

**Cover**

Neural fibre bundles in the human brain reconstructed from in-vivo diffusion tensor imaging (DTI). These anatomical connections between brain regions may represent the structural framework of functional interactions. For a report on the brain connectivity workshop in Havana, Cuba, see the article by Thomas Koenig, Rolf Kötter, and Pedro Valdes-Sosa on pages 11-15. (By courtesy of Denis Le Bihan, Service Hospitalier Frederic Joliot, Orsay, France)

CONTENTS**B.I.F. INTERNAL**

- 2 Particulars
3 Genug gejamert? Genug geklagt!
77 Events, Imprint

RESEARCH

- 5 Sabine Rosenberger, Sibylle Ermler, Karin M. Greulich-Bode, Petra Boukamp
The role of telomeres and telomerase in cancer and aging. Meeting report of the 3rd European Workshop in Ladenburg, Germany.
Telomerase has become a diagnostic and prognostic marker in cancer, and a promising target for drug development. It has even been suggested that the enzyme can at least partly counteract the effects of aging. The length of the chromosomes, on the other hand, could serve as a tool in the search for new ways of treating cancer.
- 11 Thomas Koenig, Rolf Kötter, Pedro Valdes-Sosa
Networks in the brain. Highlights from the brain connectivity workshop in Havana.
Deciphering the pathways of information flow in the brain is challenging – not least due to the different temporal and spatial resolutions of the methods employed. The aim of the workshop was to discuss how diverse data sets can be correlated or fused.

SCIENCE

- 16 Interview with Christina Berndt
Science in the media. Knowing the rules of the game
Christina Berndt is a science journalist working for the Süddeutsche Zeitung, one of Germany's major daily newspapers. She describes how science becomes news and comments on some of the fundamental misunderstandings between scientists and the media.

PROJECTS

- 19 Electrophysiological characterization of dyskinesia induced by dopamimetic drugs •

Structural insights into the ribosomal elongation cycle • Structural and functional studies at the human nuclear pore complex: the Nup107-160 complex • Genetic and biochemical analysis of Braf functions in melanomagenesis • Biophysical investigations on rhodopsin activation • Role of EGFR signalling during epithelial development and tumour formation • Structural analyses of the human spliceosomal Cdc5/Prp19 complex • Decoding protein structure from infrared spectra • Dynamics and control of replication timing in *Drosophila melanogaster* • Structural characterization of GNBP-GDP-GEF intermediates • Dissection of a complex phenotype: conditional inactivation of the chloride channel CIC-7 • The paradoxically rewarding effect of electric shock •

RESULTS

- 37 Saskia M. Brachmann
In-vivo role of class Ia phosphoinositide 3-kinase regulatory subunit, p85
- 42 Tim Gollisch
How fast is the ear?
- 45 Sylke Hassel
BMP receptor activation, complex formation, and signal transduction
- 50 Christian Hirsch
Cytosolic turnover of glycoproteins
- 54 Katarzyna Kowanetz
Adaptor proteins in the regulation of receptor endocytosis
- 58 Samu Melkko
Encoded self-assembling chemical libraries
- 62 Ulrike Philippar
Srf target genes in apoptosis and muscle differentiation
- 66 Kristin Tessmar
Ancient cell types in modern brains
- 72 Eva Tiecke
A dual role for PKA in Sonic Hedgehog signalling

76 GUIDELINES FOR AUTHORS