



Neuropathology in the 21st Century

International Symposium and 54th Annual Meeting of the
German Society for Neuropathology and Neuroanatomy (DGNN)

Heinrich-Heine-University Düsseldorf
September 16-19, 2009



Venue: Heinrich-Heine-University
Lecture Hall 13B, Building 13.55
Moorenstrasse 5, D-40225 Düsseldorf, Germany

Date: September 16-19, 2009

FINAL PROGRAM

Wednesday, September 16, 2009

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| 14.00-14.15 | Opening of the Meeting |
| | Words of welcome: L. Schmitt , Vice-Rector for Research and Innovation, Heinrich-Heine University J. Windolf , Dean of the Medical Faculty, Heinrich-Heine University G. Reifenberger , Congress President of the 54th DGNN-Meeting |
| 14.15-15.45 | Neurodegenerative diseases (I) Chairs: R. Meyermann (Tübingen), M. Prinz (Freiburg) |
| 14.15-14.45 | P. Nicotera (Bonn) Subcellular programmes for neurodegeneration |
| 14.45-15.15 | M. Jucker (Tübingen) The prion-like aspect of cerebral amyloidosis |
| 15.15-15.30 | A.R. Upadhya , K.-H. Wiederhold, D. Abramowski, E. Capetillo-Zarate, H. Yamaguchi, S. Liebau, M. Staufenbiel, D.R. Thal (Ulm, Basel, New York, Gunma) Different types of neurodegeneration in two mouse models of Alzheimer's disease |
| 15.30-15.45 | S. A. Funke , T. van Groen, I. Kadish, D. Bartnik, O. Brener, L. Nagel-Steger, K. Wiesehan, D. Willbold (Jülich, Birmingham, Düsseldorf) Oral treatment with an A β 42 oligomer modulating D-amino acid peptide improves cognitive behavior of APP/ PS1 double transgenic mice |

15.45-16.15 **Coffee break**

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| 16.15-18.00 | Neurodegenerative diseases (II) Chairs: H. Budka (Vienna), D. R. Thal (Ulm) |
| 16.15-16.45 | F. Tagliavini (Milan) A recessive mutation in the APP gene with dominant-negative effect on amyloidogenesis: a new perspective for AD therapeutics |
| 16.45-17.15 | J. A. Nicoll (Southampton) The clinical and neuropathological consequences of A β immunization for Alzheimer's disease |
| 17.15-17.30 | T. Hortobágyi , C. Vance, B. Rogelj, K. de Vos, C. Troakes, S. Al-Sarraj, C. Shaw (London) Mutations in RNA processing protein <i>FUS</i> result in neurodegeneration with cytoplasmic inclusion and cause familial amyotrophic lateral sclerosis |
| 17.30-17.45 | T. Nachreiner , M. Esser, J. Senderek, A.D. Funke, S. Zierz, M. Deschauer, A.D. Sperfeld, C. Drepper, M. Sendtner, A. Voigt, J.B. Schulz, A. Krüttgen, J. Weis (Aachen, Zurich, Halle/Saale, Ulm, Würzburg) The role of the mutated P56S <i>VAPB</i> protein in the autosomal dominant form of amyotrophic lateral sclerosis (<i>ALS8</i>) |
| 17.45-18.00 | V. Bader , R. Leliveld, P. Hendriks, I. Prikulis, G. Sajnani, J. R. Requena, C. Korth (Düsseldorf, Santiago de Compostela) Misassembly of Disrupted-in-Schizophrenia 1 as a mechanism of sporadic mental disease |

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| 18.15-19.00 | Evening Lecture Chair: G. Reifenberger (Düsseldorf) |
| | A. Aguzzi (Zurich) What's new in prion research? |

19.30 **Welcome Reception at the "Jazzschmiede"**
Himmelgeister Str. 107g, 40225 Düsseldorf

Thursday, September 17, 2009

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| 9.00-10.30 | Neurodegenerative diseases (III) Chairs: S. Weggen (Düsseldorf), M. Neumann (Zurich) |
| 9.00-9.30 | M. Neumann (Zurich) Role of TDP-43 in fronto-temporal dementia |
| 9.30-10.00 | J. L. Eriksen (Jacksonville) Insights about progranulin in inflammation and neurodegeneration |
| 10.00-10.15 | W. Schulz-Schaeffer (Göttingen) Synaptic mechanisms of α -synuclein aggregates in neurodegeneration |

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| 10.15-10.30 | G. G. Kovacs , T. Schauer, M. Lochner, E. Keller, I. Milenkovic, H. Budka (Vienna, Budapest) Immunostaining for striatal dopamine transporter (DAT): message for DAT scan neuroimaging |
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10.30-11.00 **Coffee break**

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| 11.00-12.30 | Stem cells and development Chairs: O. Brüstle (Bonn), F. Heppner (Berlin) |
| 11.00-11.30 | O. Brüstle (Bonn) From pluripotent sources to functional neurons and glia |
| 11.30-11.45 | F. Bicker , I. Nikolic, J. Meister, K.H. Plate, M.H.H. Schmidt (Frankfurt/Main) Epidermal growth factor-like domain 7 (EGFL7) affects adult brain-derived neural stem cells |
| 11.45-12.00 | S. Zoubaa , J. Schlegel, F. Guillemot, W. Wurst, J. Guimera (Munich, Neuherberg, London) GABAergic neurons in the midbrain are specified by the bHLH transcription factors <i>Megane</i> and <i>Mash1</i> |
| 12.00-12.15 | R. Lünsken , T. Glaser, O. Brüstle (Bonn) Generation of a neural stem cell population with strong gliogenic potential |
| 12.15-12.30 | A. Lorenz , R. Smits, R. Fodde, H. A. Kretschmar, U. Schüller (Munich, Rotterdam) Adenomatous polyposis coli gene function is essential for granule neuron precursor proliferation and cerebellar development |

