 - 05

Friday 24.02.06

14.15 - 16.15 Parallel symposia ctd

S 7	Cancer : Research for Prevention SSO-SGO -Symposium Chair, Gabriela Baerlocher, UNIBE, and Caroline Maake, UNIZH	A250
14.15	Tissue Microarrays: Applications in Clinical Cancer Research Peter Schraml, UNIZH	S7 - 01
14.45	Genes Mediating Breast Cancer Metastasis Andy Minn, University of Chicago and University of IL	S7 - 02
15.15	Prevention of Hereditary Cancer Hansjakob Müller, UNIBAS	S7 - 03
15.45	Tumor-Suppressor Function of the Transcription Factor ESE-3 in prostate cancer Romina Cangemi, IOSI, Bellinzona P	P1 - 26
16.00	SM4 Sulfatide, a Ligand for P-Selectin Mediated Metastasis Josep Garcia, UNIZH	P1 - 35
S 8	Endocytosis and Ubiquitylation PHA -Symposium; Chair, Olivier Staub, UNIL	IV - V
14.15	Regulation of Cell Signaling by Ubiquitylation Ivan Dikic, Goethe University, Frankfurt am Main	S8 - 01
14.45	Anthrax Toxin: the Opportunistic Use of Sophisticated Cellular Devices Gisou van der Goot, UNIGE	S8 - 02
15.15	Ubiquitylation of Voltage-Gated Sodium Channels Hugues Abriel, UNIL	S8 - 03
15.45	In Vivo Aldosterone-Induced Ubiquitin Specific Protease P Identified by Gene Screen Regulates ENaC by Deubiquitylation – From Microarray Gene Scan to Function P. Fakitsas, UNIZH	P2 – 24