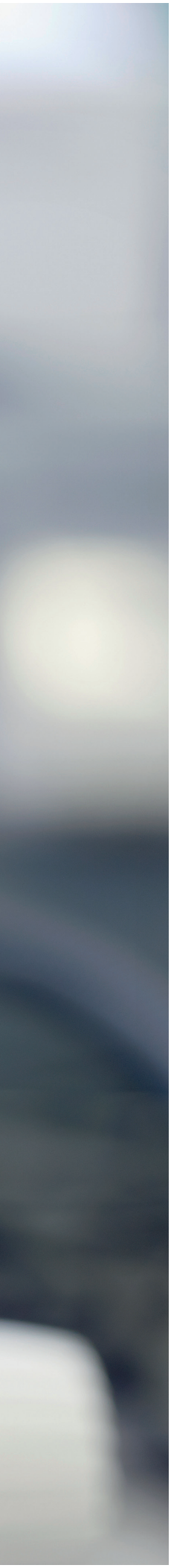
CENTER OF NEUROLOGY
TÜBINGEN

Annual Report 2019

APPENDIX

Content



Appendix

University Hospital of Neurology

Clinical Staff

HEAD OF NURSING SERVICES

Dr. Renate D. Fuhr
(Head of Nursing Services)

Susanne Fallscheer
(Deputy Head of Nursing Services)

Marc-Sebastian Haug
(Deputy Ward Manager, Ward 44)

Adriana Hurcikova
(Division Manager, Ward 42/43/45)

Olga Krämer
(Deputy Division Manager,
Ward 42/43/45)

Annette Silber
(Deputy Ward Manager, Ward 44)

Gerda Weise
(Ward Manager, 44)

WARD 42/43

Paul Alacron
Diana Arko
Luther Basa
Meike Besser
Önder Bilen
Irene Brady
Mark Canoy
Friedhelm Chmell
Olga Degraf
Michelle Dupke
Annette Eisele
Rebecca Fais
Maria Flohr
Karl Andrew Gallar
Joann Gallo
Alice Hoffmann
Corinna Kalmbach-Ftits
Petra Kaschowitz
Eva Kern
Gabriele Kern-Braun
Franziska Lehmann
Renate Maier-Korneck
Mary Catherine Odon
Dorothe Pacholleck
Selina Palamatcu
Birgit Peter
Iris Sadowski
Sarah Schneider
Ulrike Schweizer
Gudrun Siegl
Nicole Steiner
Birgit Weimar
Sina Westbomke
Emma Witte
Stephanie Zanfardino
Shpend Zymeri

WARD 44 INTENSIVE CARE/ STROKE UNIT

Jerome Blancia
Karin Brunner
Jane Buo
Ana-Maria Cheregi
Adriana Digirolamo
Ebrar Döger
Daniel Fuente Friend
Laura Gabriele
Eowyn Galvez
Susanne Grumann
Mustafa Hadzic
Frank Hauber
Kathrin Haug
Marc-Sebastian Haug
Lea Heinzelmann
Sigrid Herter
Elli Hofmann
Yvonne Horz-Weger
Regina Johner
Victor Kadlec
Sandra Kästner
Navdeep Kaur
Lothar Kunz
Christine Löffler

Giusi Marchese
Christine Moosmann
Birgit Moryson
Petra Nipprasch
Simone Ochieng
Gloria Peth
Paul Pollehne
Christine Reuter
Jane Reutter
Claudia Romeikat
Thomas Rottmann
Sibel Sari
Mirjam Schafer
Cora Scheffold
Simon Schippmann
Christine Schmidt
Johann Schmuck
Lena Seelmann
Brigitte Steinau
Tanja Striebich
Armin Teubert
Angelika Weber
Gerda Weise
Bettina Weisser
Eva Wener-Buck
Dieter Zeller
Ulrike Zimmermann

WARD 45

Isaac Emwinghare
Karola Froehlich
Werner Hansen
Michael Heymann
Sevbenur Ibrahimova
Beate Kloster
Jessica Kurz
Andrea Langmann
Kevin Lux
Alisa Mansour-Tokovic
Banu Sahin
Juliana Salten
Katrin Siedle (née Schindl)
Anja Siegle
Nadine Wolter

NURSING ASSISTANTS

Emad Abu Rinneh
Abdulaziz Alofesh
Gesa Binzenbach
Nadja Dendur
Daniel Ganter
Larissa Grillmayr
Christian Hunger
Emese Jordan
Bassem Kiswani
Steffen Klett
Gabriele Layla
Katrin Letzgus
Mohammadhasan Mahmodi
Susanne Oberländer
Carolin Schmitt
Frida Schubert
Jonas Schug
Merlin Stuber-Roselle
Rebekka Weitz

WARD ASSISTANTS

Jana Otterbach
Ann-Kathrin Schumacher
Kübra Soysal

CASE/OCCUPANCY MANAGEMENT

Silvia Clement
Simone Dettinger
Christine Rebenschütz
Michael Schütz-Böger
Isabel Utsch-Selinow

TECHNICIANS

Sandra Berger (EMG)
Fridos Bouraima (EEG)
Ingrid Braun
(Neurocardiac Diagnostics)
Margarete Dengler (Nurse)
Anke Deutsch (EP)
Evelyn Dubois (CFS Chemistry)
Maximilian Früchel
(Neurosonography)
Irina Köhnlein (Nurse)
Renate Mahle
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Veronika Serwotka
(Nerve conduction)
Elke Stransky (CSF Chemistry)
Kathrin Vohrer (EEG, EP)
Julia Wittlinger
(Neurosonography, EP)
Barbara Wörner (EEG)

SECRETARIES

Ina Baumeister
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Dagmar Heller-Schmerold
Sabrina Kreiser
Isolde Marterer
Christine Riegraf
Susanne Stimmler
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Martina Pabst
Christina Tröger

Department of Neurology with Neurovascular Medicine and Neuro-Oncology

Clinical and Scientific Staff

HEAD OF THE DEPARTMENT

Prof. Dr. Ulf Ziemann

GROUP LEADERS/ATTENDING PHYSICIANS

Prof. Dr. Hermann Ackermann
Dr. Rainer Greulich (Cardiologist)
PD Dr. Markus Kowarik
PD Dr. Markus Krumbholz
Prof. Dr. Arthur Melms (5%)
Dr. Annerose Mengel
Prof. Dr. Ulrike Naumann
PD Dr. Sven Poli, MSc
PD Dr. Mirjam Renovanz
PD Dr. Johannes Rieger (5%)
Prof. Dr. Dr. Ghazaleh Tabatabai
(Interdisciplinary Division of Neuro-Oncology)

SCIENTISTS/RESIDENTS

Dr. Ahmed Abdelhak
Dr. Yang Bai (since 10/2019)
Dr. David Baur
Dr. Paolo Belardinelli
Dr. Til Ole Bergmann (5%)
Dr. Corinna Blum
Paula Bombach
Elisabeth Braun (neé Rexer) (until 04/2019)
Jutta Dünschede
Dr. Mohamed Yasser Elnaggar
Dr. Irina Gepfner-Tuma (until 10/2019)
Dr. Pedro Caldana Gordon
Dr. Parameswari Govindarajan (until 06/2019)
Florian Härtig
Prof. Dr. Ingo Hertrich
Dr. Sophie Hirsch
Dr. Marilin Koch
Valentin Kusch (since 02/2019)
Anne Lieb (since 07/2019)
Dr. Daniel Merk
Dr. Johanna Metsomaa (since 08/2019)
Dr. Elisa Pichler
Dr. Khouloud Poli (neé Nafaa)
Dr. Hardy Richter
Dr. Christoph Ruschil
Dr. Jennifer Sartor
Dr. Natalie Schaworonkow (until 03/2019)
Patricia Schwarz
Vera Stadler
Maria-Ioanna Stefanou
Dr. Johannes Tünnerhoff
Dr. Brigitte Zrenner
Dr. Christoph Zrenner

TECHNICAL STAFF/ADMINISTRATION

Marcel Armbruster
Ulrike Baumann
Dipl.-Ing. Rüdiger Berndt (Electronics, together with the Department of Cognitive Neurology)
Ingrid Braun (since 03/2019)
Evelyn Dubois
Sandra Gäßler-Kegelmann, MBA
Sarah Hendel
Marion Jeric
Anna Kempf
Gabriele Kuebart
Ivana Princip
Matthias Scholl
Elke Stransky
Julia Zeller

MASTER STUDENTS

Maya Velardi (Supervisor Prof. Dr. Hertrich)

PROFESSORSHIP FOR NEUROREHABILITATION

Prof. Dr. Hermann Ackermann
Prof. Dr. Ingo Hertrich

PHD STUDENTS

Eric McDermott (Supervisor Prof. Dr. Ziemann)
Debora Desideri (Supervisor Prof. Dr. Ziemann)
Maria Ermolova (Supervisor Prof. Dr. Ziemann)
Lara Häusser (Supervisor Prof. Dr. Dr. Tabatabai)
Desiree Blair Jovellar (Supervisor Prof. Dr. Ziemann)
Constanze Kemmerer (Supervisor: PD Dr. Kowarik)
Moritz Klawitter (Supervisor Prof. Dr. Naumann)
Yana Parfynova (Supervisor Prof. Dr. Naumann)
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Steven Pillen (Supervisor Prof. Dr. Ziemann)
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Yufei Song (Supervisor Prof. Dr. Ziemann)
Bianca Walter (Supervisor Prof. Dr. Dr. Tabatabai)
Yi Wang (Supervisor PD Dr. Poli)

MEDICAL DOCTORAL STUDENTS

Abdullah Alekuzei (Supervisor Prof. Dr. Naumann)
Dominik Baku (Supervisor PD Dr. Kowarik)
Sinan Barus (Supervisor Prof. Dr. Ziemann)
Hannes Becker (Supervisor Prof. Dr. Dr. Tabatabai)
Elina Brendle (Supervisor Prof. Dr. Dr. Tabatabai)
Hui Chen (Supervisor PD Dr. Poli)
Elena Dangel (Supervisor Prof. Dr. Dr. Tabatabai)
Sara Dörre (Supervisor Prof. Dr. Ziemann)
Juliane Ebert (Supervisor Prof. Dr. Dr. Tabatabai)
Hermann Eckhardt (Supervisor Prof. Dr. Naumann)
Hulda Ewald (Supervisor Prof. Dr. Dr. Tabatabai)
Ines Fachner (Supervisor Prof. Dr. Dr. Tabatabai)
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Hannah Krämer (Supervisor Prof. Dr. Ziemann)
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Chen Liang (Supervisor Prof. Dr. Ziemann)
Anne Lieb (Supervisor Prof. Dr. Ziemann)
Mirjam Lingel (Supervisor Prof. Dr. Ziemann)
Adam Meder (Supervisor Prof. Dr. Ziemann)
Hardy Richter (Supervisor PD Dr. Poli)
Francesca Russo (Supervisor PD Dr. Poli)
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Leonie Schumacher (Supervisor Prof. Dr. Naumann)
Matthias Sonnleitner (Supervisor PD Dr. Poli)
Charlotte Spencer (Supervisor PD Dr. Poli)
Jakob Spogis (Supervisor Prof. Dr. Ziemann)
Marianna Stefanou (Supervisor Prof. Dr. Ziemann)
Miriam Thies (Supervisor Prof. Dr. Ziemann)
Dimitrios Vasilakis (Supervisor PD Dr. Poli)
Xueyu Yang (Supervisor PD Dr. Poli)
Jan Zurloh (Supervisor: PD Dr. Krumbholz)

Clinical Studies

STROKE STUDIES

ANNEXA-4: Prospective, open-label study of Andexanet alfa in patients receiving a factor XA-Inhibitor who have acute major bleeding
Investigator: PD Dr. Sven Poli

ANNEXA-i: A Phase 4 randomizes clinical trial of Andexanet Alfa (Andexanet Alfa for Injection) in acute intracranial hemorrhage in patients receiving an oral Factor XA Inhibitor
Investigator: PD Dr. Sven Poli

APICES: Automatic PredICtion of Edema after Stroke (APICES) – Computergestützte automatische Prognose der Entwicklung eines malignen Hirnödems nach Mediainfarkt
Investigator: PD Dr. Sven Poli

ATTICUS: Apixaban for treatment of embolic stroke of undetermined source
Investigator: PD Dr. Sven Poli

AXIOMATIC-SSP: A Global, Phase 2, Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging Study of BMS-986177, an Oral Factor XIa Inhibitor, for the Prevention of New Ischemic Stroke or New Covert Brain Infarction in Patients Receiving Aspirin and Clopidogrel Following Acute Ischemic Stroke or Transient Ischemic Attack (TIA)
Investigator: PD Dr. Sven Poli

CAPIAS: The carotid plaque imaging in acute stroke (CAPIAS) study: protocol and initial baseline data
Investigator: Prof. Dr. Ulf Ziemann

German Stroke Registry
Investigator: PD Dr. Sven Poli

LYSA: Beobachtungsstudie zur Untersuchung des inhaltlichen Verständnisses eines Aufklärungsgespräches zur Thrombolyse bei ischämischem Schlaganfall
Investigator: PD Dr. Sven Poli

PRAISE: Prediction of acute coronary syndrome in acute ischemic stroke
Investigator: Dr. Annerose Mengel

Precious: PREvention of Complications to Improve OUtcome in elderly patients with acute Stroke. A randomised, open, phase III, clinical trial with blinded outcome assessment
Investigator: PD Dr. Sven Poli

PRESTIGE-AF: PREvention of STroke in Intracerebral haemorrhaGE survivors with Atrial Fibrillation
Investigator: PD Dr. Sven Poli

Prodast: Prospective Record Of the use of Dabigatran in patients with Acute Stroke or TIA
Investigator: PD Dr. Sven Poli

PROOF: Penumbral Rescue by Normobaric O=O Administration in Patients with Ischaemic Stroke and Target Mismatch ProFile: A Phase II Proof-of-Concept Trial
Investigator: PD Dr. Sven Poli

RASUNOA-Prime: Register für Akute Schlaganfälle Unter Neuen Oralen Antikoagulantien - Prime
Investigator: PD Dr. Sven Poli

REVACEPT (EudraCT-Nr.: 2011-001006-10): An inhibitor of platelet adhesion in symptomatic carotid stenosis: A phase II, multicenter, randomized, dose-finding, double-blind and placebo controlled superiority study with parallel groups.
Investigator: PD Dr. Sven Poli

RIC-ICH: Register zum Einsatz von Idarucizumab bei Patienten mit intrakranieller Blutung
Investigator: PD Dr. Sven Poli

SANO: Strukturierte ambulante Nachsorge nach Schlaganfall
Investigator: PD Dr. Sven Poli

SPOCT-NOAC 1: Specific Point-of-Care Testing of Coagulation in Patients Treated with Non-Vitamin K Antagonist Oral Anticoagulants – Part Ia/b
Investigator: PD Dr. Sven Poli

STREAM (ClinicalTrials.gov Identifier: NCT03228251): Simulation-based Training of Rapid Evaluation and Management for Acute Stroke Trial
Investigator: PD Dr. Sven Poli

TESTdem: Feststellung der Wirksamkeit und Sicherheit der Transkraniellen Extrakorporalen Stoßwellen-Therapie bei Patienten mit einer Alzheimer-Demenz
Investigator: PD Dr. Sven Poli