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| 12.30-13.00 | Pediatric neurooncology lecture Chairs: O. Brüstle (Bonn), F. Heppner (Berlin) |
| 12.30-13.00 | S. Pfister (Heidelberg) Molecular markers in pediatric brain tumors |

13.00-14.15 **Lunch**

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| 14.15-15.30 | Poster sessions 1 - 4 Chairs: A. Becker (Bonn), K. Keyvani (Essen), C. Mawrin (Magdeburg), J. Schlegel (Munich) |
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15.30-16.00 **Coffee break**

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| 16.00-18.00 | Neurooncology (I) Chairs: A. von Deimling (Heidelberg), T. Acker (Giessen) |
| 16.00-16.30 | R. McLendon (Durham) Glioma stem cells: Tumor progenitors or perpetuators? |
| 16.30-17.00 | K. Ligon (Boston) Stem/progenitor cell transcription factor insights into CNS cancers |

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| 17.00-17.15 | S. Seidel , B. K. Garvalov, V. Wirta, A. Schänzer, D. Sommerlad, K. Meletis, M. Wolter, L. von Stechow, A.-T. Henze, M. Nistér, G. Reifenberger, J. Lundeberg, J. Frisén, T. Acker (Giessen, Stockholm, Düsseldorf) A hypoxic niche regulates glioma stem cells |
| 17.15-17.30 | K. Halama , A. Jeibmann, H. Witte, M. Becker, S. Mertsch, M. Hasselblatt, C. Klämbt, W. Paulus (Münster) PDGFR signalling in gliomas analyzed using a high-throughput <i>in vivo</i> screen in <i>Drosophila melanogaster</i> |
| 17.30-17.45 | S. Delic , N. Schmidt, N. Lottmann, A. Stefanski, K. Stühler, G. Reifenberger, M.J. Riemenschneider (Düsseldorf, Bochum) <i>In vivo</i> and <i>in vitro</i> selection of infiltrating glioma cells: A comprehensive, multi-dimensional molecular analysis of the invasive phenotype of human glioblastomas |
| 17.45-18.00 | C. Hartmann , A. von Deimling (Heidelberg) <i>IDH1</i> and <i>IDH2</i> mutations in diffusely infiltrating gliomas: distribution, mutation frequencies and clinical consequences |
| 18.00-18.15 | D. Capper , J. Balss, A. Habel, J. Meyer, U. Ackermann, H. Zentgraf, A. von Deimling (Heidelberg) Generation of R132H mutation specific monoclonal <i>IDH1</i> antibody |
| 18.30-20.30 | DGNN Business Meeting (Mitgliederversammlung der DGNN) |

Friday, September 18, 2009

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| 9.00-11.00 | Neurooncology (II) Chairs: G. Reifenberger (Düsseldorf), T. Pietsch (Bonn) |
| 9.00-9.30 | K. Aldape (Houston) Multigene predictors of patient outcome in glioma |
| 9.30-10.00 | R. Stupp (Lausanne) Glioma therapy: beyond standard of care |
| 10.00-10.15 | G. Toedt , S. Barbus, M. Wolter, J. Felsberg, M. Hahn, P. Lichter, G. Reifenberger, B. Radlwimmer (Heidelberg, Düsseldorf) Genome-wide genomic and expression profiling of astrocytic gliomas reveals novel pathomechanisms and molecular signatures associated with tumor entity and <i>IDH1</i> gene mutation status |
| 10.15-10.30 | A. Elias , M. Siegelin, A. Steinmüller, A. von Deimling, U. Lass, B. Korn, W. Mueller (Heidelberg) Epigenetic silencing of Death Receptor 4 mediates TRAIL-resistance in gliomas |
| 10.30-10.45 | C. Mawrin , A. Höfer, E. Kirches (Magdeburg, Jena) Antioxidative defense status and sensitivity to alkylating agents in frataxin-expressing U87 glioma cells |

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| 10.45-11.00 | F. Giangaspero , V. Esposito, G. C. De Gennaro, S. Casciato, M. Antonelli, G. Perilongo, L. Lauriola (Rome, Padua) Aggressive diffuse gliomas simulating angiocentric glioma |
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11.00-11.30 **Coffee break**

