

**Mathematisch – Naturwissenschaftliche Fakultät**  
der Universität zu Köln  
- Der Dekan -

# **Einladung**

zu der am Freitag, den 28.11.2003, 16.00 Uhr  
im großen Hörsaal der Genetik, Institut für Genetik, Weyertal  
121, 50931 Köln,

stattfindenden öffentlichen

## **Einführungsvorlesung**

zur Erlangung der venia legendi im Fach Genetik

von

**Herrn Dr. Thomas Klein**

über das Thema

# **The biology and plasticity of adult stem cells**

Abstract:

During recent years, stem cells have been isolated from a variety of adult tissues, where no such cells have been thought to exist. These cells have been shown to be required for the normal maintenance of the tissue and also for the replacement of cells after injury.

Furthermore, adult stem cells seem to be able to cross tissue boundaries and contribute to the replacement of cells of other tissues. This fascinating property is called plasticity and led to the proposal of a new theory about the life of adult stem cells.

The lecture will describe the biology of adult stem cells and outline the difference to embryonic stem cells. It will then go on to describe some examples of plasticity of adult stem cells and a new theory of one adult stem cells, arising as a result from these observations.

Furthermore, it will continue to describe one example of how adult stem cells contribute to the regeneration of a tissue of different origin.

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