

Program Overview

Wednesday February 6, 2008

08:00-09:30	REGISTRATION (<i>Building SG</i>)
	Coffee-Tea will be provided
9:30-10:20	OPENING PLENARY SESSION (<i>Building SG - Room SG 1</i>)
	WELCOME by D. Trono (EPFL-CH), Chair USGEB-2008 H.-U. Simon (Univ. of Bern-CH), USGEB President <u>KEYNOTE SPEAKER (1):</u> Evolution Of Cooperation In Ant And Robot Societies. L. Keller (UNIL- CH)
10:30-11:00	Coffee & Tea (<i>Building CO - on the three floors</i>)
11:00-13:00	CONCURRENT SYMPOSIA (4) (<i>Building CO</i>)
	<u>SYMPOSIUM 1: ZMG - Genes And Development</u> (<i>Room CO 1</i>) <u>SYMPOSIUM 2: PHA - Small Molecules-Signaling Pathways: Cell Programming And Therapeutic Interventions</u> (<i>Room CO 3</i>) <u>SYMPOSIUM 3: STSBC - Stem Cells: From Bench To Bedside</u> (<i>Room CO 011</i>) <u>SYMPOSIUM 4: Climbing To New Perspectives For Biomedical Research With Bio-Imaging</u> (<i>Room CO 2</i>)
13:00-15:00	LUNCH WITH POSTERS SESSION (<i>Building CO - on the three floors</i>)
15:00-16:15	PLENARY SESSION (<i>Room CO 1</i>)
	<u>KEYNOTE SPEAKERS (2):</u> Designing Biological Systems. P. Silver (Harvard Medical School-USA) Robustness And Scaling In Developmental Patterning. N. Barkai (Weizmann Institute-Israel)
16:30-18:30	CONCURRENT SYMPOSIA (3) (<i>Building CO</i>)
	<u>SYMPOSIUM 5: PHY - Cardiac Tissue Engineering</u> (<i>Room CO 2</i>) <u>SYMPOSIUM 6: Engineering Meets Biology: Analysis And Design From The Molecule Up</u> (<i>Room CO 1</i>) <u>SYMPOSIUM 7: ssAHE - Contribution Of New Technologies To Combine Structural And Functional Analysis In Cellular Imaging</u> (<i>Room CO 3</i>)
18:30-21:00	COCKTAIL DINNER (<i>Building CO</i>)
	All Participants Are Invited To attend The Cocktail Dinner - (<i>Building CO - on the three floors</i>)

Thursday February 7, 2008

09:00-10:15	PLENARY SESSION (<i>Room CO 1</i>)
	<p><u>KEYNOTE SPEAKERS (2):</u></p> <p>Studying Biomechanics to Gain Insight Into Sensory Perception. M. Hartmann (Northwestern University-USA)</p> <p>Lymphatic Biology And Interstitial Flow: Roles In Cancer Metastasis And Immunity. M. Swartz (EPFL-CH)</p>
10:30-11:00	Coffee & Tea (<i>Building CO - on the three floors</i>)
11:00-13:00	CONCURRENT SYMPOSIA (3)
	<p><u>SYMPOSIUM 8: SSO: Imaging Cancer For Better Therapy</u> (<i>Room CO 2</i>)</p> <p><u>SYMPOSIUM 9: SGV: Revision Of The Animal Protection Ordinance : What Are The Consequences For Research And Animal House Management?</u> (<i>Room CO 3</i>)</p> <p><u>SYMPOSIUM 10: BIO: Structure And Function Of Cellular Nanomachines</u> (<i>Room CO 1</i>)</p>
13:00-15:00	LUNCH WITH POSTERS SESSION AND EXHIBITION VIEWING (<i>Building CO - on the three floors</i>)
15:00-16:15	PLENARY SESSION (<i>Room CO 1</i>)
	<p><u>KEYNOTE SPEAKERS (2):</u></p> <p>Quantify What Cannot Be Measured: Small Molecule Fluxes Through Metabolic Networks. U. Sauer (ETHZ-CH)</p> <p>Biology As Reverse Engineering: A Few Examples S. Leibler (The Rockefeller University-USA)</p>
16:20-17:15	PLENARY SESSION (<i>Room CO 1</i>)
	<p>AWARDS:</p> <p>The 2008 Friedrich Miescher Award. Chair: D. Burger (Univ. of Geneva-CH)</p> <p>Presentation of the Poster Awards (ssAHE, BIO, "Engineering meets Biology...", "...Bio-Imaging", PHA, PHY, SSO, ZMG)</p>
	END OF MEETING