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| 11.30-13.00 | Neuroimmunology/Neuroinflammation (I) Chairs: M. Deckert (Cologne), A. Pagenstecher (Marburg) |
| 11.30-12.00 | W. Brück (Göttingen) Remyelination in multiple sclerosis |
| 12.00-12.30 | H. Lassmann (Vienna) Neuromyelitis optica or aquaporin 4 autoimmune encephalomyelitis? |
| 12.30-12.45 | N. Zeller , J. Raasch, G. van Loo, D. Merkler, A. Mildner, D. Ery, K.-P. Knobloch, J.R. Bethea, A. Waisman, M. Knust, D. Del Turco, T. Deller, T. Blank, J. Priller, W. Brück, M. Pasparakis, M. Prinz (Freiburg, Monterotondo, Ghent, Göttingen, Miami, Mainz, Frankfurt/Main, Honolulu, Berlin, Cologne) Brain-specific I κ B kinase 2 is crucial for demyelination of the CNS but dispensable for myelin formation and repair |
| 12.45-13.00 | G.E.M. Althoff , D.P. Wolfer, N. Timmesfeld, B. Kanzler, H. Schrewe, A. Pagenstecher (Marburg, Freiburg, Zurich, Berlin) Long-term, high-dose expression of TIMP1 in the murine CNS confers a physiological phenotype and alleviates the course of EAE in a dose-dependent manner |

13.00-14.15 **Lunch**

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| 14.15-15.30 | Poster sessions 5 - 8 Chairs: M. Bergmann (Bremen), C. Korth (Düsseldorf), K. Kuchelmeister (Bonn), C. Stadelmann-Nessler (Göttingen) |
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15.30-16.00 **Coffee break**

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| 16.00 -18.00 | Neuroimmunology/Neuroinflammation (II) & Miscellaneous topics (I) Chairs: I. Blümcke (Erlangen), C. Sommer (Mainz) |
| 16.00-16.15 | C. Wegner , C. Stadelmann, W. Brück (Göttingen) Therapeutic treatment with Laquinimod reduces inflammation, demyelination and axonal damage in experimental autoimmune encephalomyelitis |
| 16.15-16.30 | T. Dallenga , A. Bittner, W. Jäger, P. Vollmar, W.H. Oertel, N. Sommer, J.C. Möller, B. Hemmer, C. Stadelmann, S. Nessler (Göttingen, Marburg, Munich) Increased axonal damage in p75 ^{NTR} -knockout mice after induction of experimental autoimmune encephalomyelitis by adoptive transfer |

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| 16.30-16.45 | M.J. Hofer , W. Li, I. L. Campbell (Sydney, Marburg) The type I interferon (IFN)- α mediates a more severe neurological disease in the absence of the canonical signaling molecule interferon regulatory factor (IRF) 9 |
| 16.45-17.00 | M. Sanchez-Ruiz , L. Wilden, W. Müller, W. Stenzel, A. Brunn, H. Miletic, D. Schlüter, M. Deckert (Cologne, Braunschweig, Manchester, Magdeburg) Molecular mimicry between neurons and an intracerebral pathogen induces a CD8 T cell-mediated autoimmune disease |
| 17.00-17.15 | M. Montesinos-Rongen , H. Schwindt, I. Vater, M. Kreuz, A. Brunn, J. Richter, S. Gesk, O. Ammerpohl, M. Maarouf, D. Hasenclever, R. Siebert, M. Deckert (Cologne, Kiel, Leipzig) Chromosomal imbalances and partial uniparental disomies in primary central nervous system lymphoma |
| 17.15-17.30 | K. Kobow , I. Fritzsche, M. Njunting, J. Hauke, E. Hahnen, I. Blümcke (Erlangen, Cologne) Promoter methylation and sustained down-regulation of the metabotropic glutamate receptor mGluR2 in an experimental model of temporal lobe epilepsy |
| 17.30-17.45 | K. Frauenknecht , P. Bargiotas, H. Bauer, P. von Landenberg, M. Schwaninger, C. Sommer (Mainz, Heidelberg) Paradoxical neuroprotective effect of a pathogenic human monoclonal antiphospholipid antibody after experimental stroke in Fn14 receptor knockout mice |
| 17.45-18.00 | F. Lauda , K. Jellinger, J. Attems (Vienna, Newcastle upon Tyne) Different neprilysin expression in vessels of occipital and frontal lobes. |

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| 18.15-18.45 | Presentation of the Kurt Jellinger Award 2009 Chair: W. Paulus (Münster) |
| 18.15-18.45 | N. L. Lehman (Detroit) The ubiquitin proteasome system in neuropathology |

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| 18.45-19.00 | Announcement of the Poster Awards |
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| 20.00 | Conference Dinner (Gesellschaftsabend) Traditional Home Brewery "Zum Schlüssel" – Düsseldorf-Altstadt |
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Saturday, September 19, 2009

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| 9.00-10.30 | Miscellaneous topics (II) Chairs: V. Hans (Bielefeld), R. Schober (Leipzig) |
| 9.00-9.15 | R. Höftberger , M. Kunze, T. Voigtländer, U. Unterberger, G. Regelsberger, J. Bauer, F. Aboul-Enein, F. Garzuly, S. Forss-Petter, H. Bernheimer, J. Berger, H. Budka (Vienna, Szombathely) Peroxisomal localization of beta-lipotropin and beta-endorphin in ALDP positive cells |