NEUROIMMUNOLOGY STUDIES

AFFINITY (NCT03222973, 215MS202):
Efficacy and Safety of BIIB033 (Opicinumab) as an Add-on Therapy to Disease-Modifying Therapies (DMTs) in Relapsing Multiple Sclerosis (MS)
Investigator: PD Dr. Markus Krumbholz

CFTY720D2406 PASSAGE (NIS – Phase 4):
Prospektive, nicht-interventionelle, multinationale Studie mit Parallel-Kohorten zur Bewertung der Langzeit-Sicherheit in Patienten mit MS, deren Behandlung kürzlich auf tägliche Fingolimod-Gabe umgestellt wurde oder die mit einer anderen zugelassenen krankheitsmodifizierenden Therapie behandelt werden
Investigator: PD Dr. Markus Krumbholz

CFTY720DDE02 PANGAEA (NIS – Phase 4):
Multizentrische, prospektive, nicht-interventionelle Langzeit-Registerstudie zur Beschreibung der Sicherheit und des Stellenwerts von Gilenya® (fingolimod 0.5 mg) in der Behandlung von MS Patienten
Investigator: PD Dr. Markus Krumbholz

CLADQoL (MS700568): CLADribine tablets – evaluation of Quality of Life
Investigator: PD Dr. Markus Kowarik

CLARION (MS 700568-0002) (NIS – Phase 4):
Long term, prospective, observational cohort study evaluating the safety profile in patients with highly active relapsing multiple sclerosis (RMS) newly started on oral cladribine
Investigator: PD Dr. Markus Krumbholz

CONFIDENCE (ML39632): Safety and effectiveness of ocrelizumab under real world conditions: a non-interventional post authorization safety study in patients diagnosed with relapsing or primary progressive multiple sclerosis
Investigator: PD Dr. Markus Kowarik

DIFUTURE/ProVal-MS – BMBF-supported, Prospective study to validate a multidimensional risk score (DIFUTURE-MSRS) which predicts the 24-month outcome in early Multiple Sclerosis patients)
Investigator Tübingen: Prof. Dr. Ulf Ziemann

EmBioPro-MS: Explorative study of emerging blood biomarkers in progressive multiple sclerosis
Investigators: Dr. Ahmed Abdelhak, PD Dr. Markus Krumbholz

ENSEMBLE (EudraCT Nr: 2016-002937-31:
This is a prospective, multicenter, open-label, single-arm, phase 3b study which evaluates effectiveness and safety of ocrelizumab in participants with early stage RRMS. The study will consist of an open-label treatment period of 192 weeks and follow-up period of at least 48 weeks
Investigator: Prof. Dr. Ulf Ziemann

Ensemble-Plus (NCT03606460): A Study to Evaluate the Safety of Administering Ocrelizumab Per a Shorter Infusion Protocol in Participants With Primary Progressive Multiple Sclerosis (PPMS) and Relapsing Multiple Sclerosis (RMS)
Investigator: Prof. Dr. Ulf Ziemann

Pangaea 2.0 (CFTY720DDE26): Post-Authorization Non-interventional GermAn treatment benefit study of GilEnyA in MS)
Investigator: PD Dr. Markus Krumbholz

PROFILE RRMS (ML39348): Evaluation of specific unmet needs in current clinical practice of multiple sclerosis: characterization of different profiles of relapsing-remitting multiple sclerosis patients defined by disease activity and patient-reported outcomes
Investigator: PD Dr. Markus Kowarik

REGIMS Register: Ein Immuntherapieregister zur Verbesserung der Arzneimittelsicherheit in der MS-Therapie
Investigator: PD Dr. Markus Krumbholz

RETRO (ML39631): A retrospective study investigating best supportive and medical care in clinical practice in patients with primary progressive multiple sclerosis (PPMS) in Germany
Investigator: PD Dr. Markus Krumbholz

TRUST (GER-TYS-14-10626): Eine multizentrische, prospektive, nicht-interventionelle Studie zur Untersuchung der Auswirkung eines integrierten Patientenmanagements, inklusive Biomarkern, Magnetresonanztomographie und Expertenrat auf den Krankheitsverlauf bei Patienten mit schubförmiger Multipler Sklerose, die seit mindestens 12 Monaten mit TYSABRI behandelt wurden
Investigator: PD Dr. Markus Krumbholz

Clinical Studies

NEUROIMMUNOLOGY STUDIES

WA 21493 OLE (EudraCT-Nr. 2007-006338-32):
A phase II, multicenter, randomized, placebo and Avonex controlled dose finding study to evaluate the efficacy and safety of ocrelizumab in patients with relapsing-remitting multiple sclerosis
Investigator: Prof. Dr. Ulf Ziemann

WA21092 OPERA (EudraCT-Nr. 2010-020337-99):
A randomized, double-blind, double-dummy, parallel-group study to evaluate the efficacy and safety of ocrelizumab in comparison to interferon beta-1a (Rebif®) in patients with relapsing multiple sclerosis
Investigator: Prof. Dr. Ulf Ziemann

WA25046 ORATORIO (EudraCT-Nr.2010-020338-25):
A phase III, multicenter, randomized, parallel-group, double-blinded, placebo-controlled study to evaluate the efficacy and safety of ocrelizumab in adults with primary progressive multiple sclerosis.
Investigator: Prof. Dr. Ulf Ziemann

NEUROONCOLOGY STUDIES RECRUITING TRIALS (OPEN FOR ENROLLMENT)

BMS-CA209-548 (NCT02667587): Study of Temozolomide Plus Radiation Therapy With Nivolumab or Placebo, for Newly Diagnosed Patients With Glioblastoma (GBM, a Malignant Brain Cancer) (CheckMate548)
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: BMS

AbbVie M13-813 (NCT02573324): A study of ABT-414 in subjects with newly diagnosed Glioblastoma (GBM) with Epidermal Growth Factor Receptor (EGFR) amplification (Intellance 1)
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: RTOG and AbbVie

iMRI/5-ALA: A parallel group phase II trial to investigate maximum extent of resection based on iMRI versus 5-ALA
Lead Principal Investigators: PD Dr. Constantin Roder, Prof. Dr. Marcos Tatagiba
Sponsor: University Hospital Tübingen

NOA-10 (NCT01252459): Amino-acid PET versus MRI-guided re-irradiation in patients with recurrent Glioblastoma Multiforme (GLIAA)
Investigator in Tübingen: Prof. Dr. Daniel Zips
Sponsor: University Hospital Freiburg

NOA-16 (NCT02454634): Phase I trial of IDH1-peptide vaccine in IDH1R132H-mutated grade III-IV gliomas
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: University Hospital Heidelberg

Bayer 18239 (NCT02746081): Phase I study of BAY1436032 in Isocitrate Dehydrogenase-1 (IDH1)-mutant advanced solid tumors
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: Bayer

EORTC 1320: Phase II trial in atypical and anaplastic meningioma
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: EORTC

NEUROONCOLOGY STUDIES
TRIALS IN TREATMENT AND FOLLOW-UP PHASE (ENROLLMENT CLOSED)

NOA12: Phase I/II trial exploring the combination of the compound BIBF120 with re-irradiation versus re-irradiation alone in progressive glioblastoma.
Investigator in Tübingen: Prof. Dr. Daniel Zips
Sponsor: University Hospital Heidelberg

BMS CA 209-498 (NCT02617589): Phase III trial of Nivolumab Compared to Temozolomide, Given With Radiation Therapy, for Newly-diagnosed Patients With Unmethylated Glioblastoma (GBM, a Malignant Brain Cancer) (CheckMate 498)
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: BMS

EORTC1410/AbbVie M14-483 (NCT02343406): ABT-414 Alone or ABT-414 Plus Temozolomide vs. Lomustine or Temozolomide for recurrent glioblastoma (INTELLANCE 2)
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: EORTC

CINC280X2204 (NCT01870726): Safety and efficacy of INC280 and Buparlisib (BKM120) in patients with recurrent gliobastoma
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: Novartis

GAPVAC-101: A phase I study using an innovative individualized peptide-vaccination-based immunotherapy in newly diagnosed glioblastoma (www.gapvac.eu)
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: Immatics GmbH, Tübingen

CeTeG (NCT01149109): Efficacy and safety study of Lomustine/Temozolomide combination therapy versus standard therapy for glioblastoma patients
Investigator in Tübingen: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: University Hospital Bonn

CATNON Intergroup Trial (EORTC 26053): Phase III trial on concurrent and adjuvant temozolomide chemotherapy in non-1p/19q deleted anaplastic glioma
Investigator: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: EORTC

EORTC 26101 (NCT01290939): Bevacizumab and Lomustine for Recurrent GBM
Investigator: Prof. Dr. Dr. Ghazaleh Tabatabai
Sponsor: EORTC

Third-Party Funding

ONGOING GRANTS

Explorative study of emerging blood biomarkers in progressive multiple sclerosis (EmBioProMS)
Project leader: Dr. Ahmed Abdelhak
Funding Institution: Deutsche Multiple Sklerose Gesellschaft (DMSG)

The sensorimotor µ-rhythm as cholinergically controlled pulsed inhibition
Project leader: Dr. Til Ole Bergmann
Funding institution: German Research Foundation (DFG)

The role of B cells in patients with gliomas: B cell associated immuno-surveillance in the CNS?
Project leader: PD Dr. Markus Kowarik
Funding Institution: Medical Faculty University Tübingen, fortüne Program

Immunoglobulin (Ig) repertoire analysis in multiple sclerosis patients treated with cladribine (Mavenclad) - A combined Ig transcriptome and proteome approach -
Project leader: PD Dr. Markus Kowarik
Funding Institution: Merck GmbH

Immunoglobulin (Ig) repertoire analysis in multiple sclerosis patients treated with teriflunomid (Aubagio) - A combined Ig transcriptome and proteome approach -
Project leader: PD Dr. Markus Kowarik
Funding Institution: Genzyme

Beeinflussung des klinischen Verlaufes von neurologischen Intensivpatienten durch autoregulationsbasiertes zerebrales Perfusionsmanagement
Project leader: Dr. Annerose Mengel
Funding Institution: Medical Faculty University Tübingen, TüFF Program

Cardiac Autonomic Function for Risk Prediction in Cryptogenic Stroke (CRYPTIC-Study)
Project leaders: Prof. Dr. Christine Meyer-Zürn, PD Dr. Sven Poli, Prof. Dr. Jennifer Diedler
Funding institution: Medtronic

The role of MTUS/ATIP1 in glioblastoma progression and invasion
Project leader: Prof. Dr. Ulrike Naumann
Funding institution: DAAD

Assessment of YB-1 Dependent Oncolytic Adenovirus-Based Glioma-Virotherapy on Cellular Immune Responses
(NA 770/4-1)
Project leader: Prof. Dr. Ulrike Naumann
Funding institution: German Research Foundation (DFG)

Automatic PredICtion of Edema after Stroke (APICES)
Project leader: PD Dr. Sven Poli
Funding institution: Innovationsausschuss beim Gemeinsamen Bundesausschuss (GBA)

Specific Point-of-Care Testing of Coagulation In Patients Treated with Edoxaban (SPOCT-Edoxaban)
Project leader: PD Dr. Sven Poli
Funding institution: Daiichi Sankyo

Penumbral Rescue by normobaric O=O Administration in patients with ischemic Stroke and target mismatch profile:
A phase II Proof-of-Concept Trial
Project leader: PD Dr. Sven Poli
Funding institution: European Commission

Immunoglobuline repertoire analysis in multiple sclerosis
Project leader: Dr. Christoph Ruschil
Funding Institution: Medical Faculty University Tübingen, PATE Program

Multipeptide vaccination with a new immunomodulatory agent XS15 in newly diagnosed glioblastoma: a first in man phase 1 trial
Project leader: Prof. Dr. Dr. Ghazaleh Tabatabai, Prof. Dr. Hans-Georg Rammensee
Funding institution: Medical Faculty Tübingen

Individualizing the treatment of CNS Metastases
Project leader: Prof. Dr. Dr. Ghazaleh Tabatabai
Funding institution: Medical Faculty Tübingen

EKFS-Forschungskolleg „Therapieresistenz solider Tumore"
Project leader: Prof. Dr. Dr. Ghazaleh Tabatabai
Funding institution: Else Kröner Fresenius-Stiftung

Strengthening the SMA-M1 connection of human motor cortex by a novel non-invasive brain stimulation protocol to enhance motor performance and learning
(DFG ZI 542/7-1)
Project leader: Prof. Dr. Ulf Ziemann
Funding institution: German Research Foundation (DFG)

Implantable, bidirectional brain-computer-interface for restoration of motor functions (MOTOR-BIC)
Leaders for Tübingen Project: Prof. Dr. Niels Birbaumer, Prof. Dr. Ulf Ziemann
Funding institution: Federal Ministry of Education and Research (BMBF)

Apixaban for treatment of embolic stroke of undetermined source (ATTICUS randomized trial)
Project leaders: Prof. Dr. Tobias Geisler, Prof. Dr. Ulf Ziemann
Funding institution: Bristol-Myers Squibbs

An exploratory study assessing TMS plasticity deficits in patients with AD and aMCI in comparison to healthy controls
Project leaders: Prof. Dr. Ulf Ziemann, Prof. Dr. Daniela Berg, Prof. Dr. Christoph Laske
Funding institution: Janssen Pharmaceuticals NV

Transcranial magnetic stimulation; Electroencephalography; TMS-EEG; human cortex; excitability; neuropharmacology; glutamatergic system; GABAergic system; voltage-gated ion channels; anticonvulsants (ZI 542/9-1)
Project leader: Prof. Dr. Ulf Ziemann
Funding institution: German Research Foundation (DFG)

DIFUTURE/ProVal-MS – Prospective study to validate a multidimensional risk score (DIFUTURE-MSRS) which predicts the 24-month outcome in early Multiple Sclerosis patients)
Clinical project leader Tübingen: Prof. Dr. Ulf Ziemann
Funding institution: Federal Ministry of Education and Research (BMBF)

Connecting to the Networks of the Human Brain (ConnectToBrain)
Project leaders: Prof. Dr. Ulf Ziemann, Prof. Dr. Risto Ilmoniemi (Aalto University, Finland), Prof. Dr. Gian-Luca Romani (Universita degli studi Gabriele d'Annunzio di Chieti-Pescara, Italy)
Funding Institution: European Research Council (ERC) Synergy Program

EXIST Forschungstransfer: NEUROSYNC
Project leader: Dr. Christoph Zrenner
Funding institution: Federal Ministry of Education and Research (BMBF)

Induction of brain plasticity with closed-loop EEG-triggered transcranial magnetic stimulation
Project leader: Dr. Christoph Zrenner
Funding institution: Medical Faculty University Tübingen, Clinician Scientist Program

NEW GRANTS

Pre-stimulus µ-rhythm phase differentially effects low-frequency repetitive TMS-induced corticospinal excitability
Project leader: Dr. David Baur
Funding institution: Medical Faculty University Tübingen, Junior Clinician Scientist Program

Der Einfluss des EMT-Proteins SLUG auf die Integrität der Blut-Hirn-Schranke im GBM - in vitro Analysen
Project leader: Prof. Dr. Ulrike Naumann
Funding institution: IZKF Promotionskolleg

Untersuchungen zum Einfluss von gliom-sezerniertem TGF-ß auf die Struktur Gliom-assoziierter Gefäße: Erstellung von murinen TGF-ß^{KO} Gliomzellen mittels CRISPR/Cas und Charakterisierung der Zelllinien
Project leader: Prof. Dr. Ulrike Naumann
Funding institution: IZKF Promotionskolleg

