

# **Perspectives of Neurobiology in Neurosurgery**

## **First Neuroscience Conference**

of the

## **German Academy of Neurosurgery**

**Freiburg im Breisgau, Germany, 20-22 June 2003**

Further information: [www.danc.de](http://www.danc.de)  
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Accomodation: <http://www.dorint-hotel.de/freiburg-am-konzerthaus>

**Trespassing Frontiers**

**Today's research is tomorrow's therapy**

For thousands of years surgical treatment of neurological diseases has been limited to cutting or burning. The scalpel, bipolar coagulation, the LASERs, and certainly also the gamma-knife, are but different aspects of this shortcoming.

There is no doubt that modern anesthesiology, sophisticated computer technology (neuro-navigation, intraoperative imaging), and advances in the field of functional cortical mapping have significantly improved the fate of our patients. However, surgical frontiers are now being trespassed. In recent years, under the influence of technological progress, Basic Neuroscience has been paving a new approach to the understanding and potential treatment of diseases of the central nervous system (CNS). The use of biological and non-biological implants and transplantations into the CNS will be used for the treatment of diseases such as brain tumours, epilepsy, movement disorders, stroke and Alzheimer's disease. Bridging the gap between basic scientists and clinical specialists is an important aspect of our academic responsibilities towards coming generations of neurosurgeons. They may have to exchange, at least in part, the scalpel by other therapeutic weapons. The goal is etiological treatment (the most efficacious of all!) rather than normalizing intracranial pressure/volume relationship alone. This goal is now within reach!

Therefore it is no coincidence that the First Neuroscience Conference of the German Academy for Neurosurgery has the title

**PERSPECTIVES OF NEUROBIOLOGY IN NEUROSURGERY.**

The list of invited speakers is impressive! The discussed topics are of importance for almost every neurological discipline. This will be a highly multidisciplinary meeting.

Registration fee is symbolic thanks to subsidizing by the GANS.

Unfortunately the number of participants has to be limited to 120 (capacity of the lecture hall). This means: register now!

Freiburg is one of the most beautiful cities in Germany and certainly the attractive center of the Black Forest!

It is a great pleasure to welcome you to this unforgettable event!

Prof. M. Brock, MD, PhD  
President of the GANS

Prof. Ch. Ostertag, MD, PhD  
Conference President

## **Proposed Topics/Invited Speakers**

- **Genome research and neurosurgery**
- **Genesis and development of brain neoplasms ( Kleihues? )**
- **Gene expression in gliomas – a new classification?**
- **Molecular genetics, physiology and treatment response of oligodendrogliomas  
( Peter C. Warnke, Liverpool)**
- **Biological treatment of gliomas ( Weller, Tübingen)**
- **Receptor mediated treatment of pituitary tumors (M. Buchfelder, Göttingen)**
- **Apolipoprotein E – Genetics and brain damage**
- **Epilepsy – disease and model to study human brain function ( Christian Elger, Bonn)**
- **Local treatment with immunotoxins**
- **Surgical drug delivery for neurodegenerative diseases**
- **Cell replacement therapies for central nervous system disorders**
- **Functional reconstruction for PD ( Guido Nikkhah, Freiburg)**
- **Intrinsic repair of brain damage**
- **Spinal cord repair**
- **Stimulation/modulation – new indications and concepts ( Alim Benabid, Grenoble)**
- **Epilogue ( Paul Kleihues, Lyon )**