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| 9.15-9.30 | A. Ronchi , R. Salaroli, V. Marchese, E. Della Bella, C. Ceccarelli, E. Barbieri, F. Giangaspero, G. Cenacchi (Bologna, Rome) The Wnt/beta-catenin pathway in radio-response of medulloblastoma cell lines |
| 9.30-9.45 | R. Schober , H. Holland, P. Ahnert, M. Livrea, K.-T. Hoffmann, W. Krupp (Leipzig) Intracranial hemangiopericytoma studied by GTG-banding, M-FISH and SNP-A: Further evidence for a distinct brain tumor entity |
| 9.45-10.00 | F. Henke , O. Bannach, D. Riesner, E. Birkmann (Jülich, Düsseldorf) Molecular diagnostics of Creutzfeldt-Jakob disease by single particle counting |
| 10.00-10.15 | A. Müller-Schiffmann , M. Michel, J. Muyrers, B. Petsch, L. Stitz, C. Korth (Düsseldorf, Tübingen) A PrP ^{Sc} -specific peptide for prion diagnostics and therapy |
| 10.15-10.30 | J. Bremer , F. Baumann, C. Tiberi, P. Schwarz, C. Wessig, A.D. Steele, K.V. Toyka, K.-A. Nave, J. Weis, A. Aguzzi (Zurich, Würzburg, Pasadena, Göttingen, Aachen) Axonal prion protein is required for peripheral myelin maintenance |

10.30-11.00 **Coffee break**

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| 11.00-13.00 | Meeting of the DGNN Reference Center for Neuromuscular Diseases (I) Chairs: E. Neuen-Jacob (Düsseldorf), J. Weis (Aachen) |
| 11.00-11.30 | J. Weis , M. Krieger, M. Elbracht, V. Guergueltcheva, I. Tournev, A. Urtizbera, S.M. Garvey, H. Feit, J.S. Beckmann, M.A. Hauser, C.E. Jackson, S. Ziertz, M. Deschauer, J. Senderek (Aachen, Sofia, Hendaye, Charlottesville, Detroit, Lausanne, Durham, Temple, Halle/Saale, Zurich) Muscle biopsy findings in a new hereditary distal vacuolar myopathy associated with mutation of the nuclear matrix protein, matrin 3 |
| 11.30-11.45 | K. W. Nolte , K. Elsner, U. Lieser, N. Merkel, R. Finke, M. Kornhuber, S. Nikolin, D. Wand, R. Haase, J. Weis (Aachen, Halle/Saale) Nerve biopsy findings in PCWH – the severe phenotype of Shah-Waardenburg syndrome due to SOX10 mutation |
| 11.45-12.00 | W. Stenzel , S. Prokop, H.-H. Goebel, F.L. Heppner (Berlin, Mainz) Alternative activation of macrophages in neuromuscular sarcoidosis |
| 12.00-12.15 | A. Bornemann , H. Wiethölter (Tübingen, Stuttgart) Autosomal-dominant neurogenic atrophy |
| 12.15-12.30 | J. Reimann (Bonn) Necrotizing myopathy with acute respiratory insufficiency |
| 12.30-13.00 | Presentation of neuromuscular case reports |

13.00-14.00 **Lunch**

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| 14.00-15.30 | Meeting of the DGNN Reference Center for Neuromuscular Diseases (II) Chairs: A. Bornemann (Tübingen), M. Bergmann (Bremen) |
| 14.00-15.30 | Presentation of neuromuscular case reports |

15.30 **End of the Meeting**

Poster Sessions 1-4: Thursday, September 17, 2009, 14.15-15.30

| Poster session 1 | Neurodegeneration (I) Chair: K. Keyvani (Essen) |
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| P1-1 | O. Brener , L. Nagel-Steger, D. Willbold (Düsseldorf, Jülich) Characterization of the interaction of the Alzheimer's disease associated amyloid beta peptide with a phage-display selected D-peptide by density gradient centrifugation |
| P1-2 | S. Hahn , T. Brüning, J. Ness, E. Czirr, B. Bulic, C. U. Pietrzik, S. Weggen (Düsseldorf, Dortmund, Mainz) The potency of g-secretase inhibitors and modulators is diminished by presenilin-1 (<i>PS1</i>) and amyloid precursor protein (<i>APP</i>) mutations expressed in mouse models of Alzheimer's disease |
| P1-3 | A. Halle , V. Hornung, G. Petzold, B. Monks, E. Latz, D. Golenbock, F.L. Heppner (Berlin, Worcester, Cambridge) Amyloid-beta mediates NALP3 inflammasome activation via phagolysosomal damage |
| P1-4 | A. Herring , L. Lewejohann, A. Donath, N. Sachser, W. Paulus, K. Keyvani (Essen, Münster) Preventive and therapeutic environmental enrichment counteract Abeta pathology by different molecular mechanisms |
| P1-5 | J. Hofrichter , A. Volz, K. Kraft, J. Pahnke (Rostock) Herbal extracts reduce amyloid load by either reducing lower or higher MW Abeta aggregates |
| P1-6 | G. Jedlitschky , L.C. Walker, M. Peters, A. Brenn, H.E. Meyer zu Schwabedissen, H.K. Kroemer, R.W. Warzok, S. Vogelgesang (Greifswald, Atlanta) Breast cancer resistance protein (ABCG2) acts as an active transport protein for amyloid- β peptides – identification of a new pathogenic target of Alzheimer's disease |
| P1-7 | C. Lange , M. Krohn, J. Hofrichter, J. Pahnke (Rostock) Changes of Abeta levels in double knockout mice of Neprilysin and ABC-transporters lead to specific behavioral alterations |
| P1-8 | C. Lange-Asschenfeldt , M. Siebler, S.A. Funke, D. Willbold, P. Götz (Düsseldorf, Essen, Jülich) Effect of sublethal amyloid β (1-42) peptide concentrations on spontaneous neuronal network activity <i>in vitro</i> |
| P1-9 | A. Mildner , B. Schlevogt, K. Kierdorf, C. Böttcher, M. Kummer, O. Wirths, M. Henneka, J. Priller, M. Prinz (Freiburg, Göttingen, Berlin, Bonn) Alzheimer's Disease pathology is not sufficient for CCR2 ⁺ bone marrow engraftment in the CNS |
| P1-10 | A. Müller-Schiffmann , H. Sticht, I. Prikulis, C. Korth (Düsseldorf, Erlangen) Affinity maturation of a single-chain antibody fragment (scFv) against Abeta by rational engineering |