Intranasal delivery of cellular "Trojan Horse" cells loaded with oncolytic adenovirus to treat invasive recurrent glioblastoma
Project leader: Prof. Dr. Ulrike Naumann
Funding institution: German Cancer Foundation

Pericyte function in the glioblastoma vascule
Project leader: Prof. Dr. Ulrike Naumann
Funding institution: Chinese Sholarship Council

Reconnecting the ageing brain to enhance plasticity and motor learning
Project leaders: Prof. Dr. John Semmler (Adelaide University), Co-PI: Prof. Dr. Ulf Ziemann
Funding institution: Australian Research Council (ARC)

Awards

Prof. Dr. Ulf Ziemann
Listing "Top Physicians 2019" (Guter Rat)

Prof. Dr. Dr. Ghazaleh Tabatabai
Listing "Top physician 2019" (Brain Tumor Treatment)

Medical Theses

(Completed in 2019)

Julia Kiraly
The role of GABAAergic neurotransmission in the human brain probed by paired-pulse TMS-EEG
Supervisor: Prof. Dr. Ulf Ziemann

PhD Theses

(Completed in 2019)

Sonja Schötterl
Functional and therapeutic effects of viscumins in the treatment of experimental glioblastoma
Supervisor: Prof. Dr. Ulrike Naumann

Master Theses

(Completed in 2019)

Maya Velardi
Neuere Ansätze in der Aphasietherapie
Supervisor: Prof. Dr. Ingo Hertrich

Bachelor Theses

(Completed in 2019)

Fee Arnold
It's all about irony
Supervisor: Prof. Dr. Ingo Hertrich

Jule Kalessa
Das Tourette Syndrom - Kann die Krankheit zu einer besseren Verarbeitung linguistischer Prozesse führen?
Supervisor: Prof. Dr. Ingo Hertrich

Lea Glauner
Sprachverhalten bei Menschen mit Depression – prosodische und linguistische Merkmale
Supervisor: Prof. Dr. Ingo Hertrich

Amelie Winter
Is a naive discriminative learning model an appropriate candidate for replacing cloze tasks?
Supervisor: Prof. Dr. Ingo Hertrich

Patricia Zwicker
Bilingual aphasia - does bilingualism have a beneficial effect on recovery from (post-stroke) aphasia?
Supervisor: Prof. Dr. Ingo Hertrich

Guest Researchers

Dr. Jaakko Nieminen, Aalto University, Finland
(Funded by the National Academy of Science, Finland)
Host: Prof. Dr. Ulf Ziemann

Department of Neurology and Epileptology

Clinical and Scientific Staff

HEAD OF THE DEPARTMENT

Prof. Dr. Holger Lerche

GROUP LEADERS/ATTENDING PHYSICIANS

Prof. Dr. Niels Focke (partially affiliated)
Prof. Dr. Tobias Freilinger (partially affiliated)
Prof. Dr. Alexander Grimm
Dr. Pascal Martin (since March 2019)
Dr. Melanie Schreiber (since April 2019)
PD Dr. Sigrid Schuh-Hofer (partially affiliated)
Prof. Dr. Yvonne Weber
(until September 2019, then partially affiliated)
Dr. Stefan Wolking (until March 2019)

SCIENTISTS/RESIDENTS

Murtadha Alshabaan
Dr. Christian Boßelmann
Dr. Ahmed Eltokhi
Dr. Samira Hamzehian
Dr. Ulrike Hedrich-Klimosch
Dr. Yiwen Li Hegner
Dr. Dr. Randolph Helfrich
Dr. Josua Kegele
Dr. Silke Klamer
Dr. Henner Koch
Dr. Stephan Lauxmann
Dr. Yuanyuan Liu
Dr. Justus Marquetand
Dr. Joohyun Park
Dr. Lorenzo Roncoroni
Filip Rosa
Dr. Victoria Schubert
Dr. Laura Schurr
Dr. Niklas Schwarz
Jan-Hendrik Stahl
Sabine Thewes
Dr. Nathalie Winter
Dr. Sophia Willikens
Dr. Thomas Wuttke

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Sabrina Kreiser
Heidrun Löffler
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Elisabeth Schriewer

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Erva Bayraktar
Carolin Fischer
Moritz Hanke
Haosi Huang
Mahmoud Koko Musa
Raviteja Kotikalapudi
Johanna Krüger
Nicole Kusch
Robert Lauerer
Nikolas Layer
Hang Lyu
Anjela Meyer
Daniela Miely
Harshad Pannikkaveettil Ashraf
Simone Seiffert
Pauline Scheuber
Hannah Schwarz
Lukas Sonnenberg
Christina Stier
Pu Yan
Nan Zhan

INTERNSHIPS

Marei Brose
Supervisor: Dr. Stephan Lauxmann

Julia Koppelmann
Supervisor: Betül Uysal

Kalaivani Manibarathi
Supervisor: Dr. Ulrike Hedrich

Emilio Pardo
Supervisors: Johanna Krüger, Nikolas Layer, Dr. Henner Koch

Lorena Savini
Supervisor: Dr. Stephan Lauxmann

Zeynep Yentur
Supervisor: Betül Uysal, Dr. Ulrike Hedrich

Clinical Studies

LIBERTY / CAMG334A2301 – a 12-week double-blind, randomized, multicenter study comparing the efficacy and safety of once monthly subcutaneous 140 mg AMG 334 against placebo in adult episodic migraine patients who have failed 2-4 prophylactic treatments
Investigators: Prof. Dr. Tobias Freilinger, Prof. Dr. Holger Lerche

HeMiLa – Prophylactic treatment of hemiplegic migraine with lamotrigine
Investigators: Prof. Dr. Tobias Freilinger, Prof. Dr. Holger Lerche

VOTE / EP0076 – Patient preferences in epilepsy mono-therapy – a non-intervnetional study of lacosamide and other antiepileptic drugs in the treatment of partial-onset seizures, including a discrete choice experiment
Investigator: Prof. Dr. Holger Lerche

ARISE / EP0091 – A randomized, double-blind, placebo-controlled, dose finding study to evaluate the efficacy and safety of padsevonil as adjunctive treatment of focal-onset seizures in adult subjects with drug-resistant epilepsy
Investigators: Prof. Dr. Yvonne Weber, Prof. Dr. Holger Lerche

EE / AKF357-0-0 – Pathophysiologie basierte Therapie von früh beginnenden epileptischen Enzephalopathien
Investigators: Prof. Dr. Yvonne Weber, Dr. Michael Alberg

EP0093 - an open-label, multicenter, extension study to evaluate the safety and efficacy of padsevonil as adjunctive treatment of focal-onset seizures in adult subjects with drug-resistant epilepsy
Investigators: Prof. Dr. Yvonne Weber, Prof. Dr. Holger Lerche

HerMes / CAMG334ADE01 - a randomized, double-blind, multicenter head-to-head study of erenumab against topiramate - migraine study to assess tolerability and efficacy in a patient-centered setting
Investigator: Prof. Dr. Holger Lerche

Spectre / CAMG334ADE02 - Characerisation of prescription patterns In episodic and chronic migraine patients starting treatment in a reallife setting with erenumab in Germany
Investigator: Prof. Dr. Holger Lerche

BIA-2093-213 - prevention of epilepsy in stroke patients at high risk of developing unprovoked seizures: anti-epileptogenic effects of eslicarbazepine acetate
Investigator: Prof. Dr. Holger Lerche

TUNAP – Studie zur Evaluierung der Rolle des Nervenultraschalls bei Nerventraumata
Investigators: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter, Dr. Martin Schuhmann (Neurochirurgie), Prof. Dr. Adrien Daigeler (BGU Tübingen), Jan-Hendrik Stahl, Dr Josua Kegele, Dr. Sophia Willlikens, Julia Wittlinger

UPSS – Pattern Analysis bei Neuropathien
Investigators: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter, Jan-Hendrik Stahl, Dr Josua Kegele, Dr. Sophia Willlikens, Julia Wittlinger, Debora Vittore-Welliong

MUSS – Muskelsummenscore zur Evaluierung der Muskelfibrose bei Neuropathien
Investigators: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter

Follow-Up PNP - Ultrasound, electrophysiology and clinical follow-up study of patients with Immune-mediated neuropathies (in cooperation with CSL Behring)
Investigators: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter, Jan-Hendrik Stahl, Dr Josua Kegele, Dr. Sophia Willlikens, Julia Wittlinger

Ultrasound in inherited neuropathies and TTR-Amyloidosis - ultrasound aspects of hereditary neuropathies
Investigators: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter, Jan-Hendrik Stahl, Dr Josua Kegele, Dr. Sophia Willlikens, Julia Wittlinger, Debora Vittore-Welliong

Tram2 – Screening for TTR-Amyloiosis in patients with axonal neuropathy (in cooperation with Centogene Rostock)
Investigators: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter, Jan-Hendrik Stahl, Dr Josua Kegele, Dr. Sophia Willlikens, Julia Wittlinger, Debora Vittore-Welliong

I-Guide – Follow-Up Study of CIDP and MMN patients with treatment of ivIG (in cooperation with Grifols)
Investigators: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter, Jan-Hendrik Stahl, Dr Josua Kegele, Dr. Sophia Willlikens, Julia Wittlinger

Third-Party Funding

ONGOING GRANTS

Pathophysiology of familial hemiplegic migraine: Examination of a newly developed transgenic SCNC1A mouse model
Project leader: PD Dr. Tobias Freilinger
Funding institution: German Research Foundation (DFG)

Pathophysiology of non-classical epileptic encephalopathies (EE)
Project leader: Prof. Dr. Yvonne Weber
Funding institution: German Research Foundation (DFG)

Pathophysiology-triggered therapy of epileptic encephalopathies
Project leader: Prof. Dr. Yvonne Weber
Funding institution: AKF (Angewandte Klinische Forschung), University of Tübingen

Prophylactic treatment of hemiplegic migraine with lamotrigine – a pilot study
Project leader: PD Dr. Tobias Freilinger
Funding institutions: Centre for Rare Diseases (ZSE) and AKF, University of Tübingen

Exploring the function of the central control of breathing in mice with sodium-channel mutations causing epilepsy, implications for sudden unexpected death in patients with epilepsy (SUDEP)
Project leader: Dr. Henner Koch
Funding institution: German Research Foundation (DFG)

DAAD PhD Stipendium
Project participant: Mahmoud Koko
Funding institution: DAAD

Network-Imaging in genetic epilepsy
Project leader: Prof. Dr. Niels Focke
Funding Institution: German Research Foundation (DFG)

Non-invasive vagal nerve stimulation (nVNS) for acute treatment of prolonged aura in hemiplegic migraine – an open-label, single-arm, multiple attack pilot trial
Project leader: Prof. Dr. Tobias Freilinger
Funding institution: Centre for Rare Diseases, University of Tübingen

Trimodale Bildgebung humaner Hirnnetzwerke mittels simultaner PET/MR/EEG
Project leader: Prof. Dr. Niels Focke (together with Prof. Dr. Christian la Fougere und Prof. Dr. Bernd Pichler)
Funding Institution: German Research Foundation (DFG)

Effect of Eslicarbazepine on genetic gain-of-function mutations in voltage-gated Na+ channels causing epilepsies in young children
Project leader: Prof. Dr. Holger Lerche, Dr. Stephan Lauxmann
Funding Institution: Bial

Neurological Clinical Problem Solving (Neuro-CliPS) Tübingen
Project leader: Prof. Dr. Tobias Freilinger
Funding institution: University of Tuebingen, PROFIL programme

Guest Physician Stipend
Project participant: Murtadha Alshabaan
Funding institution: Saudi-Arabia

DFG-Research Unit FOR2715 'Epileptogenesis of genetic epilepsies'
Speaker: Prof. Dr. Holger Lerche
Funding institution: German Research Foundation (DFG), additional funding by the FNR (Luxembourg): including the following five grants:

P1: Genetic mechanisms of epileptic encephalopathies
Project leader: Prof. Dr. Yvonne Weber (with Prof. Dr. Ingo Helbig from Kiel University)

P2: Rare genetic factors in epileptogenesis
Project leader: Prof. Dr. Holger Lerche (with Prof. Dr. Michael Nothnagel from Cologne University and Dr. Roland Krause from Luxembourg University)

P5: Brain region-specific epileptogenesis in a conditional mouse model
Project leaders: Prof. Dr. Holger Lerche, Dr. Henner Koch, Dr. Thomas Wuttke

P6: Mechanisms of epileptogenesis in KCNA2-/SCN2A-mediated epilepsies
Project leader: Dr. Ulrike Hedrich (with Prof. Dr. Olga Garaschuk from Tübingen University)

Z3: Central Management
Project leader: Prof. Dr. Holger Lerche

Third-Party Funding

ONGOING GRANTS

Spreading of pathological activity in critical brainstem centers and activation measured in vivo in a Dravet mouse Model
Project leader: Dr. Henner Koch
Funding institution: Finding a Cure for Epilepsy and Seizures (FACES)

Personalisierte Therapieoptionen für Patienten mit KCNA2-assoziierten epileptischen Enzephalopathien
Project leader: Dr. Ulrike Hedrich
Funding institution: Eva Luise und Horst Köhler Stiftung

Entwicklung eines Anfallsdetektors
Project leader: Prof. Dr. Yvonne Weber
Funding institutions: Federal Ministry of Education and Research/Life Science Incubator Bonn (BMBF/LSI Bonn)

SNAREopathies - Mechanismen neuropsychiatrischer, genetischer Erkrankungen des SNARE-Komplexes: Hin zu therapeutischen Maßnahmen
TP Tübingen: Funktionelle Analyse anhand von transgenen Mausmodellen, die Träger des krankheitsverursachenden Gens sind
Project leader: Prof. Dr. Holger Lerche
Funding institution: Federal Ministry of Education and Research (BMBF)

Doktorandenstipendium – Projekt: computer-basierte Modellrechnungen zur Änderung des Verhaltens von Nervenzellen bei genetischen Epilepsien
Project leader: Prof. Dr. Holger Lerche
Funding institution: Stiftung no epilep

UNAP-Projekt bei Nervenverletzung
Project leader: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter
Funding institution: Deutsche Gesellschaft für Ultraschall in der Medizin (DEGUM)

NEW GRANTS

TreatION - New therapies for neurologic ion channel and transporter disorders
Speaker: Prof. Dr. Holger Lerche
Funding institution: Federal Ministry of Education and Research (BMBF)

TP1: Coordination, Mol.-Therap. Board, an d existing rare disease initiatives
Project leader: Prof. Dr. Holger Lerche
(with Dr. Holm Graessner from Centre of Rare Diseases - University of Tübingen)

TP2: Data integration and in silico precision medicine for neurological ion channel and transporter disorders
Project leader: Prof. Dr. Yvonne Weber
(with Dr. Sarah von Spiczak from University Medical Center Schleswig-Holstein - Campus Kiel and Roland Krause from Luxembourg Centre for Systems Biomedicine Univ. of Luxembourg)

TP7: Multimodal analysis of novel mouse models associated with glutamate transporter dysfunction
Project leader: Dr. Ulrike Hedrich
(with Prof. Dr. Nikolaus Plesnila from LMU Munich)

TP8: Pathophysiology and therapy in human neuronal models of KCNA2 channelopathies
Project leader: Prof. Dr. Holger Lerche, Dr. Henner Koch, Dr. Niklas Schwarz