ssAHE	Swiss Society for Anatomy, Histology and Embryology
BIO	Swiss Society for Biochemistry
PHA	Swiss Society for Pharmacology and Toxicology
PHY	Swiss Physiological Society
SGV	Swiss Laboratory Animal Science Association
SSO-SGO	Swiss Society for Oncology
STSBC	Società Ticinese della Scienze Biomediche e Chimiche
ZMG	Swiss Society for Cell Biology, Molecular Biology and Genetics

Plenary Lectures

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Symposia Overview

Wednesday February 6, 2008	
11:00-13:00	CONCURRENT SYMPOSIA (4) (Building CO)
	<p><u>SYMPOSIUM 1:</u> ZMG - Genes And Development (<i>Room CO 1</i>)</p> <p><u>SYMPOSIUM 2:</u> PHA - Small Molecules-Signaling Pathways: Cell Programming And Therapeutic Interventions (<i>Room CO 3</i>)</p> <p><u>SYMPOSIUM 3:</u> STSBC - Stem Cells: From Bench To Bedside (<i>Room CO 011</i>)</p> <p><u>SYMPOSIUM 4:</u> Climbing To New Perspectives For Biomedical Research With Bio-Imaging (<i>Room CO 2</i>)</p>
16:30-18:30	CONCURRENT SYMPOSIA (3) (Building CO)
	<p><u>SYMPOSIUM 5:</u> PHY - Cardiac Tissue Engineering (<i>Room CO 2</i>)</p> <p><u>SYMPOSIUM 6:</u> Engineering Meets Biology: Analysis And Design From The Molecule Up (<i>Room CO 1</i>)</p> <p><u>SYMPOSIUM 7:</u> ssAHE - Contribution Of New Technologies To Combine Structural And Functional Analysis In Cellular Imaging (<i>Room CO 3</i>)</p>

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	<p><u>SYMPOSIUM 8:</u> SSO: Imaging Cancer For Better Therapy (<i>Room CO 2</i>)</p> <p><u>SYMPOSIUM 9:</u> SGV: Revision Of The Animal Protection Ordinance : What Are The Consequences For Research And Animal House Management? (<i>Room CO 3</i>)</p> <p><u>SYMPOSIUM 10:</u> BIO: Structure And Function Of Cellular Nanomachines (<i>Room CO 1</i>)</p>

ssAHE	Swiss Society for Anatomy, Histology and Embryology
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Symposia Detailed Program