| Poster session 2 | Neurooncology (I) Chair: C. Mawrin (Magdeburg) |
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| P2-1 | T. Beez , V. Börger, M. Rapp, R.V. Sorg, M.C. Sabel (Düsseldorf) Immunological markers of anti-glioma immune response generated in vivo by dendritic cell immunotherapy |
| P2-2 | C. Berthold , D. Hinkerohe, A. Haghikia, A. Schöbel, E. Zülw, H. Dambach, U. Schlegel, P.M. Faustmann (Bochum) Antagonism of TGF-beta1 enhances gap junctional coupling in glioma cells <i>in vitro</i> |
| P2-3 | H. Dambach , D. Hinkerohe, A. Haghikia, C. Berthold, E. Zülw, A. Schöbel, U. Schlegel, Pedro M. Faustmann (Bochum) Dexamethasone reduces functional intercellular coupling in F98, C6 and U87 glioma cell-lines and increases tgf-beta1 production |
| P2-4 | A. Dreier , A. Krüttgen, J. Weis (Aachen) Influence of Cetuximab on the activation, signalling, and endocytosis of EGFR and its tumour-specific splice variant EGFRvIII |
| P2-5 | A. Ernst , B. Campos, F. Liesenberg, M. Wolter, G. Reifenberger, P. Lichter, C. Herold-Mende, B. Radlwimmer (Heidelberg, Düsseldorf) The miR-17-92 cluster in retinoic acid-treated human glioma spheroid cultures |
| P2-6 | K. Geiger , K. Conseur, J. Felsberg, G. Reifenberger, T. Pietsch, C. Hagel, G. Schackert, A. Temme (Dresden, Düsseldorf, Bonn, Hamburg) Aurora B correlates with malignancy in gliomas but is associated with p53 overexpression in giant cell glioblastoma |
| P2-7 | P. Harter , J. Gerstein, C. Rödel, KH. Plate, F. Rödel, M. Mittelbronn (Frankfurt/Main) Nuclear shifting and expression of survivin is positively associated with the grade of malignancy and negatively with patient survival in human astrocytomas |
| P2-8 | F. Liesenberg , M. Wolter, M. Zapatka, B.Brors, G. Reifenberger (Düsseldorf, Heidelberg) Expression profiling of microRNAs in astrocytic and oligodendroglial gliomas using TaqMan Low Density Arrays |
| P2-9 | J. Meyer , S. Pusch, J. Balss, D. Capper, W. Müller, A. Christians, C. Hartmann, A. von Deimling (Heidelberg) PCR and restriction endonuclease-based detection of <i>IDH1</i> mutations |
| P2-10 | J. Ness , M.J. Riemenschneider, S. Baches, S. Barbus, M. Hahn, P. Lichter, J.L. Eriksen, C.U. Pietrzik, G. Reifenberger, S. Weggen (Düsseldorf, Heidelberg, Houston, Mainz) Human gliomas display elevated expression of progranulin (GRN), a protein mutated in frontotemporal dementia with ubiquitin-positive inclusions (FTLD-U) |
| P2-11 | A. Waha , J. Felsberg, W. Hartmann, A. von dem Knesebeck, T. Mikeska, Stefan Joos, M. Wolter, A. Koch, P. S. Yan, E. Endl, O. D. Wiestler, G. Reifenberger, T. Pietsch, A. Waha (Bonn, Düsseldorf, Heidelberg, Columbus) <i>DUSP4</i> is epigenetically regulated and acts as a growth suppressor in gliomas |
| P2-12 | M. Reis , C.J. Czupalla, S. Thom, K. H. Plate, S. Liebner (Frankfurt/Main) Wnt signaling modulates vascularization and vessel permeability in gliomas |