Single-cell transcriptome sequencing to investigate mechanisms of epileptogenesis in genetic mouse models and human brain biopsy tissue
Project leader: Dr. Ulrike Hedrich, Dr. Henner Koch
(with Prof. Dr. Albert Becker from University of Bonn and Prof. Dr. Dirk Isbrandt University of Cologne)
Funding institution: German Research Foundation (DFG)

Establishment of a human electrophysiological model to quantify the CGRP-related axon reflex of trigeminal afferents and its evaluation as a clinical tool to assess and predict treatment effects of migraine prophylaxis
Project leader: Dr. Victoria Schubert
Funding institution: Medical Faculty, University of Tübingen

Genetics and pharmakogenetics of epilepsies
Project leader: Dr. Stefan Wolking
Funding institution: University of Tübingen
(Clinician Scientist)

Role of common and rare genetic factors In the etiology of genetic epilepsies and pharmacoresponse
Project leader: Dr. Stefan Wolking
Funding institution: German Research Foundation (DFG)

Investigation of novel treatment strategies for idiopathic epilepsy: from genetic modulation of neuronal network activity in vivo to transplantation of MGE-derived interneurons
Project leader: Dr. Thomas Wuttke
Funding institution: Medical Faculty,
University of Tübingen

Somatotopia and fascikelarchitektur im gesunden und neuropathischen Nerv
Project leader: Dr. Natalie Winter
Funding Institution: University of Tübingen
(Clinician Scientist Program)

Conferences & Workshops

DGN Facharztrepetitorium Neurologie 2019
Tübingen, 21 - 22 February 2019
Scientific coordinators: Prof. Dr. Holger Lerche, Prof. Dr. Tobias Freilinger, Dr. Stefan Wolking

Ultraschall Seminar
Tübingen, 6 April 2019
Scientific coordinator: Prof. Dr. Alexander Grimm

Tübinger Therapiefortbildung Neurologie
Tübingen, 20 July 2019
Scientific coordinators: Prof. Dr. Holger Lerche, Pascal Martin

Young Neurologists Summer School 2019
Tübingen,29 July - 2 August 2019
Scientific coordinators: Prof. Dr. Holger Lerche, Dr. Christian Boßelmann, Dr. Sophia Willikens

Awards

Prof. Dr. Alexander Grimm
2nd Felix-Jerusalem Award of the German Society for Muscle Diseases (DGM)

Victoria Schubert, Sigrid Schuh-Hofer
Soyka Förderpreis für Schmerzforschung

PhD Theses

(Completed in 2019)

Ravitejah Kotikalapudi
Voxel based morphometry of the human brain in epilepsy
Supervisor: Prof. Dr. Niels Focke

MD Theses

(Completed in 2019)

Josua Kegele
Genetische Ursachen des Nodding-Syndroms und familiärer Epilepsien in Subsahara-Afrika
Supervisor: Prof. Dr. Holger Lerche

Nicole Kusch
Beeinflussung kardiorespiratorischer Parameter bei Patienten mit Epilepsie
Supervisor: Prof. Dr. Yvonne Weber

Bachelor Theses

(Completed in 2019)

Marietheres Evers
Functional Characterization of mutations in the potassium channel gene KCND3 causing a spectrum of neuropathological symptoms
Supervisors: Dr. Ulrike Hedrich, Mahmoud Koko

Eva Kunzelmann
Measuring of Synchronic Rhythmic Activity in Wildtype and Pathologically Altered Brain Slices and the Response to the Sodium Channel Blocker Eslicarbazepine
Supervisor: Dr. Stephan Lauxman

Department of Neuro-degenerative Diseases

Clinical and Scientific Staff

HEAD OF THE DEPARTMENT

Prof. Dr. Thomas Gasser

DEPUTY HEAD OF THE DEPARTMENT

Prof. Dr. Ludger Schöls

GROUP LEADERS/ATTENDING PHYSICIANS

Dr. Kathrin Brockmann
Jun.-Prof. Dr. Dr. Michela Deleidi (jointly with DZNE)
Dr. Julia Fitzgerald
PD Dr. Christian Johannes Gloeckner (jointly with DZNE)
Prof. Dr. Philipp Kahle
PD Dr. Inga Liepelt-Scarfone
PD Dr. Rebecca Schüle
Prof. Dr. Matthis Synofzik
Prof. Dr. Daniel Weiß

AFFILIATED EXTERNAL GROUP LEADERS

Prof. Dr. Daniela Berg
Prof. Dr. Rejko Krüger

SCIENTISTS/RESIDENTS/PHD STUDENTS

Sara Becker
Dr. Friedemann Bender
Maria Sophie Breu
Idil Cebi
Silvia De Cicco
Mohamad Dehestani
Marita Eckert
Zofia Fleszer
Dr. Natalja Funk
Dr. Sven Geisler
Dr. Shabab Hannan
Dr. Friederike Hans
Dr. Stefan Hauser (jointly with DZNE)
Dr. Stefanie Hayer
Dr. Holger Hengel
Anna Hofmann
Philip Höflinger
Mohammad Hormozi
Dr. Dina Ivanyuk
Dr. Christoph Kessler
Felix Knab
Milena Korneck
Stefanie Krüger
Dr. Stefanie Lerche
Hui Liu
Dr. Ebba Lohmann
Dr. Gerrit Machetanz
Dr. David Mengel
Jorge Garcia Morato
Maike Nagel
Dr. Vasiliki Panagiotakopoulou

Dr. Tim Rattay
Dr. Benjamin Roeben
Dr. Anna Schöllmann (until 06/2019)
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Claudia Schulte
Stefanie Schuster
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Patricia Sulzer
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Catherine Thömmes
Dr. Dr. Andreas Traschütz
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Dr. Isabel Wurster
Dr. Lena Zeltner
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Jennifer Reichbauer
Benjamin Riebenbauer
Elisabeth von Schalkwyk (until 01/2019)
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Susanne Stimmler
Elke Stransky
Dr. Anna-Katharina von Thaler
Doris Wieder
Ina Wolfstädter
Cong Yu
Maria Zarani
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Merit Bade
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Aline Beyle
Andreas Boldt
Vera Borowski
Jan-Hinrich Busch
Gabriela Carvajal
Monique Dehnert
Steffen Dengler
Lisanne Dormann
Karl Friedrich Ermisch
Zofia Fleszar
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Sarah Gascon-Busquet
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Katharina Greulich
Kilian Gunkel
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Jochen Hallwachs
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Kim-Susann Hennefarth
Hanna Hentrich
Dominik Hermle
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Sofie Kämereit
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Irenee Kanyiki
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Jennifer Sartor
David Scheibner
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Patricia Schöpfer
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Johannes Sprengel
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Stefan Streich
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Melanie Wayand
Sofie Weiss
Katarzyna Wojcik
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Laura Zaunbrecher

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Benedikt Hölbling
Milena Korneck
Kim Krieg
Hannah Lönnecker
Kalaivani Manibarathi
Max Mattheuer
Madeline Nagel
Lara Sophie Rieder
Srinethe Saravanan
David Skrabak
Jule Truberg
Deborah Wolf

BUNDESFREIWILLIGEN-DIENSTLEISTERINNEN

Lea Hetzinger
Meike Keller (until 08/2019)
Annika Weger
Marie Wiesemann (until 08/2019)

Clinical Studies

PPMI – The Parkinson's Progression Markers Initiative
(please see: http://www.ppmi-info.org/)
Multicenter longitudinal observational study in PD
Investigators: Dr. Kathrin Brockmann

P-PPMI (please see also: Fox-Trial-Finder): **Prodromal Parkinson's Progression Markers Initiative**: Multicenter longitudinal observational study in individuals at risk for PD
Investigators: Dr. Kathrin Brockmann

PPMI Genetic Cohort: Multicenter longitudinal observational study in genetic PD
Investigators: Dr. Kathrin Brockmann

Roche Pasadena Studie BP39529: a randomized, double-blind, placebo-controlled, 52-week phase II study to evaluate the efficacy of intravenous RO7046015 (PRX002) in participants with early Parkinson's Disease with a 52-week blinded extension Pasadena
Investigators: Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Thomas Gasser

Influence of Inflammatory Profiles on PD Phenotype and Progression
Investigator: Dr. Kathrin Brockmann

Kognitive Stimulation bei Patienten mit Parkinson-Demenz: Wirksamkeit, Prädiktoren des Trainingserfolgs und gesundheitsökonomische Evaluation
Investigator: PD Dr. Inga Liepelt-Scarfone

Cognitive-driven ADL impairment as a predictor for Parkinson's disease Dementia (PDD)
Investigator: PD Dr. Inga Liepelt-Scarfone

ABC-PD: a monocenter longitudinal study on the predictive value of CSF abeta-pathology for PD dementia.
Investigators: PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Daniela Berg, Prof. Dr. Walter Maetzler

TREND-Studie (Tübinger evaluation of Risk factors for Early detection of NeuroDegeneration): Monocenter longitudinal observational study on individuals at high risk for PD to determine the value of risk, prodromal and progression markers in the prodromal phase.
Please see also: http://www.trend-studie.de/english/
Investigators: Prof. Dr. Daniela Berg, Prof. Dr. Walter Mätzler (UKSH, Campus Kiel, Neurology), Dr. Kathrin Brockmann, (UKT, Neurology), Prof. Dr. Andreas Fallgatter, Prof. Dr. Gerhard Eschweiler, Prof. Dr. Florian Metzger (UKT, Psychiatry)

iMed-Study: a DZNE-funded project to understand the relation of Parkinson's disease and metabolic profiles including diabetes.
Investigators: Dr. Kathrin Brockmann, Prof. Dr. Thomas Gasser

MIGAP: (Markers in GBA-associated PD) multicenter study of the DZNE to detect biomarkers and protective factors in GBA-associated PD.
Investigators: Dr. Kathrin Brockmann, Prof. Dr. Thomas Gasser

PDdementia: A BMBF-funded study to assess Biomarkers for dementia in PD using Cell Models and human CSF
Investigators: Dr. Kathrin Brockmann, Prof. Dr. Thomas Gasser

Aspen - 1: A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Paralell Group, Multi-Center Trial to Evaluate the Efficacy and Safety of a Single Treatment of Daxibotulinumtoxin A for Injection in Adults with Isolated Cervical Dystonia
Investigator: Dr. Ebba Lohmann

Aspen – OLS: A Phase 3, Open-Label, Multi-Center Trial to Evaluate the Long-Term Safety and Efficacy of Repeat Treatments of Daxibotulinumtoxin A for Injection in Adults with Isolated Cervical Dystonia
Investigators: Dr. Ebba Lohmann

A 94-52120-174: An international, multicenter, non-interventional, prospective, longitudinal study to investigate the effectiveness of botulinum toxin A (Dysport®) injections in patients suffering from post-stroke arm spasticity with respect to early, medium or late start of treatment.
Investigators: Dr. Katerina Freitag, Prof. Dr. Thomas Gasser

AGN191622: BOTOX prophylaxis in chronic migraine. An international, multicentre, non-interventional, prospective study of treatment with botulinum toxin A injections in patients with chronic migraine
Investigators: Dr. Katerina Freitag, Prof. Dr. Thomas Gasser

ETAM: Validierungsstudie des Erlangen Test of Activities of Daily Living in Persons with Mild Dementia or Mild Cognitive Impairment (ETAM) bei Parkinson Patienten mit leichten kognitiven Einschränkungen
Investigators: PD Dr. Inga Liepelt-Scarfone, Patricia Sulzer

Klinische Charakterisierung der Parkinson Demenz: detaillierte Beschreibung und Identifikation von PDD Subgruppen aufgrund des kognitiven, genetischen, motorischen und nicht-motorischem klinischen Profils und deren Progression der Erkrankung über einen Verlauf von zwei Jahren
Investigators: PD Dr. Inga Liepelt-Scarfone, Sara Becker, Patricia Sulzer

ACT14820-MOVES-PD: Multizentrische, randomisierte, doppelblinde, placebokontrollierte Studie zur Beurteilung der Wirksamkeit, Sicherheit, Pharmakokinetik und Pharmakodynamik von GZ/SAR402671 bei Patienten mit Morbus Parkinson im Frühstadium, die eine GBA-Mutation oder eine vorspezifizierte Variante tragen
Investigators: Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Thomas Gasser

EPI589-15-002: A phase 2A Safety and Biomarker Study of EPI-589 in Mitochondrial Subtype and Idiophatic Parkinson's Disease Subjects
Investigators: Prof. Dr. Thomas Gasser, Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone

EarlyStim – 10 year post study follow up: The effect of deep brain stimulation of the subthalamic nucleus (STN-DBS) on quality of life in comparison to best medical treatment in patients with complicated Parkinson's disease and preserved psychosocial competence.
Investigators: Prof. Dr. Daniel Weiß

Health-related quality of life in LCIG-treated and LCIG-amenable patients with continued oral dopaminergic therapy: Non-interventional, multicentre observational trial for levodopa-carbidopa gel (LCIG) in Germany – BALANCE
Investigator: Prof. Dr. Daniel Weiß

Clinical Studies

Subthalamic steering for therapy optimization in Parkinson's disease (SANTOP)
Investigator: Prof. Dr. Daniel Weiß

Lateral steering of nigral stimulation for freezing of gait in Parkinson's disease (NIGRASTEER)
Investigator: Prof. Dr. Daniel Weiß

Restitution of oral transport, deglutition, and aspiration with nigral stimulation in Parkinson's disease?
Investigator: Prof. Dr. Daniel Weiß

Combined stimulation of STN and SNr for Resistant Freezing of Gait in Parkinson's disease
Investigators: Prof. Dr. Daniel Weiß, Prof. Dr. Alireza Gharabaghi, Prof. Dr. Rejko Krüger, Dr. Georgios Naros

Sensing of oscillatory subthalamic nucleus field potentials for freezing of gait in Parkinson's disease (SenseFOG)
Investigators: Prof. Dr. Daniel Weiß, Prof. Dr. Alireza Gharabaghi

Physiotherapie bei Hereditärer Spastischer Spinalparalyse (HSP)
Investigators: PD Dr. Rebecca Schüle, Dr. Tim Rattay, Prof. Dr. Ludger Schöls

Natural history in Hereditary Spastic Paraplegia (HSP registry)
Investigators: PD Dr. Rebecca Schüle, Dr. Sarah Wiethoff, Prof. Dr. Ludger Schöls

Phenotype, Genotype and Biomarkers in ALS and Related Disorders (Clinical Research in ALS and Related Disorders for Therapeutic Development Consortium / CReATe)
Investigators: PD Dr. Rebecca Schüle, PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Matthis Synofzik, Dr. Christoph Kessler, Dr. Carlo Wilke

Neuropsychological deficits in genetically defined subtypes of Hereditary Spastic Paraplegia (HSP)
Investigators: PD Dr. Rebecca Schüle, PD Dr. Inga Liepelt

Biomarkers of axonal degeneration in Hereditary Spastic Paraplegia and related diseases
Investigators: PD Dr. Rebecca Schüle, Dr. Christoph Kessler

PROSPAX: an integrated multimodal progression chart in spastic ataxias.
Investigators: Prof. Dr. Matthis Synofzik, PD Dr. Rebecca Schüle

European Friedreich's Ataxia Consortium for Translational Studies (EFACTS)
Investigators: Prof. Dr. Ludger Schöls, Dr. Jennifer Just, Dr. Stefanie Hayer, Prof. Dr. Jörg B. Schulz (Aachen)

