

**Registration for
Workshop GeneSEES 2015, 07 Sep 2015**

A Day Ticket for 60th Annual Conference of GMDS, 06-09 Sep 2015, Krefeld, is purchasable at the Conference Desk (Bldg J)

245.00 EUR for non-members of GMDS

170.00 EUR for members of GMDS etc

Special After-Workshop Social Dinner to be held from 19:00 to 21:30, Park-Hotel Krefelder Hof, Uerdinger Str. 245, 47800 Krefeld (this is not part of 60th Annual Conference of GMDS)

45.00 EUR

including a choice of 3-course dinner, tax and free parking on the hotel's car park - but not including beverages and other special orders.

Payment is to be made prior to the Dinner on site, to Park-Hotel Krefelder Hof.

Yes, I wish to take part and I do register

for the Workshop

for the After-Workshop Dinner

Name _____

Institution _____

Phone / Fax _____

E-Mail _____

Stamp / Signature:

Fax to: 02151-5129676 or

E-Mail: biokyb@t-online.de

Biokybernetik Workshop GeneSEES2015

Biokybernetik (engl. bio-automation) combines bio-systems modeling, molecular bio-data methodologies and clinical characterizations for a holistic understanding of human body's functional and a person's operational management and control systems from an engineering perspective.

Concept **GeneSEES** integrates individual health and disease modifying or modulating factors in genetics, physiology, environmental and socio-economic surroundings for study of impact from a person's "world outside" on human body system and person's behavior. It thus lays the ground in the sciences it engages for empirical studies of health, disease and impact of medical interventions in young, adult and aged, men and women, and in the three health sectors of prevention, clinical medicine and long-term nursing, in spatially varying human populations with genetic admixing.

Workshop **GeneSEES 2015 "Loss of Control as a Slow Health Hazard"** specifically sheds light on uncertainties to be encountered in the study of regulation (feed-back control) and control in functional human body system and influence of volitive steering capabilities with ten overview talks by renowned experts and two special-topics talks by young talent.

Venue

Hochschule Niederrhein, Reinarzstr. 49, 47805 Krefeld, Building H (Health / Gesundheitswesen), 3rd Floor (2. Stock), Room H209

Organizers

Johannes W Dietrich (endocrinologist, Bochum),
Dirk M Hermann (neurologist, Essen),
Jochen Mau (mathematician, Düsseldorf/Krefeld),
Günther Palm (neuroinformatician, Ulm),
Zhi-Ying Wu (neurologist, Hangzhou)

60th Annual Conference of GMDS

06-09 Sep 2015, Krefeld

Conference President: Prof. Dr. B. Breil
Hochschule Niederrhein Campus Krefeld
Fachbereich Gesundheitswesen

Biokybernetik Workshop

**Mit 6 Punkten (Kat. B) für Ihre
ärztliche Fort- u. Weiterbildung**

**GeneSEES¹ – Genetics, Systems
Medicine, Environmental Exposures,
Economic & Social Settings – 2015**

**“Loss of Control as a
Slow Health Hazard”**

07 September 2015

08:30 – 18:00

Hochschule Niederrhein, Krefeld



**Chairman: Prof. Dr. J. Mau
Düsseldorf**

¹**Design:** Prof. Dr. J. Mau, Buschstr. 9, 47800 Krefeld,
© 2015, Institut für Quantitative Methodik - Privates
Akademisches Beratungsbüro für Forschung und Entwicklung



Key Notes

Genetics

Zhi-Ying **Wu**, MD&PhD, Professor and Director, Research Center of Neurology, 2nd Affiliated Hospital of Zhejiang University, Hangzhou, Zhejiang Province, China.

Systems Medicine

Dr-Ing Rolf **Findeisen**, Professor and Chair of Systems Theory and Automatic Control, Otto-von-Guericke-Universität, Magdeburg, Germany.

Dr-Ing Dr med Steffen **Leonhardt**, Professor, and Philips Chair for Medical Information Technology, RWTH Aachen, Aachen, Germany.

Dr phil Dr rer pol Dr med Felix **Tretter**, Professor, 2nd Chairman, Bayerische Akademie für Suchtfragen in Forschung und Praxis BAS e.V., Munich, Germany.

Theoretical and Applied Neurosciences

Dr J Leo **van Hemmen**, Professor and Chair of Theoretical Biophysics, Technical University Munich; Editor in Chief, Springer Journal “Biological Cybernetics”; Munich, Germany.

Dr Günther **Palm**, Professor and Chair of Neural Information Processing, Universität Ulm; Ulm, Germany.

Dr med Bernd **Weber**, Heisenberg Professor at the Center for Economics and Neuroscience of Rheinische Friedrich-Wilhelms-Universität; Bonn, Germany.

Dr Florentin **Wörgötter**, Professor and Chair of Computational Neurosciences, Georg-August-Universität; Göttingen, Germany.

Invited Topics

Environmental Impact

Dr med Dirk M **Hermann**, Professor and Chair of Vascular Neurology, Dementia and Aging, University Hospital Essen, Universität Duisburg-Essen, Essen, Germany.

Modeling Hormonal Feedback

Dr med Johannes W **Dietrich**, Consultant Endocrinologist, Endocrine Research Laboratory, University Hospital “Bergmannsheil”, Ruhr Universität Bochum, Bochum, Germany.

Young Talent Special Invited Topics

Feed-back in Soil Environment

Dr Nadezda A **Vasilyeva**, Faculty of Computational Mathematics and Cybernetics, Moscow State University Lomonosov, and Dokuchaev Soil Science Institute, Department of Soil Physics and Hydrology, Moscow, Russia.

Cognitive Function Impact on Physiology

Dr Jan **Ehlers**, Department of General Psychology, Ulm University, Ulm, Germany.

Schedule of Talks

08:30 Mau, J. *Introduction*

08:40 Wu, Z-Y. *Genetic Neurology and Clinical Implications*

09:20 Hermann, D M. *Risk factors and Sub-clinical Markers of Atherosclerosis as Predictors of Stroke in the Population-based Heinz Nixdorf Recall-Study* (with J Gronewold, N Lehmann, H Kälsch, A-A Mahabadi, C Weimar, S Moebus, K-H Jöckel, R Erbel)

09:50 Tretter, F. *Systems Approaches in Medicine from a Clinical Perspective*

10:30 Tea Break

11:00 Leonhardt, S. *Systems Approaches in Medicine from an Engineering Perspective*

11:40 Dietrich, J W. *Advanced Methodology and Clinical Application in Hormonal Feed-back*

12:10 Findeisen, R. *Uncertainty and Robustness in Systems Medicine*

12:50 Lunch Break

14:00 Vasilyeva, N A. *Modeling microorganism's growth in multiple feedbacks with soil environment* (with Dmitriy A Silaev)

14:15 Ehlers, J. *Voluntary pupil control: How proximal must control be to be called voluntary?* (with Christoph Strauch and Anke Huckauf)

14:30 Break

14:40 van Hemmen, J L. *Mathematics and Neuroscience*

15:20 Wörgötter, F. *Theoretical Models of Brain Function and Their Use for Behavioral Control*

16:00 Tea Break

16:30 Weber, B. *Neuroeconomics – From Individual Decision Making to Real World Implications*

17:10 Palm, G. *Modeling Neural Systems*

17:50 Audience *Closing Discussion*

18:00 End

19:00 to 21:30 After-Workshop Dinner
“**Social Settings' Impact**”

to interact with Speakers (as available) informally:
Parkhotel Krefelder Hof
Uerdinger Str. 245, 47800 Krefeld

Organizer: Prof. J. Mau

Prior registration required – see overleaf!