| Poster session 3 | Neurooncology (II) Chair: J. Schlegel (Munich) |
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| P3-1 | D. Barski , M. Wolter, G. Reifenberger, M.J. Riemenschneider (Düsseldorf) Promoter methylation and transcriptional downregulation of the <i>TIMP3</i> gene is associated with allelic loss on 22q12.3 and malignancy in meningiomas |
| P3-2 | Y.-J. Kim , M. Klotz, A. Tholey, W. Henn, K.-H. Schäfer, W. Feiden (Homburg, Zweibrücken, Kiel) Comparative proteome analyses of meningiomas of different grades in the identification of progression associated proteins |
| P3-3 | C. Bernreuther , N. Wiesnagrotzki, M. Glatzel, C. Hagel (Hamburg) Co-localization of GFAP and cytokeratin in pituitary adenoma |
| P3-4 | A. Hölsken , M. Buchfelder, R. Fahlbusch, I. Blümcke, R. Buslei (Erlangen, Hannover) Experimental modulation of the canonical Wnt-signalling pathway in primary cell cultures of craniopharyngiomas |
| P3-5 | S. Purucker , A. Hölsken, M. Buchfelder, R. Fahlbusch, V. Hans, F. Oppel, I. Blümcke, R. Buslei (Erlangen, Hannover, Bielefeld) A tumor-specific cellular environment at the brain invasion border of craniopharyngiomas |
| P3-6 | R. Beschorner , T. Psaras, R. Meyermann, J. Bremer, M. Mittelbronn, J. Schittenhelm (Tübingen, Zurich, Frankfurt/Main) EpoR expression in choroid plexus tumors |
| P3-7 | Ö. Bolat , P. Zipper, M. Wolter, B. Korn, G. Reifenberger (Düsseldorf, Heidelberg) Characterization of differential microRNA expression in medulloblastoma |
| P3-8 | W. Hartmann , J. Kuchler, A. Waha, A. Koch, E. Endl, P. Wurst, T. Mikeska, A. Waha, C. G. Goodyer, R. Büttner, K. Schilling, T. Pietsch (Bonn, Montreal) p75 ^{NTR} induces apoptosis in medulloblastoma cells |
| P3-9 | K. Kuteykin-Teplyakov , J. Pöschl, J. Herms, H. A. Kretzschmar, U. Schüller (Munich) KOX 15 controls proliferation of medulloblastoma cells and predicts patients' survival |
| P3-10 | T. Pietsch , D. Denkhaus, F. Berthold, S. Rutkowski (Bonn, Cologne, Hamburg) Logistics of the German pediatric brain tumor repository and its role in future therapeutic stratification of pediatric brain tumor patients according to their biological risk profile |
| P3-11 | B. Koos , A. Jeibmann, S. Mertsch, H. Lünenbürger, N. Nupponen, I. Leuschner, C. Vokuhl, M. Frühwald, W. Paulus, M. Hasselblatt (Münster, Helsinki, Kiel) Expression and functional role of tyrosine kinase receptors in atypical teratoid/rhabdoid tumors and extracranial malignant rhabdoid tumors |
| P3-12 | P. Zipper , D. Haag, J. Reifenberger, D. Karra, V. Schmiemann, M. Hahn, P. Lichter, G. Reifenberger (Düsseldorf, Heidelberg) Molecular and functional studies on the development of basal cell carcinoma and medulloblastoma in patched haploinsufficient (<i>Ptch1</i> ^{+/-}) mice |

| Poster session 4 | Stem cells & Miscellaneous topics Chairs: A. Becker (Bonn) |
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| P4-1 | J. Gerardo-Nava , G. Cocks, J. Price, T. Grehl, J. Weis, H.W.M Steinbusch, G.A. Brook (Aachen, London, Bochum, Maastricht) Generation of highly enriched populations of immature astrocytes from human foetal neural progenitors |
| P4-2 | A. Kraft , J. Macas, R. Glass, M. Synowitz, K. Plate, S Momma (Frankfurt/Main, Berlin) Interaction of adult human neural stem or progenitor cells and glioblastoma <i>in vitro</i> |
| P4-3 | K. Oesterwind , C. Nern, I. Wolff, J. Macas, J. von Randow, C. Scharenberg, D. Del Turco, T. Deller, K. Plate, J. Priller, S. Momma (Frankfurt/Main, Stockholm, Berlin) Fusion of hematopoietic cells with Purkinje neurons does not lead to stable heterokaryon formation under noninvasive conditions |
| P4-4 | M. Peitz , M. Brandt, J. Jungverdorben, S. Chichon, O. Brüstle (Bonn) SNP analysis of human iPS cells |
| P4-5 | T. Schumacher , J. Pahnke (Rostock) Transient ABC transporter expression during neurogenesis – Cause or effect of stem cell differentiation? |
| P4-6 | J.A. Steinbeck , J. Ladewig, P. Koch, O. Brüstle (Bonn) Migration and axonal integration of grafted human ES cell-derived neurons |
| P4-7 | G.D.Eom , I. Papageorgiou, R.E. Kälin, S. Prokop, O.Kann, F.L.Heppner (Berlin) Functional characterization of neuronal electrophysiological properties upon <i>in vivo</i> microglial ablation |
| P4-8 | E. Zülw , D. Hinkerohe, N. Prochnow, A. Schöbel, C. Berthold, H. Dambach, A. Haghikia, U. Schlegel, P.M. Faustmann (Bochum) Effects of activated microglia on neurons and astrocytes – analyses on a triple-coculture-model |
| P4-9 | S. Theis , K. Frauenknecht, H. Bauer, A. Katzav, P. von Landenberg, C. Sommer (Mainz, Tel Hashomer) Effects of glutamate and a pathogenic human monoclonal antiphospholipid antibody on cultured primary murine microglia |
| P4-10 | M. Krohn , T. Schöppe, A. Schmidt, B. Pützer, J. Pahnke (Rostock) Pseudotyped adenoviruses mediate gene transfer for specific intracerebral and intramuscular exon-skipping constructs |