ESMI: European Spinocerebellar Ataxia Type 3 / Machado-Joseph Disease Initiative
Investigators: Prof. Dr. Ludger Schöls, Prof. Dr. Matthis Synofzik, Dr. Winfried Ilg

Sporadic ataxia with adult onset: Natural history study (SPORTAX)
Investigators: Prof. Dr. Ludger Schöls, Prof. Dr. Matthis Synofzik, Prof. Dr. Thomas Klockgether (Bonn)

Early onset ataxia: Genetic basis and natural history (EOA)
Investigators: Prof. Dr. Matthis Synofzik, Prof. Dr. Ludger Schöls

Solving the unsolved Rare Diseases (Solve RD)
Investigators: PD Dr. Rebecca Schüle, Prof. Dr. Matthis Synofzik, Prof. Dr. Ludger Schöls

Detecting PreAtaxia: A mixed challenge strategy to identify ataxia at its preclinical stage
Investigators: Prof. Dr. Matthis Synofzik, Dr. Winfried Ilg

SPEECH-Atax: A randomised delayed entry trial of intensive home-based speech therapy in spinocerebellar ataxias
Investigators: Prof. Dr. Matthis Synofzik, Dr. Adam Vogel (University of Melbourne)

Slowing down disease progression in premanifest SCA: a piloting interventional exergame trial (SlowSCA)
Investigators: Prof. Dr. Matthis Synofzik, Dr. Winfried Ilg

Alkahest AKST4290-21: A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of AKST4290 in Subjects with Parkinson's Disease on Stable Dopaminergic Treatment
Investigators: Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Thomas Gasser

Third-Party Funding

ONGOING GRANTS

PPMI – The Parkinson's Progression Markers Initiative
Project leaders: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

PPMI – Amendment: Genetic PPMI
Project leaders: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

PPMI Amendment – Cognitive categorization assessment
Project leader: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Inclusion of Resting State MRI: A Parkinson's Progression Markers Initiative (PPMI) Substudy
Project leader: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

P-PPMI – Prodromal subjects
Project leader: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Observational study in non-demented patients with Parkinson's disease with lowered A-beta1-42 CFS levels
Project leaders: PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Daniela Berg, Prof. Dr. Walter Maetzler
Funding institution: Janssen Pharmaceutica NV

PPMI – Amendment 11
Project leader: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

EPI589-15-002: A phase 2A Safety and Biomarker Study of EPI-589 in Mitochondrial Subtype and Idiophatic Parkinson's Disease Subjects
Project leaders: Prof. Dr. Thomas Gasser, Dr. Kathrin Brockmann, PD.Dr. Inga Liepelt-Scarfone
Funding institution: Edison Pharmaceuticals, Inc.

ACT14820-MOVES-PD: Multizentrische, randomisierte, doppelblinde, placebokontrollierte Studie zur Beurteilung der Wirksamkeit, Sicherheit, Pharmakokinetik und Pharmakodynamik von GZ/SAR402671 bei Patienten mit Morbus Parkinson im Frühstadium, die eine GBA-Mutation oder eine vorspezifizierte Variante tragen
Project leaders: Prof. Dr. Thomas Gasser, Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone
Funding institution: Sanofi-Aventis Deutschland GmbH

Identification of compounds preventing cognitive decline in Parkinson's disease patients using clinically correlated iPS cell models (PDdementia)
Project leaders: Prof. Dr. Thomas Gasser, Dr. Kathrin Brockmann
Funding institution: Federal Ministry of Education and Research (BMBF)

Cognitive stimulation therapy in patients with Parkinson's disease dementia: Efficacy, predictors of positive treatment outcomes and economical aspects
Project leader: PD Dr. Inga Liepelt-Scarfone
Funding institution: University of Cologne

Influence of Inflammatory Profiles on PD Phenotype and Progression
Project leader: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Cognitive-driven ADL impairment as a predictor for Parkinson's disease Dementia (PDD)
Project leader: PD Dr. Inga Liepelt-Scarfone
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Roche Pasadena Studie BP39529: a randomized, double-blind, placebo-controlled, 52-week phase II study to evaluate the efficacy of intravenous RO7046015 (PRX002) in participants with early Parkinson's disease with a 52-week blinded extension Pasadena
Project leaders: Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Thomas Gasser
Funding institution: F. Hoffmann-La Roche AG

PPMI - Amendment 13
Project leader: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Third-Party Funding

ONGOING GRANTS

iMed 2019 - 2020: A Comprehensive Evaluation of Diagnostic and Prognostic Biomarkers in Diabetes Progression and Neurodegeneration
Project leaders: Prof. Dr. Thomas Gasser, Dr. Kathrin Brockmann
Funding institution: German Center for Neurodegenerative Diseases (DZNE)

LRRK2 as a target for the treatment of Parkinson's disease
Project leader: Prof. Dr. Thomas Gasser
Funding institution: German Resarch Foundation (DFG)

Multi-dimensional stratification of Parkinson's disease patients for personalized interventions (PD-Strat)
Project leader: Prof. Dr. Thomas Gasser
Funding institution: Federal Ministry of Education and Research (BMBF)

CENTRE-PD: TWINNING for a Comprehensive Clinical Centre for the Diagnosis and Treatment of Parkinson's Disease (Luxemburg, Oxford, Tübingen)
Project leaders: Prof. Dr. Thomas Gasser, PD Dr. Inga Liepelt-Scarfone
Funding institution: EU

Data Integration for Future Medicine (DIFUTURE).
Project leader: Prof. Dr. Thomas Gasser
Funding institution: Federal Ministry of Education and Research (BMBF)

Understanding the molecular pathogenesis of GBA1-associated Parkinson's disease by using engineered i nduced pluripotent stem cells
Project leader: Jun.-Prof. Dr. Dr. Michela Deleidi
Funding institution: German Research Foundation (DFG)

Investigation of molecular and cellular functions of TDP-43 and FUS, pathorelevant proteins in frontotemporal dementias (FTD) and amyotrophic lateral sclerosis (ALS)
Project leader: Prof. Dr. Philipp Kahle
Funding institution: German Research Foundation (DFG)

Decipher the ComplexIty and Plasticity of Epigenomic Characteristics Under Influence of Environmental Factors in the Pathomechanistic Regulation of Parkinson's Disease (decipherPD): German-Canadian-French Joint Transnational Project „Epigenomics of Complex Diseases"
Project Leader: Prof. Dr. Philipp Kahle
Funding Institution: Federal Ministry of Education and Research (BMBF)

Virtual Institute: RNA dysmetabolism in ALS and FTD
Project leader: Prof. Dr. Philipp Kahle
Funding institution: German Center for Neurodegenerative Diseases (DZNE)

DZNE Crosscutting Project: Posttranslational Modifications of TDP-43
Project leader: Prof. Dr. Philipp Kahle
Funding institution: NOMIS Foundation

GRK 2364: MOMbrane: The Multifaceted Functions and Dynamics of the Mitochondrial Outer Membrane
Project leaders: Dr. Julia Fitzgerald, Prof. Dr. Philipp Kahle
Funding institution: German Research Foundation (DFG)
Research Training Group GRK 2364

Genomweiter RNAi Screen der Parkin abhängigen Eliminierung von depolarisierten Mitochondrien
Project leader: Dr. Sven Geisler
Funding institution: German Research Foundation (DFG)

Identification of modulators of the PINK1/Parkin-dependent mitophagy by siRNA based high-content screening of mitochondrial Parkin translocation
Project leader: Dr. Sven Geisler
Funding institution: ONO Pharmaceuticals

Sensing of oscillatory subthalamic nucleus field potentials for freezing of gait in Parkinson's disease (SenseFOG)
Investigators: Prof. Dr. Daniel Weiß, Prof. Dr. Alireza Gharabaghi
Funding institution: Medtronic

Combined interleaved stimulation of STN and SNr for mobility impairment related to freezing of gait:
A randomized controlled clinical trial
Project leaders: Prof. Dr. Daniel Weiß, Prof. Dr. Alireza Gharabaghi, Prof. Dr. Rejko Krüger, Dr. Georgios Naros
Funding institution: Medtronic

Subthalamic steering for therapy optimization in Parkinson's disease (SANTOP)
Investigator: Prof. Dr. Daniel Weiß
Funding Institution: Abott

Lateral steering of nigral stimulation for freezing of gait in Parkinson's disease (NIGRASTEER)
Investigator: Prof. Dr. Daniel Weiß
Funding Institution: Boston Scientific

Restitution of oral transport, deglutition, and aspiration with nigral stimulation in Parkinson's disease?
Investigator: Prof. Dr. Daniel Weiß
Funding Institution: Michael J. Fox Foundation

ESMI: European Spinocerebellar Ataxia Type 3 / Machado-Joseph Disease Initiative
Project leader: Prof. Dr. Ludger Schöls
Funding institution: EU / BMBF

Translate NAMSE
Principle investigator: Prof. Dr. Ludger Schöls
Funding institution: Innovationsfond

Genetic basis of hereditary spastic paraplegias
Project leaders: Prof. Dr. Ludger Schöls, PD Dr. Rebecca Schüle
Funding institution: HSP Support Group; Germany e.V.

International HSP registry
Project leaders: PD Dr. Rebecca Schüle, Prof. Dr. Ludger Schöls
Funding institution: HSP Selbsthilfegruppe e.V.

E-RARE composite NEURO LIPID: Role of lipid metabolism hereditary spastic paraplegia in the pathogenesis: genes, biomarkers and therapeutic models
Project leader: PD Dr. Rebecca Schüle
Funding institution: EU

Entwicklung und Evaluation eines modularen Physiotherapiekonzepts für Patienten mit Hereditärer Spastischer Spinalparalyse (HSP)
Project leaders: PD Dr. Rebecca Schüle, Prof. Ludger Schöls
Funding institution: Förderverein für HSP-Forschung e.V.

Natural history in Hereditary Spastic Paraplegia
Project leaders: PD Dr. Rebecca Schüle, Prof. Dr. Ludger Schöls
Funding institution: HSP Support Group; Germany e.V.

Clinical Research in ALS and Related Disorders for Therapeutic Development (CReATe) Consortium
Project leader: PD Dr. Rebecca Schüle
Funding institution: National Institutes of Health (NIH/NINDS)

Exome Studies in Hereditary Spastic Paraplegia – Beyond the Exome
Project leader: PD Dr. Rebecca Schüle
Funding institution: National Institutes of Health (NIH/NINDS)

Alliance for Treatment in HSP and PLS
Project leader: PD Dr. Rebecca Schüle
Funding institution: Spastic Paraplegia Foundation Inc.

Validierung eines Physiotherapiekonzeptes für die Hereditäre Spastische Spinalparalyse
Project leader: PD Dr. Rebecca Schüle
Funding: Interdisziplinäres Zentrum für Klinische Studien (IZKF) Tübingen

A randomised delayed entry trial of intensive home-based speech therapy in spinocerebellar ataxias
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: German Heredo-Ataxia Society

Slowing down disease progression in premanifest SCA:
A piloting interventional exergame trial (SlowSCA)
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: Center for Rare Diseases, Tübingen

NCER-PD – National Centre of Excellence in Research on Parkinson's Disease
Project leaders: Prof. Dr. Daniela Berg, PD Dr. Inga Liepelt-Scarfone
Funding institution: Fonds nationale de la Recherche Luxembourg / Université Luxembourg

PREPARE: Preparing therapies for autosomal recessive ataxias
Project leader: Prof. Dr. Matthis Synofzik
Funding Institution: ERARE JTC Grant

Third-Party Funding

ONGOING GRANTS

From structure and function to allosteric targeting of LRRK2-mediated Parkinson's disease (Grant ID: 8068.02)
Project leader: PD Dr. Christian Johannes Gloeckner
Funding Institution: The Michael J. Fox Foundation for Parkinson's Research (MJFF)

EU Horizon 2020 RIA Research and Innovation action: Solving the Unsolved Rare Diseases (Solve RD)
Co-Project leaders: Prof. Dr. Matthis Synofzik, PD Dr. Rebecca Schüle
Funding Institution: EU

Validation of the RADIAL algorithm in an independent early-onset ataxia cohort
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: Actelion Pharmaceuticals

Etablierung einer Messmethode zur quantitativen Erfassung von Bewegungsparametern im Lebensumfeld bei Patienten mit degenerativer Ataxie
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: German Heredo-Ataxia Society

Unravelling progression biomarkers in ARSACS: a multicenter transmodal combined fluid biomarker and magnetic resonance imaging study
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: Fondation de l'Ataxie Charlevoix , Saguenay

Neurofilamente als blutbasierter Progressions- und Therapie-Biomarker für SCA3: eine speziesübergreifende Analyse bei SCA3-Patienten und SCA3-Mäusen
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: Stiftung Hoffnung

Bronya J. Keats International Research Collaboration Award: Speech Trial in FA
Project leaders: Prof. Dr. Matthis Synofzik, Dr. Adam Vogel
Funding institution: Friedreich's Ataxia Research Alliance (FARA)

SpeechAtax: A rater-blinded randomised controlled trial of intensive home-based speech treatment for ataxia
Co-Project leaders: Dr. Adam Vogel, Prof. Dr. Matthis Synofzik
Funding Institution: Australian National Health and Research Council-MRFF-Research Gate

Non-motor features in Hereditary Spastic Paraplegia
Project leaders: Dr. Tim Ratty, PD Dr. Rebecca Schüle, Prof. Dr. Ludger Schöls
Funding institution: HSP Support Group; Germany e.V.

Biomarkers of axonal degeneration in HSP
Project leader: PD Dr. Rebecca Schüle
Funding institution: National Institutes of Health (NIH/NINDS)

Biomarkers of axonal degeneration in HSP
Project leader: PD Dr. Rebecca Schüle
Funding: Australian Research Foundation

Biomarkers of axonal degeneration in HSP
Project leaders: PD Dr. Rebecca Schüle, Prof. Dr. Matthis Synofzik
Funding institution: National Institutes of Health (NIH), HSP Research Foundation

Frequency of putative high-frequency NPC1 and NPC2 variants in neurological and control populations
Project leaders: Prof. Dr. Matthis Synofzik, PD Dr. Rebecca Schüle
Funding institution: Actelion Pharmaceuticals

NEW GRANTS

Fellowship 2019
Project leader: Prof. Dr. Thomas Gasser
Funding institution: Deutsche Parkinson Vereinigung

Molekulare Stratifizierung neurodegenerativer Erkrankungen für Früherkennung und personalisierte Therapie
Project leader: Prof. Dr. Thomas Gasser
Funding institution: Baden-Württemberg, Ministerium für Wissenschaft, Forschung und Kunst

Blood Based Mitochondrial Biomarkers of Parkinson's Disease
Project leader: Dr. Julia Fitzgerald
Co-project leader: Dr. Gerrit Machetanz
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Translational Research in Hereditary Spastic Paraplegias: TreatHSP.net
Project leader: PD Dr. Rebecca Schüle
Funding: Bundesministerium für Bildung und Forschung (BMBF)

From Pathophysiology to Therapeutic Targets: Disturbed Sphingolipid Metabolism in HSP Caused by GBA2 Mutations
Project leader: PD Dr. Rebecca Schüle, Ulrike Ulmer
Funding: Tom Wahlig Foundation

ZSE-DUO
Principle investigator: Prof. Dr. Ludger Schöls
Funding institution: Innovationsfond

Treat-HSP: WP4 iPSC-based neuronal models for biomarker discovery and therapeutic target identification in SPG4 and SPG31
Project leaders: Prof. Dr. Ludger Schöls, Dr. Stefan Hauser
Funding institution: EU/BMBF

Treat-ION: WP2 Investigating the pathophysiology and treatment options of ataxia-associated CACNA1A disease variants in Drosophila melanogaster
Project leader: Prof. Dr. Ludger Schöls
Funding institution: EU/BMBF

Pre-SPG4: Presymptomatic state of Hereditary Spastic Paraplegia Type 4
Project leaders: Dr. Tim Ratty, PD Dr. Rebecca Schüle, Prof. Dr. Ludger Schöls
Funding institution: HSP Support Group; Germany e.V.

