



ZIHP *News*

Zurich Center for Integrative Human Physiology

9-2013 • September 2013

As broad as integrative human physiology goes: The topics at the 9th ZIHP Symposium

Magdalena Seebauer

How to keep the glucose level constant according to the metabolic needs of the organism? A hot topic, in particular early in the morning, as reflected by a considerable audience at the opening lecture of the 9th ZIHP Symposium. Prof. Bernard Thorens from the Center for Integrative Genomics of the University of Lausanne and longstanding member of the ZIHP Scientific Advisory Board explained how insulin producing cells of the pancreas are orchestrated by the coordinated function of liver, muscles, adipose tissue and brain.

From glucose level and muscle fatigue ...
Still in a balanced energy state, the audience was in a perfect shape for the talk of Prof. Håkan Westerblad from the Karolinska Institut in Stockholm who spoke on the cellular mechanisms in muscles experiencing fatigue. The big picture he drew was sound and credible, not only because he himself is a top marathon runner.

This year keynote lecturers were proposed by a committee of imMed PhD students. Our top speakers very much appreciated being contacted by our young researchers. Having



the speakers at the symposium for the whole day was a great pleasure and enabled them to get in touch with various researchers of the ZIHP.

Another innovation, the video spot presentation within the poster exhibition area at the foyer, had to be cancelled due to lack of contributions. The idea was to give authors of posters the opportunity to highlight their contributions in a short video spot. Maybe the ZIHP was ahead of its time in this matter ... Nevertheless, an [→ attractive example](#) made by Divya Ail from the Lab for Retinal Cell Biology can be downloaded from the ZIHP website.

... to aggression and vascular biology
Mollified by the delicious lunch buffet, the participants were ready for the next topic: Aggression. Prof. Carmen Sandi from the Laboratory of Behavioral Genetics at the EPFL Lausanne reported on the impact and mechanisms in which stress and personality affect brain function and behavior. Her special focus is on aggression and social hierarchies.

Last but not least, the interested audience listened to the extensive overview of Prof. Asrar B. Malik from the Center for Lung and Vascular Biology, University of Illinois, Chicago on the signaling events which regu-

late the permeability of endothelial cells which form the inner layer of the vasculature.

Presentations and posters of high standard

Short oral presentations of high scientific and didactic standard were given by young researchers, many of them students of the imMed PhD Program. They spanned a broad spectrum from A - adipose tissue-liver crosstalk to Z - zebrafish pronephros. The prize for the best presentation was awarded to Federica Storti for her contribution on the modula-

tion of oxygen-regulated erythropoietin expression. Congratulations!

To decide on the best four poster contributions the poster jury – consisting of eight junior researchers – had a challenging job in studying and discussing more than 80 posters. Congratulations to Tanja Güntert, Tito Borner, Sarah S. Gabriel and Marianne Spalinger who won the poster prizes!

At the end of this long day, Marianna Di Chiara, imMed PhD student from the Institute of Anatomy, had the

floor for the closing remarks. She commented her «take home messages» on the topics and lectures of this intensive day of integrative human physiology research from a very personal point of view. Hoping to see you again next year at the 10th anniversary edition of the ZIHP symposium on August 29, 2014!

→ [Photo album of the 9th ZIHP Symposium](#)

→ [For even more photos, click here!](#)

Events

Autumn term 2013

→ [Seminar Series Integrative Human Physiology](#)

September 17, 2013

→ [Renal angiomyolipoma: using mouse genetic engineering to solve the mystery of the cellular origin of an enigmatic tumour](#)

Dr. Ana Filipa Gonçalves, Institute of Physiology, UZH

September 18, 2013 - PhD Thesis Defense

→ [Role of mimivirus collagen in rheumatoid arthritis](#)

Nikunj Shah, Institute of Physiology, UZH

Sep. 19, 2013 - ZIHP Special Seminar

→ [The role of the HIF oxygen-sensing pathway in metabolic rewiring and disease](#)
Prof. Julián Aragonés, Immunology Department, Hospital Universitario de la Princesa, Madrid, Spain

Sep. 19, 2013 - ZIHP Special Seminar

→ [Cerebral erythropoietin regulates the neural respiratory control system during the postnatal development](#)

Prof. Jorge Soliz, Pediatrics, Faculté de Médecine, Université Laval, Québec, CA

September 23, 2013 - PhD Thesis Defense

→ [Functional implications of the regulation of PASKIN mRNA](#)

Sascha S. Egger, Inst. of Physiology, UZH

Sep. 24, 2013 - ZIHP Lunch Seminar

→ [Fishing for compliments: Studying vision and its disorders in zebrafish](#)

Prof. Dr. Stephan Neuhauss, Institute of Molecular Life Sciences, UZH

25. September 2013

→ [Hämatologie: Klärung der Ursache eines nicht messbaren Serum-Ferritin](#)

Dr. Jeroen S. Goede, Klinik für Hämatologie, USZ

26. September 2013

→ [Abschiedssymposium für Prof. Dr. Thomas Fehr](#)

26. September 2013

→ [Gastro-chirurgisches Kolloquium: Neuroendokrine Tumoren: gar nicht so selten!](#)

September 30, 2013

→ [NF-kappaB in the Ying and Yang of the cellular response to heavy ion exposure](#)

