

It is my honour and pleasure to announce two
RESEARCH SEMINARS ON THE 18TH OF NOVEMBER 2011
(FRIDAY) at 14:00 University of Pécs
(exact location will be announced at a later date)

funded by the "Manifestation of Novel Social Challenges of the European Union
in the Teaching Material of Medical Biotechnology Master's Programmes
at the University of Pécs and at the University of Debrecen" project

Identification Number: TÁMOP-4.1.2-08/1/A-2009-0011



Terry Gaasterland, Professor, Director of Computational Biology and
Genomics, Scripps Genome Center,
University of California, San Diego

**Seminar title: "Understanding glaucoma (a neurodegenerative
disease) through exome sequencing"**

Professor Gaasterland:

'My computer science research interests center on logic-based methods for answering queries about large bodies of diverse distributed knowledge. I use semantic information, that is, data about the data, to develop alternative, or cooperative, answers to queries. In the years since my Ph.D., I have been exploring problems in computational molecular biology using logic programming techniques in general and cooperative answering strategies in particular. In collaboration with genome sequencing groups in Canada, the U.S., and Europe I have built a system called MAGPIE (Multipurpose Automated Genome Project Investigation Environment) for analyzing DNA sequence data in real-time during and beyond the lifetime of a sequencing project.'



Karl Willert, Professor, Director of Stem Cell Research Facility, Department of
Cellular & Molecular Medicine,
University of California, San Diego

Seminar title: "Exploring the role of WNT signaling in stem cells"

Professor Willert:

'Our lab studies the role of Wnt proteins in the regulation of stem cell behavior. Stem cells have the unique ability to maintain their undifferentiated state and differentiate into cells with specialized functions. Wnt genes, which encode secreted lipid modified growth factors, play a critical role in the regulation of this cell fate choice between self-renewal and differentiation. However, because of the large number of Wnt genes identified to date (19 in mammals) and the variety of Wnt receptors and distinct Wnt signaling pathways, the mechanisms by which Wnts regulate cell fate remains poorly understood. Using human embryonic stem cells (hESCs) as a model system, we are examining how manipulation of the Wnt pathway affects their pluripotency and differentiation. A long-term goal of the lab is to dissect early embryonic signaling pathways, with particular emphasis on Wnt signaling, and thereby develop strategies for the directed differentiation of hESCs into any mature cell type of interest.'

INTERESTED? SEND AN E-MAIL TO SECURE YOUR PLACE AT THE SEMINAR TO:

medbiotech@aok.pte.hu

Dr. Judit Pongrácz
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