Poster Sessions 5-8: Friday, September 18, 2009, 14.15-15.30

| Poster session 5 | Neurodegeneration (II) Chair: C. Korth (Düsseldorf) |
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| P5-1 | S. Prokop , R. Kälin, S. Grathwohl, M. Jucker, F.L. Heppner (Berlin, Tübingen) Lessons from ablating microglia: Alzheimer's disease |
| P5-2 | K. Scheffler , A. Schade, J. Pahnke (Rostock) Alterations in mitochondrial DNA are sufficient to influence Abeta levels - A study in new AD mouse models |
| P5-3 | J. Stenzel , K. Scheffler, J. Pahnke (Rostock) Analysis of microglia in the vicinity of amyloid plaques reveals the formation of two distinct plaque populations |
| P5-4 | P. Zißmann , S.A. Funke, S. Grabowski, L. Wang, E. Birkmann, C. Seidel, D. Willbold (Düsseldorf, Jülich) Analyzing A β aggregates with high resolution microscopy |
| P5-5 | M. Baier , C. Riemer, R. Schliebs (Berlin, Leipzig) Prion infection of mice transgenic for human APP |
| P5-6 | L. Lüers , G. Panza, D. Riesner, E. Birkmann (Düsseldorf, Jülich) Misfolding and fibrillisation of the human prion protein |
| P5-7 | M. Michel , S.R. Leliveld, P. Hendriks, G. Sajjani, V. Bader, S. Trossbach, I. Prikulis, J.R. Requena, C. Korth (Düsseldorf, Santiago de Compostela) Disease-associated polymorphism S/C704 influence oligomerization of C-terminal Disrupted-in-schizophrenia-1 (DISC1) |
| P5-8 | M. Minnerop , J.C. Schöne-Bake, S. Röske, U. Wüllner, M. Abele, K. Amunts, M. Tittgemeyer, B. Weber, T. Klockgether (Jülich, Bonn, Aachen, Cologne) In vivo detection of neuropathological differences between multiple system atrophy (MSA) and sporadic adult onset ataxias of unknown aetiology (SAOA) using MR-morphometry |
| P5-9 | A.-M. Florea , P. Zipper, J. Reifenberger, G. Reifenberger (Düsseldorf) A study of aging-associated gene expression changes in the murine brain |
| P5-10 | A. Pluskota , M. Chen A. von Mikecz (Düsseldorf) Nanoparticles induce age-related neuronal phenotypes in cell culture and <i>Caenorhabditis elegans</i> |

| Poster session 6 | Neurooncology (III) Chair: K. Kuchelmeister (Bonn) |
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| P6-1 | D. Schiffer , V. Caldera, M. Mellai, L. Annovazzi (Turin) On the identification in vivo of cell stemness in gliomas |
| P6-2 | J. Schittenhelm , K. Trautmann, G. Tabatabai, C. Hermann, R. Meyermann, R. Beschoner (Tübingen, Zurich) Annexin-1 expression in gliomas is altered with grade of malignancy but shows no association with survival |
| P6-3 | N. Schmidt , G. Reifenberger, M.J. Riemenschneider (Düsseldorf) Promoter hypermethylation contributes to the frequent transcriptional downregulation of the tumor suppressor candidate gene <i>RRP22</i> on 22q12.2 in human gliomas. |

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| P6-4 | V. Vladimirova , T. Mikeska, A.Waha, N. Soerensen, J. Xu, C.P. Reynolds, T. Pietsch (Bonn, Würzburg, Los Angeles, Melbourne) The novel homeobox gene <i>LHX9</i> is frequently methylated in malignant gliomas of childhood and modulates the migratory potential of glioma cells |
| P6-5 | K. Weber , L. Rütger, C. Collet, W. Paulus, V. Senner (Münster) SOX2 promotes proliferation and inhibits migration in U373MG glioma cells |
| P6-6 | M. Wolter , F. Liesenberg, G. Reifenberger (Düsseldorf) Molecular and functional characterization of the microRNA hsa-miR-330 in human gliomas |
| P6-7 | J. Zietsch , N. Ziegenhagen, V.-F. Mautner, F. Heppner, A. von Deimling, N. Holtkamp (Berlin, Hamburg, Heidelberg) Genetic alterations and expression of receptor tyrosine kinases in malignant peripheral nerve sheath tumors and implications for targeted therapy |
| P6-8 | A.C. Stan , C. Mallig, C. Puff, R. Ulrich (Bielefeld, Hannover) A desmoplastic ganglioglioma of the spinal cord in an European hedgehog (<i>Erinaceus europaeus</i>) |
| P6-9 | G. Pantazis , A. Melms, T. Psaras, K. Kroppe, F. Fend, T. Bock, J. Schittenhelm, R. Meyermann, A. Bornemann (Tübingen) Cerebral lymphoma with light chain deposition disease (LCDD) with exceedingly high IgG levels in the cerebrospinal fluid |
| P6-10 | M.A. Kamp , P. Grosser, J. Felsberg, P. Slotty, W. Stummer, G. Reifenberger, H.-J. Steiger HJ, M. C. Sabel (Düsseldorf) Fluorescence-guided resection of cerebral metastasis: Surgical and histopathological results |
| P6-11 | A.-M. Florea , D. Günes, D. Büsselberg (Essen, Düsseldorf, El Paso) Combinations of anticancer drugs arsenic trioxide and cisplatin on human SY-5Y neuroblastoma cells showed enhanced effects on calcium signalling and cytotoxicity. |