GENFI-prox: Defining measures of proximity to symptom onset in the GENetic Frontotemporal dementia Initiative
Project leader: Prof. Dr. Matthis Synofzik
Funding: European Union JPND program/BMBF

PROSPAX: an integrated multimodal progression chart in spastic ataxias (EJP consortium)
Project leaders: Prof. Dr. Matthis Synofzik, PD Dr. Rebecca Schüle
Funding: European Union EJP RD program/DFG

Neurofilament Light Chain as an individual stratification and treatment-response blood biomarker for SCA3
Project leader: Prof. Dr. Matthis Synofzik
Funding: Zentrum für Seltene Erkrankungen, Tübingen

Biomarkers of Axonal Degeneration in HSP
Project leaders: PD Dr. Rebecca Schüle, Prof. Dr. Matthis Synofzik
Funding institution: National Institutes of Health (NIH), HSP Research Foundation

PPMI - Amendment 14 - Digital Biomarker Data Collection
Project leader: Dr. Kathrin Brockmann
Funding Institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Alkahest AKST4290-21: A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of AKST4290 in Subjects with Parkinson's Disease on Stable Dopaminergic Treatment
Project leaders: Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Thomas Gasser
Funding Institution: Alkahest, Inc. / PPD Global Limited

MJFF Global Genetic PD Cohort project
Project leader: Dr. Kathrin Brockmann
Funding Institution: University Medical Center Schleswig-Holstein, Institute of Neurogenetics, Lübeck/ MJFF

Third-Party Funding

NEW GRANTS

Study ALK6021-201: Compensation of Study Start-up Activities
Project leaders: Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Thomas Gasser
Funding Institution: Premier Research SLU

INTEGRative multi-OMICs approaches on iPSC-derived 2D and 3D models to elucidate the role of immune and energy metabolism related genes/ pathways in Amyotrophic Lateral Sclerosis
Project leaders: Dr. Dr. Michela Deleidi
Funding institution: EU ERA-Net 2018

Understanding the molecular pathogenesis of GBA1-associated Parkinson's disease by using engineered induced pluripotent stem cells
Project leader: Dr. Dr. Michela Deleidi
Funding institution: German Research Foundation (DFG)

Study of the role of the GBA-mediated lysosomal impairment in Parkinson's disease
Project leader: Dr. Dr. Michela Deleidi
Funding institution: Fondazione Cariplo

Mapping the glucocerebrosidase interaction network to identify novel therapeutic targets for Parkinson's disease
Project leader: Dr. Dr. Michela Deleidi
Funding institution: Juniorprofessuren-Programm Baden-Württemberg Ministry of Science, Research and the Arts

MiTO-ND: Mitochondrial Neurodegeneration
Project leader: Dr. Dr. Michela Deleidi
Funding institution: Network of Centres of Excellence in Neurodegeneration (COEN)

Interaction between ageing and immune dysfunction in LRRK2 Parkinson's disease
Project leader: Dr. Dr. Michela Deleidi
Funding institution: Network of Centres of Excellence in Neurodegeneration (COEN)

Awards

Sara Becker
Posterpreis für «Most Collaborative Project», CENTRE-PD, Final Meeting in Luxemburg, February 2019

Dr. Kathrin Brockmann
Dingebauer-Preis der Deutschen Gesellschaft für Neurologie aus Mitteln der Dr. Friedrich-Wilhelm und Dr. Isolde Dingebauer-Stiftung für herausragende wissenschaftliche Leistungen in der Erforschung der Parkinsonschen Krankheit und anderer degenerativer Erkrankungen des Nervensystems

Prof. Dr. Philipp Kahle
Teaching Award for the lecture «Neurochemistry and Neurotransmitters"
Graduate School of Cellular & Molecular Neuroscience, Master Class Winter Term 2018/2019

PhD Theses

(Completed in 2019)

Zuzanna Tkaczynska
Association between cognitive impairment and urinary dysfunction in Parkinson's disease
Supervisor: PD Dr. Inga Liepelt-Scarfone

MD Theses

(Completed in 2019)

Aminah Flinsbach
Subjektive Wahrnehmnung prodromaler Zeichen der Parkinson-Krankheit
Supervisor: Prof. Dr. Daniela Berg

Katharina Greulich
Ambulante REM-Schlafableitung bei Patienten mit Hochrisikoprofil für Morbus Parkinson
Supervisor: Prof. Dr. Daniela Berg

Alexandra Gutfreund
Zusammenhang von körperlicher Aktivität und prodromalen Markern für Neurodegeneration
Supervisor: Prof. Dr. Daniela Berg

Jochen Hallwachs
Progression klinischer Marker einer Risikogruppe mit und ohne motorische Frühzeichen eines Morbus Parkinson
Supervisor: Prof. Dr. Daniela Berg

Markus Hobert
The association of cognitive flexibility with prioritization and gait: A cross-sectional cohort study in healthy older adults
Supervisor: Prof. Dr. Walter Mätzler

Daniel Holz
Mild Parkinsonian signs and other risk factors in elderly individuals
Supervisor: Prof. Dr. Daniela Berg

Svenja Hucker
Körperdrehungen bei idiopathischem Parkinsonsyndrom: Assoziation mit Amyloid-ß 1-42 im Liquor
Supervisor: Prof. Dr. Walter Mätzler

Eva Kraus
Validierung und psychometrische Eigenschaften der deutschen Version des SWAL QOL – Ein Fragebogen zur Lebensqualität von Menschen mit Schluckstörungen
Supervisor: Prof. Dr. Matthis Synofzik

Kathrin Prahl
Prodromalphase der Parkinsonerkrankung in unterschiedlichen genetischen Kohorten und deren zeitlicher Verlauf bis zur Konversion
Supervisor: Prof. Dr. Daniela Berg

David Rieger
Transferbewegungen als Prodromalmarker der Parkinsonerkrankung
Supervisor: Prof. Dr. Walter Mätzler

Johannes Sprengel
Herzfrequenzvariabilität in einer Risikokohorte für das idiopathische Parkinsonsyndrom
Supervisor: Prof. Dr. Walter Mätzler

Master Theses

(Completed in 2019)

Olga Böttinger
Everyday Function in Alzheimer's and Parkinson's Patients with Mild Cognitive Impairment
Supervisor: PD Dr. Inga Liepelt-Scarfone

Marie Gauder
Large-scale genomics on data from Hereditary Spastic Paraplegia (HSP) patients
Supervisors: PD Dr. Rebecca Schüle, Dr. Sven Nahnsen

Huong Giang Hoang
Entwicklung und Validierung des Tübinger Alltagsaktivitäten-Inventars für Parkinson (TADIP)
Supervisor: PD Dr. Inga Liepelt-Scarfone

Hannah Lönnecker
Mild Activity of Daily Living Impairment as a Risk Factor for Cognitive Decline in Parkinson's Disease: Follow-up Assessment of the Erlangen Test of Activities of Daily Living, ETAM
Supervisor: PD Dr. Inga Liepelt-Scarfone

Rusheka Maxwell
Epitope Mapping for Milk Fat Globule – EGF Factor 8 Protein (MFG-E8)
Supervisor: Prof. Dr. Philipp Kahle

Bachelor Theses

(Completed in 2019)

Marissa Bentele
What Parkinson's patients need to uphold their activity of daily living function - an anonymous patients survey
Supervisor: PD Dr. Inga Liepelt-Scarfone

Deborah Wolf
Investigation of mechanisms and clinical relevance of TDP-43 acetylation
Supervisor: Prof. Dr. Philipp Kahle

Department of Cognitive Neurology

Clinical and Scientific Staff

HEAD OF THE DEPARTMENT

Prof. Dr. Hans-Peter Thier

GROUP LEADERS/ATTENDING PHYSICIANS

Prof. Dr. Martin Giese
Dr. Daniel Häufle
Prof. Dr. Ziad Hafed
PD Dr. Marc Himmelbach
Prof. Dr. Uwe Ilg
Prof. Dr. Dr. Hans-Otto Karnath
Prof. Dr. Cornelius Schwarz

SCIENTISTS/RESIDENTS

Dr. Alia Benali
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Dr. Shubhodeep Chakrabarti
Dr. Andrea Christensen (until 01/2019)
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Dr. Jonathan Glenday
Dr. Winfried Ilg
Dr. Fatemeh Khademi
Dr. Jindrich Kodl (until 05/2019)
Dr. Albert Mukovskiy
Dr. Christine Pedroarena
Dr. Jörn Pomper
Dipl.-Psych. Maria Rähder
Dr. Vishnudev Ramachandran
Dr. Hamidreza Ramezanpour
Dr. Johannes Rennig
Dr. Dr. Silvia Spadacenta
Dr. Christoph Sperber

PHD DOCTORAL STUDENTS

Matthias Philipp Baumann
Joachim Bellet (until 07/2019)
Ian Chong
Amin Dadashi
Martina Feierabend
Marius Görner
Kalpana Gupta
Mohammad Hovaidi Ardestani
Junya Inoue
Fabio Izzi
Natalie John
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Nicolas Ludolph (until 05/2019)
Tatiana Malevich
Akshay Markanday
Björn Müller (until 08/2019)
Sophia Nestmann
Maysam Oladazimi
Christina Pley (until 05/2019)
Nikhil Prabhu (until 05/2019)
Aikaterini Eleonora Rassia
Julia Riede (until 09/2019)
Hannah Rosenzopf
Manuel Roth
Alessandro Salatiello
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Masih Shafiei
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Ramona Siebert
May Li Silva Prieto
Stefan Smaczny
Oleg Spivak
Jesse St. Amand
Michael Stettler
Katrin Stollenmaier
Nick Taubert
Shengjun Wen
Daniel Wiesen
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MEDICAL DOCTORAL STUDENTS

Maria Sophie Breu
Jacob Clausen
Julia Göddel
Felix Jung
Karla Lauer
Joel C. Marques
Sarah Louisa Merkel
Julia-Katharina Müller
Vincent Müller
Azam Shahvaroughi-Faharani
Dominik-David Wabersich

MASTER/DIPLOMA STUDENTS TEACHERS' & PROJECT THESES

Julian Flink (until 06/2019)
Prerana Kumar
Jana Lang
Christina Langenberger
Cen-Yu Li (until 09/2019)
Jennifer Metzger
Laura Pelzer
Pauline Reichert
Annika Thierfelder
Nora Vidotto
Tong Zhang (until 10/2019)

TECHNICAL STAFF/ ADMINISTRATION

Mirjana Angelovska
Ina Baumeister
Rüdiger Berndt
Dr. Friedemann Bunjes
Ute Großhennig
Dagmar Heller-Schmerold
Björn Müller (until 08/2019)
Ursula Pascht

Clinical Studies

PreAtaxia: Changes in the control of posture and gait in pre-symptomatic and pre-clinical stages of degenerative cerebellar ataxia
Investigators: Dr. Winfried Ilg, Zofia Fleszar, Cornelia Schatton, Prof. Dr. Martin Giese, Prof. Dr. Ludger Schöls, Prof. Dr. Matthis Synofzik

Motor training in pre-clinical stages of degenerative cerebellar ataxia
Investigators: Dr. Winfried Ilg, Cornelia Schatton, Prof. Dr. Martin Giese, Prof. Dr. Ludger Schöls, Prof. Dr. Matthis Synofzik

Examination of the influence of visual feedback on real and pantomimed object use in apraxia
Investigators: Dr. Andrea Christensen, Dr. Winfried Ilg, Prof. Dr. Martin Giese, Prof. Dr. Dr. Hans-Otto Karnath, Christoph Sperber

Examination of the specific influence of areas in the cerebellum on learning to control a dynamical system
Investigators: Nicolas Ludolph, Prof. Dr. Dagmar Timmann, Prof. Dr. Martin Giese, Dr. Winfried Ilg

Videogame-based coordinative training in children with degenerative ataxia
Investigators: Dr. Winfried Ilg, Prof. Dr. Matthis Synofzik, Prof. Dr. Martin Giese, Prof. Dr. Ludger Schöls

Cerebellar ataxia as a loss of precise velocity duration trade-off
Investigators: Julian Meßner, Akshay Markanday, Prof. Dr. Hans-Peter Thier

Neurobiologische Grundlagen der Emotionserkennung aus menschlichen Gangsequenzen bei Gesunden und Patienten mit psychischen Erkrankungen
Investigators: Ann-Christine Ehlis, Dr. Andrea Christensen, Prof. Dr. Andreas Fallgatter, Prof. Dr. Martin Giese

Examination of the influence of the cerebellum on the interaction between action and perception
Investigators: Dr. Winfried Ilg, Dr. Andrea Christensen, Prof. Dr. Martin Giese, Prof. Dr. Dagmar Timmann

Evaluation of object functionality and mechanical reasoning in humans
Investigators: PD Dr. Marc Himmelbach, Prof. Dr. Dr. Hans-Otto Karnath

Affective biological motion recognition in schizophrenia
Investigators: Prof. Dr. Martin Giese, Dr. Andrea Christensen and external partners

'Gaze Following' bei Autismus-Spektrumstörung
Investigators: Manuel Roth, PD Dr. Axel Lindner, Prof. Dr. Hans-Peter Thier

Neuronale Grundlagen der Integration geometrischer und kontextabhängiger Information zur Ausrichtung sozialer Aufmerksamkeit
Investigators: Dr. Peter Dicke, Prof. Dr. Hans-Peter Thier

Pattern recognition in neuro-vestibular diagnostics, a retrospective analysis
Investigators: Dr. Jörn Pomper, Dr. Friedemann Bunjes, Prof. Dr. Hans-Peter Thier

Clinical patterns in patients with dizziness: how much can we gain from subjective reports by questionnaires
Investigators: Dr. Jörn Pomper, Vincent Müller, Dr. Friedemann Bunjes, Prof. Dr. Hans-Peter Thier

Demarcation of subjective value from arousal during action observation in F5 mirror neurons
Investigators: Dr. Jörn Pomper, Dr. Dr. Silvia Spadacenta, Dr. Friedemann Bunjes, Prof. Dr. Martin Giese, Prof. Dr. Hans-Peter Thier

Comparison of action specificity during action execution and observation in F5 mirror neurons
Investigators: Dr. Jörn Pomper, Shengjun Wen, Dr. Dr. Silvia Spadacenta, Dr. Friedemann Bunjes, Prof. Dr. Hans-Peter Thier

MRI substrates of specific neuropsychological dysfunctions within and across FTD genotypes at the presymptomatic and symptomatic disease stage
Investigators: PD Dr. Marc Himmelbach, Prof. Dr. Matthis Synofzik, Prof. Dr. Dr. Hans-Otto Karnath, Dominik-David Wabersich