Wednesday February 6, 2008 (Building C0)	
11:00-13:00	<p><u>SYMPOSIUM 1: ZMG : Genes And Development</u> (Room CO 1)</p> <p>Chairs: F. Karch (Univ. of Geneva-CH) & P. Linder (Univ. of Geneva-CH)</p> <p>Heterotrimeric G Proteins And Dynein Promote Spindle Positioning In C. Elegans. M. Gotta (Univ. of Geneva-CH)</p> <p>Flies With Heart Diseases. R. Bodmer (Burnham Inst. for Medical Research, La Jolla-USA).</p> <p>Breaking Down The Signature Common To Hundreds Of Drosophila Insulators Identifies Nucleosome-Associated Cis-Regulatory Elements Controlling The Cell-cycle. O. Cuvier (Institut de Génétique humaine, Montpellier, FR).</p> <p>Species Selectivity Of Mixed Lineage Leukemia/Trithorax And HCF Proteolytic Maturation Pathways. F. Capotosti (UNIL-CH)</p> <p>Germ Plasm Localization in the Zebrafish Oocyte. R. Dosch (Univ. Of Geneva)</p> <p>Differential Display of DNA-Binding Proteins Reveals Heat Shock Factor 1 as a Circadian Transcription Factor. H. Reinke (Univ. Of Geneva-CH)</p>
	<p><u>SYMPOSIUM 2: PHA: Small Molecules-Signaling Pathways: Cell Programming And Therapeutic Interventions</u> (Room CO 3)</p> <p>Chair: L. Scappozza (Univ. of Geneva-CH)</p> <p>Screening For Small Molecules To Guide Neural Differentiation Of Embryonic Stem Cells. K.-H. Krause (University of Geneva-CH)</p> <p>Proteomics-Based Strategies In Drug Discovery. G. Drewes (Discovery Technologies Cellzome AG Heidelberg-DE)</p> <p>Dietary Phytoestrogens Activate AMPactivated Protein Kinase With Improvement in Lipid And Glucose Metabolism. C. R. Cederroth (Univ. Of Geneva-CH)</p> <p>Myofibroblasts And The Mechanics Of Tissue Repair: Facing The Enemy And Making It Companion. B. Hinz (EPFL-CH)</p> <p>Novel, Highly Potent, Fully Recombinant Chemokine Analogues: Promising Candidate Medicines For HIV Prevention. O. Hartley (Univ. Of Geneva-CH)</p>
	<p><u>SYMPOSIUM 3: STSBC: Stem Cells: From Bench To Bedside</u> (Room CO 011)</p> <p>Chairs: M. Manz (IRB, Bellinzona-CH) & G. Martinetti (ICM, Bellinzona-CH)</p> <p>If I Can Stop One Heart From Breaking. S. Bardelli (Harvard Univ.-USA)</p> <p>Clinical Application Of Bone Marrow-Derived Stem Cells In Acute Myocardial Infarction. Gmp Cell Processing In The Swiss-Ami Clinical Trial. G. Astori (Cell Therapy Unit, Cardiocentro Ticino-CH)</p> <p>Adipose Tissue As Source Of Stem Cells For Regenerative Medecine. The Differentiation Potential Of Adipocyte-Derived Adult Mesenchymal Stem Cells. V. Albertini (Swiss Stem Cells Bank, Cardiocentro Ticino-CH)</p> <p>In Silico Target Discovery In Neural Stem Cell Differentiation. Y. Westermaier (Univ. Of Geneva-CH)</p> <p>Exploring Stem Cell Engraftment. N. Grasset (EPFL-CH)</p> <p>A Novel Culture Device Expands Mesenchymal Stem Cell Cultures By Preserving The Proliferative Naïve Stem Cell Phenotype. H. Majd (EPFL-CH)</p>

Wednesday February 6, 2008 (Building C0)	
	SYMPOSIUM 4: Climbing To New Perspectives For Biomedical Research With Bio-Imaging (Room CO 2)
	<p>Chair: R. Gruetter (UNIL/EPFL/UNIGE-CH)</p> <p>Optical Projection Tomography. U. Ahlgren (Umea Univ.-SE)</p> <p>Optical Coherence Tomography. T. Lasser (EPFL-CH)</p> <p>Integrated Sensors For Implantable Imaging And Therapy. E. Charbon (EPFL-CH)</p> <p>Brain Connectivity Analysis By Diffusion MRI. J.-P. Thiran (EPFL-CH)</p> <p>MRI Detection And Imaging Of Hyperpolarized 6-Lithium In The Rat Brain In Vivo. R. van Heeswijk (EPFL-CH)</p> <p>In Vivo 1H NMR Measurement Of Glycine In Human Brain at 7 Tesla. G. Gambarota (EPFL-CH)</p> <p>MRI/MRS Of Ischemic Evolution In Mouse Brain at 14.1 T H. Lei (EPFL-CH)</p>
16:30-18:30	SYMPOSIUM 5: PHY: Cardiac Tissue Engineering (Room CO 2)
	<p>Chairs: A. G. Kleber (Univ. of Bern-CH) & E. Niggli (Univ. of Bern-CH)</p> <p>Cell Engineering For The Analysis Of Electrical Propagation And Intercellular Communication A. G. Kléber (Univ. Bern-CH)</p> <p>Engineered Boundary Conditions Direct Cardiac Myogenesis And Contractility. A. W. Feinberg (Harvard Univ.-USA)</p> <p>Engineering A Cardiac Pacemaker M. R. Rosen (Columbia Univ.-USA)</p>
	SYMPOSIUM 6: Engineering Meets Biology: Analysis & Design From The Molecule Up (Room CO 1)
	<p>Chair: J. Hubbell (EPFL-CH)</p> <p>Engineering The Stem Cell Niche. P. Zandstra (Univ. of Toronto-CA)</p> <p>Reverse Engineering Of Metazoan Gene Regulatory Networks. B. Deplancke (EPFL-CH)</p> <p>Molecular Modeling Of Bacterial Sensing Machines. M. dal Peraro (EPFL-CH)</p> <p>Surface Engineered Materials To Control Fate Decisions Of Hematopoetic Progenitors In Vitro. C. Werner (Max Bergmann Center of Biomaterials Dresden-DE)</p> <p>Large-Scale Precision Measurements Of Biological Network Components. S. Maerkl (EPFL-CH)</p> <p>Designed Ankyrin Repeat Proteins As A Novel Tool For Targeting Eukaryotic Protein Kinases. L. Kummer (Univ. of Zuerich-CH)</p> <p>Spatial Mapping Of The Neurite And Soma Proteomes Reveals A Functional Cdc42/Rac Regulatory Network. O. Pertz (Univ. of Basel-CH)</p>