PD Dr. Christine Hellweg, Radiation Biology, Institute of Aerospace Medicine, German Aerospace Center (DLR) Cologne

September 30, 2013 - Antrittsvorlesung

→ [Understanding depression and its treatment: a biologist's viewpoint](#)

PD Dr. Christopher Pryce, Department of Psychiatry, Psychotherapy, and Psychosomatics, UZH

October 1, 2013

→ [Regulation of phosphate homeostasis, old and new players](#)

Prof. Dr. Carsten Wagner, Institute of Physiology, UZH

2. Oktober 2013

→ [Mentalstatus bei internistischen Patienten](#)

PD Dr. Urs Schwarz, Prof. Dr. Peter Brugger, Klinik für Neurologie, USZ

3. Oktober 2013

→ [5. Zürcher Symposium für Sportkardiologie](#)

October 7, 2013

→ [p66Shc gene-related metabolic signals regulate brain plasticity and health](#)

Dr. Francesca Cirulli, Department of Cell Biology and Neuroscience, Section Behavioural Neuroscience, National Institute of Health, Rome, Italy

October 8, 2013 - ZIHP Lunch Seminar

→ [Understanding clear cell renal cell carcinoma through mouse genetic engineering](#)

Prof. Dr. Ian Frew, Inst. of Physiology, UZH

October 14, 2013 - ZIHP Special Seminar

→ [O₂ sensing: causes and consequences](#)

Prof. Nanduri R. Prabhakar, Institute for Integrative Physiology & Center for Systems Biology of O₂ Sensing, University of Chicago, Illinois, USA

October 14, 2013

→ [Smart and fast: Physiological functions of protein kinase D in brain and skeletal muscle](#)

Dr. Angelika Hausser, Institute of Cell Biology and Immunology, University of Stuttgart, Germany

Recent publications

Bhattacharya I, Dräger K, Albert V, Con-
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Zimmerli L, Humar R, Hall MN, Battagay
EJ, Haas E: → **Rictor in perivascular adi-
pose tissue controls vascular function by
regulating inflammatory molecule ex-
pression**. *Arterioscler Thromb Vasc Biol*
33(9): 2105-11, 2013

Eichenberger PA, Diener SN, Kofmehl R,
Spengler CM: → **Effects of Exercise Train-
ing on Airway Hyperreactivity in
Asthma: A Systematic Review and Meta-
Analysis**. *Sports Med* [Epub ahead of
print], 2013

Fiechter M, Ghadri JR, Jaguszewski M,
Siddique A, Vogt S, Haller RB, Halioua R,
Handzic A, Kaufmann PA, Corti R, Lüscher
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on adverse cardiovascular events in pati-
ents with acute coronary syndromes**. *J*
Cardiovasc Med (Hagerstown) [Epub
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Furtwängler T, Chan SC, Bahrenberg G,
Richards PJ, Gantenbein-Ritter B: → **As-
sessment of the Matrix Degenerative Ef-
fects of MMP-3, ADAMTS-4 and HTRA1
injected into a bovine Intervertebral Disc
Organ Culture Model**. *Spine (Phila Pa*
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Gerber PA, Gouni-Berthold I, Berneis K:
→ **Omega-3 Fatty Acids: Role in Metabo-
lism and Cardiovascular Disease**. *Curr*
Pharm Des 19(17): 3074-93, 2013

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Spring S, Amann-Vesti B, Spinaz GA,
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ness and Insulin Resistance in Men with
Type2 Diabetes and Prediabetes – A Pros-
pective Cohort Study**. *PLoS One* 8(8):
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Hadad N, Burgazliev O, Elgazar-Carmon
V, Solomonov Y, Wueest S, Item F, Konrad
D, Rudich A, Levy R: → **Induction of cyto-
solic phospholipase a2a is required for
adipose neutrophil infiltration and hepa-
tic insulin resistance early in the course
of high-fat feeding**. *Diabetes* 62(9):
3053-63, 2013

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Herrmann IK, Castellon M, Schwartz DE,
Hasler M, Urner M, Hu G, Minshall RD,
Beck-Schimmer B: → **Intravenous appli-
cation of a primary sevoflurane metabo-
lite improves outcome in murine septic
peritonitis: first results**. *PLoS One* 8(8):
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Jacobs RA, Meinild AK, Nordsborg NB,
Lundby C: → **Lactate oxidation in human
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siol Endocrinol Metab* 304(7): E686-94,
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plete blood mixing**. *Eur J Appl Physiol*
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dence for gene association with depres-
sion into mouse models of depression-
relevant behaviour: Current limitations
and future potential**. *Neurosci Biobehav*
Rev 37(8): 1380-1402, 2013

imMed PhD Program graduate course

The imMed PhD Program and the
LSZGS jointly offer the following two
day block course:

November 29 and December 6, 2013
→ **Applying statistical methods in
biosciences**
Register now on the → [LSZGS website](#).

Congratulations!

ZIHP-Mitglied Prof. Dr. Thierry Hen-
net wurde zum → **ordentlichen Pro-
fessor für Humanbiologie** an der
Universität Zürich ernannt bzw. be-
fördert.

Rasmussen P, Siebenmann C, Díaz V,
Lundby C: → **Red Cell Volume Expansion
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Vogel J: → **Decreased stability of erythro-
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