Treating dystonia by brain stimulation
Investigators: Dr. Ebba Lohmann, PD Dr. Marc Himmelbach, Prof. Dr. Dr. Hans-Otto Karnath

Tremor, Blickbewegungen und neuropsychiatrische Evaluation bei Patienten mit zervikaler Dystonie
Investigators: Prof. Dr. Uwe Ilg, PD Dr. Marc Himmelbach, Dr. Ebba Lohmann

Third-Party Funding

ONGOING GRANTS

CogIMon – Cognitive Interaction in Motion
(EU H2020-ICT-2014 644727)
Project leader: Prof. Dr. Martin Giese
Funding institution: EU

Setup and maintenance of the Section for Computational Sensomotorics
(EXC 307 – CIN)
Project leader: Prof. Dr. Martin Giese
Funding institution: German Research Foundation (DFG)

Neural mechanisms underlying the visual analysis of intent
(RGP0036/2016)
Project leader: Prof. Dr. Martin Giese
Funding institution: Human Frontiers Science Program (HFSP)

CIN Mini Research Training Project
(EXC 3017, Mini_KG-2017-04)
Project leader: Prof. Dr. Martin Giese
Funding institution: German Research Foundation (DFG)

KONSENS-NHE – Entwicklung eines Kontext-sensitiven neural-gesteuerten Handexoskeletts zur Wiederherstellung der Alltagsfähigkeit nach Hirn- und Rückenmarks-verletzungen
Project leaders: Prof. Dr. Martin Giese, Prof. Dr. Surjo Soekadar, Dr. Martin Spüler
Funding institution: Baden-Württemberg Foundation

CRCNS US-German-Israeli Collaborative Research Proposal: Hierarchical Coordination of Complex Actions
(01GQ1704)
Project leader: Prof. Dr. Martin Giese
Funding institution: Federal Ministry of Education and Research (BMBF)

System Human Being: Multi-level modeling in motor control and rehabilitation robotics
(33-7533.-30-20/7/2)
Project leader: Dr. Daniel Häufle
Funding institution: Ministerium für Wissenschaft, Forschung und Kunst Baden Württemberg (MWK)

Third-Party Funding

ONGOING GRANTS

Simulating work-related physical stress at the wrist by a computer model to assess occupational risks for musculoskeletal disorders
(Excellence Initiative / German Research Foundation)
Project leader: Dr. Daniel Häufle
Funding institution: German Research Foundation (DFG)

Entwicklung neuer Lehrkonzepte für die Veranstaltung Biorobotik
(Fonds 1040 und PSP 5150000201 (Zentrale Uni))
Project leader: Dr. Daniel Häufle
Funding institution: Fördermittel Qualitätssicherung Lehre (STURA Tü)

Vorhersage innerer Kräfte in der Wirbelsäule bei Beugebewegungen unterstützt durch ein passives Exoskelett
(Laevo-Studie Advance)
Project leader: Dr. Daniel Häufle
Funding institutions: Audi, BMW, Daimler

Active Perception – Übergangsfinanzierung zur W3-Professur
Project leader: Prof. Dr. Ziad Hafed
Funding institution: Excellence Initiative/ German Research Foundation (DFG)

SFB 1233 – Project 11: Stable vision in the presence of fixational eye movements: where and how is the retinal image jitter compensated?
(DFG SFB 1233, Robust Vision', TP 11)
Project leaders: Prof. Dr. Frank Schaeffel, Prof. Dr. Ziad Hafed
Funding institution: German Research Foundation (DFG)

CIN Mini Research Training Project
(EXC 307, Mini_KG-2017-04)
Project leader: Prof. Dr. Ziad Hafed
Funding institution: German Research Foundation (DFG)

Research Unit FOR 1847 „Primate Systems Neuroscience" – Project A6: Brainstem control of slow ocular drifts during gaze fixation
(HA 6749/2-1)
Project leader: Prof. Dr. Ziad Hafed
Funding institution: German Research Foundation (DFG)

Motor functions and connectivity of the superior colliculus
(HI 1371/1-2)
Project leader: PD Dr. Marc Himmelbach
Funding institution: German Research Foundation (DFG)

Die Architektur und Mechanismen neuropsychologischer Defizite in der MRT-Bildgebung präsymptomatischer und symptomatischer FTD in Abhängigkeit des Genotyps
Promotionsstipendium Domink-David Wabersich
Project leaders: Dominik-David Wabersich, PD Dr. Marc Himmelbach
Funding institution: Sigmund-Kiener-Stiftung

Pupils Lab for Neuroscience
(P1150100)
Project leader: Prof. Dr. Uwe Ilg
Funding institution: Hertie Foundation

Videogame-based coordinative training in children with degenerative ataxia
Project leaders: Dr. Winfried Ilg, Prof. Dr. Matthis Synofzik
Funding institution: Oliver-Vaihinger-Fond, Stiftung für kranke Kinder

Unresolved issues in unilateral neglect: An update
(Nr. 11601161)
Project leaders: Prof. Dr. Dr. Hans-Otto Karnath, Daniel Wiesen
Funding institution: Luxembourg National Research Fund

Benefits of a game-based cognitive interface for knowledge work – from basic effects and neural correlates to neuro-psychological rehabilitation
Project leaders: Prof. Dr. Manuel Ninaus, Prof. Dr. Dr. Hans-Otto Karnath
Funding institution: Leibniz-Institut für Wissensmedien

Individuelle Erholung von kognitiven Defiziten nach Schlaganfall
(KA 1258/23-1)
Project leader: Prof. Dr. Dr. Hans-Otto Karnath
Funding institution: German Research Foundation (DFG)

Facts and Figures: Neurofunktionelle Strukturen und kognitive Prozesse numerischer Größenverarbeitung und arithmetischen Faktenabrufs
(KA 1258/24-1)
Project leader: Prof. Dr. Dr. Hans-Otto Karnath
Funding institution: German Research Foundation (DFG)

The role of neocortex in declarative learning: Function and cellular mechanisms of plasticity in the primary sensorimotor cortex as bases for the conditioning of the blink reflex
(SCHW 577/12-1)
Project leader: Prof. Dr. Cornelius Schwarz
Funding institution: German Research Foundation (DFG)

Psychophysik und Kodierung des vibrotaktilen Signals im taktilen System von Ratte und Mensch
(SCHW 577/14-1)
Project leader: Prof. Dr. Cornelius Schwarz
Funding institution: German Research Foundation (DFG)

Functional modules in primary motor cortex (SCHW 577/16-1)
Project leader: Prof. Dr. Cornelius Schwarz
Funding institution: German Research Foundation (DFG)

CIN Mini Research Training Project (EXC 307, Mini_KG-2017-04)
Project leader: Prof. Dr. Cornelius Schwarz
Funding institution: German Research Foundation (DFG)

Research Unit FOR 1847 "Primate Systems Neuroscience" – Project A3: The role of the cerebellum in the control of saccades as a window into neural mechanisms of movement optimization
(TH 425/13-2)
Project leader: Prof. Dr. Hans-Peter Thier
Funding institution: German Research Foundation (DFG)

Research Unit FOR 1847 "Primate Systems Neuroscience" – Central Office Project
(TH 425/14-2)
Project leader: Prof. Dr. Hans-Peter Thier
Funding institution: German Research Foundation (DFG)

Towards the neural basis of joint attention II
(TH 425/12-2)
Project leader: Prof. Dr. Hans-Peter Thier
Funding institution: German Research Foundation (DFG)

Erfüllung der Aufgaben der Abt. Kognitive Neurologie
(T0013/29010/2016/kg)
Project leader: Prof. Dr. Hans-Peter Thier
Funding institution: Hermann and Lilly Schilling Foundation

NEW GRANTS

Direct recordings of neuronal circuit responses during transcranial magnetic stimulation in rodents
(BE 6084/2-1)
Project leader: Dr. Alia Benali
Funding institution: German Research Foundation (DFG)

Visual functions of the primate superior colliculus
(BO 5681/1-1)
Project leader: Dr. Amarender Reddy Bogadhi
Funding institution: German Research Foundation (DFG)

Saccadic suppression: from zebra fish to primates
(SPP 2205—Special Priority Program) (HA 6749/3-1)
Project leaders: Prof. Dr. Ziad Hafed, Prof. Dr. Aristides Arrenberg
Funding institution: German Research Foundation (DFG)

The contribution of bioinspired morphology to the control of technical movement: quantification with Control Effort and Morphological Computation
Project leader: Dr. Daniel Häufle
Funding institution: International Max-Planck Research School for Intelligent Systems & University of Tübingen

Computational neuroimaging of the human brainstem at 9.4T
(Collaborative Research in Computational Neuroscience Program) (01GQ1805A)
Sub-project leader: PD Dr. Marc Himmelbach
Funding institution: Federal Ministry of Education and Research (BMBF)

Innovative App zur therapeutischen Behandlung des visuellen Neglects
Project leaders: Prof. Dr. Dr. Hans-Otto Karnath, Katrin Flammer
Funding institution: Hector Foundation II gGmbH

Prozessmodell des assoziativen Lernens und zugrundeliegende Plastizität im primär-senorischen Kortex
(SCHW 577/17-1)
Project leader: Prof. Dr. Cornelius Schwarz
Funding institution: German Research Foundation (DFG)

Doctoral scholarship Dana Babin (title to be determined)
Project leader: Prof. Dr. Dr. Hans-Otto Karnath
Funding institution: IZKF, Medical Faculty Tübingen

Awards

Prof. Dr. Ziad Hafed
"EXCEPTIONAL" rating by F1000Prime for Chen et al., Current Biology, 2019 (International)

Prof. Dr. Ziad Hafed
"Editor's Highlights" recommendation by Senior Editor at Nature Communications for Willeke et al., Nature Communications, 2019 (International)

Prof. Dr. Ziad Hafed
Current Biology "Dispatch" about Chen et al., Current Biology, 2019 (International)

Conferences & Workshops

Symposium on Recent Developments in Muscle Modeling
Stuttgart University, 15 February 2019
Organizer: Dr. Daniel Häufle

New Directions in Systems Neuroscience
University of Tübingen, 21-22 March 2019
Organizer: Prof. Dr. Hans-Peter Thier

Lesion Analysis Workshop
University of Tübingen, 12-13 April 2019
Organizer: Prof. Dr. Dr. Hans-Otto Karnath,

PhD Theses

(Completed in 2019)

Simone Behrens (née Mölbert)
Investigating body representation distortions in patient populations using biometric self-avatars in virtual reality
Addendum 2018
Supervisors: Prof. Dr. Dr. Hans-Otto Karnath, Prof. Dr. Katrin Giel

Joachim Bellet
Detecting rare but relevant events in systems neuroscience
Supervisor: Prof. Dr. Ziad Hafed

Nicolas Ludolph
Studying sensorimotor learning as interaction of multiple underlying learning mechanisms
Supervisors: Prof. Dr. Martin Giese, Dr. Winfried Ilg

Maysam Oladazimi
Biomechanical texture coding and transmission of texture information in rat whiskers
Supervisor: Prof. Dr. Cornelius Schwarz

Hamidreza Ramezanpour
The role of the pSTS in gaze following and joint attention
Supervisor: Prof. Dr. Hans-Peter Thier

Christoph Sperber
The neural correlates of apraxia an the role of feedback in apractic errors
Addendum 2018
Supervisor: Prof. Dr. Dr. Hans-Otto Karnath

MD Theses

(Addendum 2018)

Katharina Klaner
Investigating vestibular contributions to perception of body metrics /Untersuchung der Rolle des vestibulären Systems für die Wahrnehmung der Körpermaße
Supervisor: Prof. Dr. Dr. Hans-Otto Karnath

Master Theses

(Completed in 2019)

Matthias Philipp Baumann
Retinal and extra-retinal mechanisms of saccadic suppression
Supervisor: Prof. Dr. Ziad Hafed

Julian Flink
Entwicklung eines VR-Exergames zur Untersuchung und Training der Hand-Auge-Koordination bei neurologischen Patienten
Supervisors: Prof. Dr. Martin Giese, Dr. Winfired Ilg

Junya Inoue
Responses of Purkinje cells to saccades in a fatigue-inducing repetitive eye movement paradigm
Supervisor: Prof. Dr. Hans-Peter Thier

Cen-You Li
A dynamic network for the encoding of muscle synergies
Supervisor: Prof. Dr. Martin Giese

Francesko Molla
Somatovisual integration in the Superior Colliculus: a pilot study
Supervisor: PD Dr. Marc Himmelbach

Jens Seemann
Analysis of real life gait pattern of neurological patients: from meaningful therapy evaluation to real-time movement therapy
Supervisors: Dr. Winfried Ilg, Prof. Dr. Martin Giese

Nora Vidotto
The correlation between decision-making and video-game playing: an eye-tracking analysis of the delay discounting task performance of video-game players and non players
Supervisor: Prof. Dr. Uwe Ilg

Stefano Vrizzi
Predicting finger kinematics from high-density EMG recordings
Supervisor: Prof. Dr. Martin Giese

Tong Zhang
Foveal action for the control of peripheral vision
Supervisor: Prof. Dr. Ziad Hafed

Bachelor Theses

(Completed in 2019)

Tatjana Alf
Lassen sich antizipatorische Augenfolgebewegungen durch Videospiele verändern? Eine Trainingsstudie
Supervisor: Prof. Dr. Uwe Ilg

Berit Böhling
Consequences of video games on saccadic reaction times and the occurence of express saccades
Supervisor: Prof. Dr. Uwe Ilg

Philipp Gackstatter
Virtual Reality
Supervisors: Dr. Winfried Ilg, Prof. Dr. Martin Giese

Isabelle Heinrich
Motorkotrolle menschlicher Bewegung: Simulation muskuloskeletaler Modelle der oberen Extremität
Supervisor: Dr. Daniel Häufle

Oliver Keller
Express-Sakkaden: eine eigene Klasse von Sakkaden oder antizipatorische Sakkaden
Supervisor: Prof. Dr. Uwe Ilg

Jennifer Metzger
Augenfolgebewegungen von Videospielern und Nichtspielern
Supervisor: Prof. Dr. Uwe Ilg

Jan-Oliver Nick
Virtual Reality
Supervisors: Dr. Winfried Ilg, Prof. Dr. Martin Giese

Laura Pelzer
Analyse sakkadischer Latenzen bei Patienten mit zervikaler Dystonie
Supervisor: Prof. Dr. Uwe Ilg

Department of Cellular Neurology

Clinical and Scientific Staff

HEAD OF THE DEPARTMENT

Prof. Dr. Mathias Jucker

HUMBOLDT GUEST PROFESSOR

Prof. Dr. Lary C. Walker

GROUP LEADERS

Prof. Dr. Christoph Laske
(Section of Dementia Research,
jointly with the University Department of Psychiatry
and Psychotherapy)
Dr. Jonas Neher
(Experimental Immunology group, jointly with the
German Center for Neurodegenerative Diseases, DZNE)

SCIENTISTS/RESIDENTS

Anja Apel (until 04/2019)
Melanie Barth
Natalie Beschorner
Desirée Brösamle
Lisa Häsler
Stephan Käser
Dr. Deborah Kronenberg-Versteeg
Ping Liu
Linda Oberle
Dr. Jörg Odenthal
Christine Rother
Dr. Alejandro Ruiz Riquelme
Dr. Angelos Skodras
Dr. Matthias Staufenbiel
Lisa Steinbrecher
Dr. Gaye Tanriöver
Ruth Uhlmann (née Dröge)
Jessica Wagner
Dr. Bettina Wegenast-Braun
Marc Welzer