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| Poster session 7 | Neuroimmunology/Neuroinflammation Chairs: C. Stadelmann-Nessler (Göttingen) |
| P7-1 | L. Bernhardt , G. Stoltenburg-Didinger (Münster, Berlin) Neuronal loss in spinal multiple sclerosis |
| P7-2 | F. Hansmann , R. Ulrich, V. Herder, W. Baumgärtner (Hannover) In vivo demonstration of matrix metalloproteinase-3, -9 and -12 mediated demyelination |
| P7-3 | V. Herder , F. Hansmann, M. Stangel, W. Baumgärtner, A. Beineke (Hannover) Cuprizone ameliorates spinal cord inflammation in a viral model of multiple sclerosis |
| P7-4 | F. B. König , A. Löscher, I. Metz, S. Müller, C. F. Lucchinetti, W. Brück (Göttingen, Berlin, Rochester) Astroglia pathology in early multiple sclerosis |
| P7-5 | A. Lürbke , A. R. Hesse, G. Salinas-Riester, T. Kuhlmann (Münster, Göttingen) The functional role of Puma and Noxa in oligodendroglial cell death |
| P7-6 | H. Poeck , A. Dann, U. Kalinke, G. Hartmann, M. Prinz (Bonn, Freiburg, Munich, Langen) Engagement of RIG-I and MDA-5 ameliorates autoimmune inflammation by IFN-I-mediated suppression of the Th17 immune response |

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| P7-7 | A. Schöbel , D. Hinkerohe, A. Haghikia, C. Berthold, E. Zülow, H. Dambach, U. Schlegel, P.M. Faustmann (Bochum) Influence of dexamethasone on LPS induced inflammation in rat glial cocultures <i>in vitro</i> |
| P7-8 | M. Stettner , T. Dehmel, A. Köhne, B.C. Kieseier (Düsseldorf) The effect of valproic acid on myelination |
| P7-9 | R. Ulrich , A. Kalkuhl, U. Deschl, W. Baumgärtner (Hannover, Biberach) Reverse engineering of microarray data predicts a role for STAT-6 signaling in the pathogenesis of demyelination in Theiler's murine encephalomyelitis |
| P7-10 | C. Wrzos , J. Bennett, W. Brück, S. Nessler, C. Stadelmann (Göttingen) Selective astrocyte depletion in the mouse brain |
| P7-11 | G. Meyer zu Hörste , H. El-Haddad, A.K. Mausberg, H.-P. Hartung, S. Martin B.C. Kieseier (Düsseldorf) Spontaneous demyelinating autoimmune neuropathy in ICAM-1 deficient NOD mice |

| Poster session 8 | Miscellaneous topics Chair: M. Bergmann (Bremen) |
|-------------------------|---|
| P8-1 | H. Dörr , K. Diederich, W.-R. Schäbitz, C. Sommer (Mainz, Münster) G-CSF deficiency in mice induces modifications of the subunit composition of hippocampal glutamate receptors |
| P8-2 | C. Kehl , A. E. Rduch, C.R. Rose, W. K. Kafitz (Düsseldorf) Differential response of astroglia to mechanically and ATP-induced injury of the mouse hippocampal CA1 region |
| P8-3 | H. D. Müller , A. Thomé, H. Weiler, H. Bauer, C. Sommer (Mainz) Reduction of GABA _A receptor associated protein (GABARAP) expression precedes delayed neuronal death of hippocampal CA1 neurons after global cerebral ischemia in the gerbil brain |
| P8-4 | J. Pitsch , K. van Loo, T. Opitz, M. Staniek, K. P. Campbell, S. Schoch, Y. Yaari, H. Beck, A. J. Becker (Bonn, Iowa, Jerusalem) Functional consequences of transcriptional upregulation of Cav3.2 in epileptogenesis |
| P8-5 | A.-M. Florea , D. Büsselberg (Essen, Düsseldorf, El Paso) Low concentrations of arsenic trioxide trigger calcium signalling "in vitro" |
| P8-6 | R. Klein , F. Götz, D. Günther (Hannover) Fatal rupture of the vertebral artery during balloon angioplasty for cerebral vasospasm |
| P8-7 | H.H. Goebel , M. Jaynes, L. Gutmann, S. Schochet, D.E. Sleat, K.B. Sims (Mainz, Morgantown, Piscataway, Boston) Adult neuronal ceroid-lipofuscinosis – the genetic spectrum is enlarging |
| P8-8 | K. W. Nolte , M. Kronenbuerger, J. M. Burgunder, V. Coenen, J. K. Krauss, J. Weis (Aachen, Bern, Bonn, Hannover) Brain tissue changes following deep brain stimulation |
| P8-9 | S. Flohr , G. R. Fink, P. H. Weiss-Blankenhorn, J. Weis, A. Krüttgen (Aachen, Cologne, Jülich) Analysis of the functional consequences of the TrkA R780P mutation causing the hereditary polyneuropathy HSAN IV/CIPA |
| P8-10 | K. Müller , U. Drott, K.H. Plate, M. Mittelbronn (Frankfurt/Main) Myofibrillar alterations in non-myofibrillar myopathies |