Trends in Stem Cell Research

Speakers

Prof. Dr. Barry L. Jacobs, Program in Neuroscience, Princeton University

PD. Dr. Ana Martin-Vilalba, DKFZ, University of Heidelberg

Dr. Anna Marciniak-Czochra, IWR, University of Heidelberg

Abstract

This symposium fosters the current trends in stem cell research, especially on the dynamics of neuronal stem cells, a process called neurogenesis. The discovery that new neurons are continuously produced throughout adulthood (adult neurogenesis) in discrete regions of the brain, notably within the dentate gyrus of the hippocampus and the olfactory bulb, has led to an explosion of studies aimed at elucidating the biological significance of this phenomenon as well as the factors that might impact this process. Neurogenesis is a complex, multi-step process, consisting of neural progenitor cell proliferation, differentiation, migration, neuronal maturation and cell death. Within this symposium, international experts will introduce the general concept of the neurogenesis and discuss neurobiological mechanisms involved in this process from different point of views. The importance of the adult neurogenesis in processes underlying memory and psychiatric diseases (e.g. depression) makes it an appropriate and fascinating subject for mathematical investigations.

Schedule

Thursday October 14, 2010 at **14:00** in **IWR (INF 368) Lecture Room 520**

Organizers

1. Dr. Anna Marciniak-Czochra, Interdisciplinary Center for Scientific Computing, University of Heidelberg, anna.marciniak@iwr.uni-heidelberg.de
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