Wednesday February 6, 2008 (Building C0)

SYMPOSIUM 7: ssAHE: Contribution Of New Technologies To Combine Structural And Functional Analysis In Cellular Imaging (*Room CO 3*)

Chairs : J.-P. Hornung & J. Dubochet (Univ. of Lausanne-CH)

Wave-Front Engineering Microscopy To Reproduce Complex Mechanical Or Chemical Environments Of Living Cells. V. Emiliani (Univ. Paris Descartes-FR)

CEMOVIS: Will The Swiss Product Become A World Winner? J. Dubochet (UNIL-CH)

Revealing The Nano-Mechanical Properties Of Biological Samples By Atomic Force Microscopy. S. Kasas (EPFL-UNIL-CH)

A New Protein Tag For Multi-Protein Labeling In Living Cells. A. Gautier (EPFL-CH)

Towards Probing Protein Interactions In Living Yeast With Fluorescence Cross-Correlation Spectroscopy (FCCS) S. Trautmann (ETHZ-CH)

Thursday February 7, 2008 (Building C0)

11:00-13:00

SYMPOSIUM 8: SSO: Imaging Cancer For Better Therapy (Room CO 2)

Chairs: H. Walt (University Hospital Zurich-CH) & **C. Ruegg** (UNIL-CH)

Assessing Molecular Properties Of Tumors Using Multimodal Imaging Techniques. M. Rudin (Zurich-CH)

Hypericin: Nature's Recipe For Imaging Cancer. P. de Witte (Leuven-BE)

Hybrid PET-CT in Oncology. O. Ratib (Geneva-CH)

Virtual Reality Simulation Of Uterine Pathologies For Surgical Training. M. Bajka (Zurich-CH)

Protein-Binding-Microarrays In Cancer Diagnosis. T. Egenger-Kuhn (UNIL-CH)

Efficient Targeting Of Melanoma With Dual PI3K/mTOR Inhibitors. R. Marone (Univ. Of Basel-CH)

SYMPOSIUM 9: SGV: Revision Of The Animal Protection Ordinance : What Are The Consequences For Research And Animal House Management? (Room CO 3)

Chairs : M. Gyger (EPFL-CH) & **B. M. Riederer** (Univ. of Lausanne-CH):

Revision Of The Animal Protection Ordinance, What Are The Main Changes? M. Lehmann (FVO, Bern-CH)

The Point Of View Of Academic Institutions, With Particular Emphasis On GM Animal Breeding. K. Buerki (LTK, Zurich-CH)

Animal Experimentation Request Procedure Goes Digital: E-Animal Experimentation. M. Lehmann (FVO, Bern-CH)

Responsibility Aspects Related to the Animal Experiment -Discussed With A Focus On Specific Criminal Law Issues Within The Animal Protection Law. M. Tinner (CH)

SYMPOSIUM 10: BIO: Structure And Function Of Cellular Nanomachines (Room CO 1)

Chair : M. Grütter (Biochemisches Institut, Zurich-CH)

Springs, tethers and switchblades: mechanistic insights into the functioning of large macromolecular assemblies involved in protein and fatty acid synthesis. N. Ban (ETH Zurich-CH)

Integrated Structural Biology Of Gene Transcription. P. Cramer (Univ. of Munich, DE)

Backbone Trace Of GroEL From Single Particle CryoEM. W. Chiu (Baylor College of Medicine, Houston-USA)

The Nucleoporin Nup153 And Its Implication In Selective Gating By The Nuclear Pore Complex. B. Fahrenkrog (Biozentrum Univ. of Basel-CH)