TECHNICAL STAFF/ ADMINISTRATION

Rawaa Al Shaana
Anika Bühler
Bernadette Graus
Marius Lambert
Ulrike Obermüller
Gisela Rose
Katleen Wild

CLINICAL STAFF

Dr. Anna Hofmann
Dr. Susanne Gräber-Sultan
Elke Kuder-Buletta
Oliver Preische

MASTER STUDENTS

Carina Bergmann
Bernadette Dahl
Marc Welzer

Clinical Studies

DELCODE (DZNE – Longitudinal Cognitive Impairment and Dementia Study): The study focuses on the characterization of subjective cognitive decline (SCD) in patients recruited from memory clinics at the DZNE sites in Germany. In addition, individuals with amnestic mild cognitive impairment (MCI), mild Alzheimer's disease (AD), first-degree relatives of AD patients, and cognitively unimpaired control subjects are studied. The total number of subjects to be enrolled is 1000.
Investigator: Prof. Dr. Christoph Laske

TAURIEL Study: A Phase II, Multicenter, Randomized, Double-blind, Placebo-controlled, Parallel-group, Efficacy and Safety Study of MTAU9937A in Patients with Prodromal to Mild Alzheimer's Disease: MTAU9937A is a pan-tau IgG4 monoclonal antibody that targets tauopathies including Alzheimer`s disease (AD). MTAU9937A is designed to bind and intercept all extracellular tau isoforms, in order to stop or slow cell-to-cell spread and propagation of tau toxicity and pathology throughout cortical and sub-cortical networks. This international multi-center study sponsored by Genentech Inc. examines the efficacy and safety of MTAU9937A in patients with prodromal to mild AD.
Investigator: Prof. Dr. Christoph Laske

HARMONY Study: A Double-blind, Placebo-controlled, Relapse Prevention Study of Pimavanserin for the Treatment of Hallucinations and Delusions Associated With Dementia-related Psychosis: Pimavanserin is an atypical antipsychotic which was approved in April 2016 in the United States for the treatment of hallucinations and delusions associated with Parkinson`s disease psychosis. Studies have also been conducted in Alzheimer`s disease psychosis and schizophrenia. The present study examines the efficacy and safety of Pimavanserin for the treatment of hallucinations and delusions in patients with different types of dementia. This international multi-center study is sponsored by ACADIA Pharmaceuticals Inc.
Investigators: Prof. Dr. Christoph Laske, Oliver Preische, Elke Kuder-Buletta

Third-Party Funding

ONGOING GRANTS

Generation of APP transgenic mice
Project leader: Prof. Dr. Mathias Jucker
Funding institution: Koesler

Donation for Alzheimer's biomarker research
Project leader: Prof. Dr. Mathias Jucker
Funding institution: Anonymous donor

Characterization of early proteopathic seeds in Alzheimer's disease
Project leader: Prof. Dr. Mathias Jucker
Funding institution: Academy of Sciences and Humanities in Hamburg

Award for medical research
Project leader: Prof. Dr. Mathias Jucker
Funding institution: MetLife Foundation USA

Donation for Alzheimer research and DIAN (Dominantly Inherited Alzheimer Network)
Project leader: Prof. Dr. Mathias Jucker
Funding institution: Anonymous donor

Intersite research grant DIAN (Tübingen site)
Project leader: Prof. Dr. Mathias Jucker
Funding institution: German Center for Neurodegenerative Diseases (DZNE)

Epigenetic microglial memory of peripheral inflammation as a non-genetic modifier of neurological disease (Az. 10.15.2.038MN)
Project leader: Dr. Jonas Neher
Funding institution: Fritz Thyssen Stiftung

Mechanisms of Neuronal Dysfunction and Death in Sepsis-induced Cognitive Impairment (NE 1951/4-1)
Project leader: Dr. Jonas Neher
Funding institution: German Research Foundation (DFG)

Single cell transcriptomics for the identification of microglial responder subtypes in Alzheimer's disease
Project leader: Dr. Jonas Neher
Funding institution: ONO Pharmaceuticals (Osaka, Japan)

Verbundprojekt Sonderlinie Medizin Nr. 2440-0-0: Neuroinflammation bei der Neurodegeneration
Project leader: Prof. Dr. Mathias Jucker
Funding institution: Ministerium für Wissenschaft, Forschung und Kunst, Baden-Württemberg

JPND - REfrAME: Pathway complexities of protein misfilling in neurodegenerative diseases: a novel approach to risks evaluation and model development (01ED1607)
Project leader: Prof. Dr. Mathias Jucker
Funding institution: BMBF: EU Joint Programme – Neurodegenerative Disease Research (JPND)

IMPRiND – Inhibiting Misfolded protein Propagation in Neurodegenerative Diseases
Project leader: Prof. Dr. Mathias Jucker
Funding institution: EU Joint Programme – IMI (Innovative Medicines Initiative)

EQIPD (EUROPEAN QUALITY IN PRECLINICAL DATA)
Project leader: Prof. Dr. Mathias Jucker
Funding institution: EU Joint Programme – IMI (Innovative Medicines Initiative)

PHD scholarship
Project leader: Ping Liu
Funding institution: China Scholarship Council

Mode of microglial proliferation in ageing and disease
Project leader: Dr. Deborah Kronenberg-Versteeg
Funding institution: Alexander von Humboldt Foundation

IZKF Stipend "Mechanisms of Neuronal Dysfunction and Death in Sepsis-induced Cognitive Impairment"
Project leaders: Linda Oberle, Dr. Jonas Neher
Funding institution: IZKF Promotionskolleg

DIAN: Dominantly Inherited Alzheimer Network – Subward Agreement
Project leader: Prof. Dr. Mathias Jucker
Funding institution: NIH / Washington University

NEW GRANTS

Structural basis of biologically active Abeta-conformers
Project leader: Prof. Dr. Mathias Jucker
Funding institution: German Research Foundation (DFG)

EpiROM: Epigenetic reprogramming of microglia across neurodegenerative diseases
Project leader: Dr. Jonas Neher
Funding institution: Baden-Württemberg-Stiftung

Extension: Single cell transcriptomics for the identification of microglial responder subtypes in Alzheimer's disease
Project leader: Dr. Jonas Neher
Funding institution: ONO Pharmaceuticals (Osaka, Japan)

Understanding molecular biomarker changes in Alzheimer's disease using genetically-defined mouse models
Project leaders: Prof. Dr. Mathias Jucker, Stephan Käser
Funding institution: Cure Alzheimer's Fund

Donation for Alzheimer Research and DIAN
Project leader: Prof. Dr. Mathias Jucker
Funding institution: Sigrid-Marx-Stiftung

Longitudinal Study of Individuals that carry Dominantly Inherited Alzheimer's Disease Mutations
Project leader: Prof. Dr. Mathias Jucker
Funding institution: Deutsches Zentrum Neurodegenerativer Erkrankungen (DZNE)

Medical Theses

(Completed in 2019)

Linda Oberle
Mechanisms of Neuronal Dysfunction and Death in Sepsis-induced Cognitive Impairment
Supervisor: Dr. Jonas Neher

Master Theses

(Completed in 2019)

Janine Brandes
Lewy-body-like pathology after injection of alpha-synuclein oligomeric species in vivo and in organotypic slice cultures
Supervisor: Prof. Dr. Mathias Jucker

Carina Bergmann
Characterisation of Aß seeds in Alzheimerr's disease
Supervisor: Prof. Dr. Mathias Jucker

Marc Welzer
Establishment of long-term live-cell imaging in organotypic brain slice cultures
Supervisors: Prof. Dr. Mathias Jucker, Dr. Angelos Skodras

Bernadette Dahl
Age asymmetry in proliferating microglia? Identifying mother and daughter cells via the mother centriole marker ninein
Supervisors: Prof. Dr. Mathias Jucker, Dr. Bettina Wegenast-Braun, Dr. Angelos Skodras

Julia Koppelmann
The pathobiology of the Medin amyloid in the brain vasculature
Supervisor: Dr. Jonas Neher

Awards

Prof. Dr. Mathias Jucker
Peter-Hemmerich-Gedächtnisvorlesungsreihe, Konstanz

Dr. Jonas Neher
Teaching Award 2019
Selected by the students of the Graduate Training Centre, Tuebingen

Dr. Karoline Degenhardt
Hertie Paper of the Year Award 2019

Conferences & Workshops

4th DIAN Family Meeting in Germany
Würzburg, 22 Nov – 23 Nov 2019
Coordinators: Prof. Dr. Mathias Jucker, Dr. Susanne Gräber-Sultan

Guest Researcher

Giulia Salvadori
Awardee of an Erasmus-traineeship, University of Trieste, Italy
Host: Prof. Dr. Mathias Jucker

Independent Research Groups

Molecular Brain Development

Clinical and Scientific Staff

HEAD OF THE RESEARCH GROUP

Dr. Simone Mayer

SCIENTISTS/RESIDENTS

Dr. Shokoufeh Khakipoor
Kseniia Sarieva

TECHNICAL STAFF/ADMINISTRATION

Elisabeth Gustafsson

Conferences & Workshops

Symposium at the 13th Göttingen Meeting of the German Neuroscience Society
Göttingen, March 2019
Coordinator: Dr. Simone Mayer

Guest Researcher

Daniel A. Cozetto
Brazil
Host: Dr. Simone Mayer

Physiology of Learning and Memory

Clinical and Scientific Staff

HEAD OF THE RESEARCH GROUP

Prof. Dr. Ingrid Ehrlich

SCIENTISTS/RESIDENTS

Dr. Ayla Aksoy-Aksel
Dr. Julien Genty

TECHNICAL STAFF/ADMINISTRATION

Andrea Gall

MASTER STUDENTS

Martin Zeller (until 4/2019)
Marlly Achury (until 11/2019)

INTERNSHIPS

Johannes Ungermann
(Biology, Unversity of Tübingen)

Third-Party Funding

ONGOING GRANTS

Plasticity of intercalated cell microcircuits in fear learning
Project leader: Prof. Dr. Ingrid Ehrlich
Funding institution: German Research Foundation (DFG)
(EH197/3-1)

NEW GRANTS

Amygdala synaptic neuromodulatory mechanisms and role of mGlu4 in Autism Spectrum Disorders
Project leader: Prof. Dr. Ingrid Ehrlich
Funding institution: Federal Ministry for Education and Research (BMBF)
(ERA-NET Neuron Project Magnolia)

Master Theses

(Completed in 2019)

Martin Zeller
Amygdala intercalated neurons exert competitive inhibitory control over the central amygdala
Biology Program, University of Tübingen
Supervisor: Prof. Dr. Ingrid Ehrlich

Marlly Achury
Implications of intercalate cell cluster connectivity with non-lemniscal thalamus and dopaminergic midbrain-
Graduate Training Center of Neuroscience, University of Tübingen
Supervisor: Prof. Dr. Ingrid Ehrlich

Guest Researcher

Dr. Claire Terrier
Tours University , France
Host: Prof. Dr. Ingrid Ehrlich

Neural Dynamics and Magnetoencephalography

Clinical and Scientific Staff

HEAD OF THE RESEARCH GROUP

Prof. Dr. Markus Siegel

SCIENTISTS/RESIDENTS

Prof. Dr. Christoph Braun
Dr. David Hawellek (until 06/2019)
Dr. Qinglin Li
Dr. Constantin von Nicolai
Dr. Nima Noury
Dr. Andreas Schindler (until 09/2019)
Dr. Yiwen Li Hegner

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PHD DOCTORAL STUDENTS

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Davide Sometti
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Karolna Poczopko
Chiara Ballan
Lorenzo Semeia
SangYeob Baek
Giuliano Giari
Antonino Grecco

Clinical Studies

Imaging cortico-cortical interactions in early stage multiple sclerosis
Investigators: Marcus Siems, Dr. Johannes Tünnerhoff, Prof. Ulf Ziemann, Prof. Dr. Markus Siegel

Acting in space and time – two functions of the same neural circuits?
Investigators: Dr. Qinglin Li, Dr. David Hawellek, Prof. Dr. Markus Siegel

Network biomarkers of fractal and oscillatory cortical activity
Investigators: Andrea Ibarra Chaoul, Prof. Dr. Markus Siegel

Cortico-subcortical interactions during flexible working memory
Investigators: Dr. Constantin von Nicolai, Prof. Dr. Markus Siegel

Non-invasive entrainment of cortical oscillations using transcranial alternating current stimulation (tACS)
Investigators: Dr. Nima Noury, Prof. Dr. Markus Siegel

Oscillatory waveforms as spectral biomarkers of neuronal circuit interactions
Investigators: Janet Giehl, Prof. Dr. Markus Siegel

Non-invasive decoding of abstract choices using magneto-encephalography (MEG)
Investigators: Florian Sandhäger, Prof. Dr. Markus Siegel

Measuring cortical and peripheral neural signals with optically pumped magnetometers
Investigators: Dr. Philip Broser, Prof. Dr. Markus Siegel, Prof. Dr. Christoph Braun

Processing of verbs and nouns studied in semantically congruent and incongruent homonyms
Investigators: Giuliano Giari, Dr. Francesca Postiglione, Prof. Dr. Gabriele Miceli

Manipulation of the somatosensory coordinate system by vibratory stimulation of the neck
Investigators: Roberta Calce, Dr. Daniel Wiesen, Prof. Dr. Dr. Hans-Otto Karnath, Prof. Dr. Christoph Braun

Network analysis in generalized epilepsy
Investigators: Christina Stier, Adham Elshahabi, Dr. Yiwen Li Hegner, Prof. Dr. Christoph Braun, Prof. Dr. Niels Focke, Prof. Dr. Holger Lerche

Reading of German words and Chinese symbols in dyslexic and normal reading children
Investigators: Giulia Righetti, Prof. Dr. Christoph Braun, Prof. Dr. Susanne Trauzettel-Klosinski

Localizing spontaneous memory reprocessing during human sleep
Investigators: Lea Himmer, Zoé Bürger, Leonie Fresz, Janina Maschke, Lore Wagner, Dr. Svenja Brodt, Prof. Dr. Monika Schönauer, Prof. Dr. Christoph Braun, Prof. Dr. Steffen Gais

Biological motion and social cognition
Investigators: Sara Insernia, Dr. Alexander Sokolov, Prof. Dr. Christoph Braun, Prof. Dr. Marina Pavlova

Spatial hearing in cochlear impant users: a multisensory training approach
Investigators: Giulia Righetti, SangYeob Baek, Lorenzo Semeia, Eusebia Schäfer, Karola Schiele, Bianca Layer, Dr. Li Hegner, Prof. Dr. Christoph Braun

Neural Dynamics and Magnetoencephalography

Clinical Studies

Neurophysiological assessment of the subcortical and cortical processiong in the auditory system
Investigators: Verónica Cuevas Villanueva, Dr. Yiwen Li Hegner, Prof. Dr. Christoph Braun

Effects of pro- and antibiotics on cortical network dynamics
Investigators: Davide Sometti, Prof. Dr. Christoph Braun, Prof. Dr. Paul Enck

Development of a therapeutic vest for the prophylaxis of falling by training proprioception
Investigators: Giuliano Giari, Dr. Eva Glink, Dr. Yiwen Li Hegner, Prof. Dr. Christoph Braun

A tactile virtual reality for the psychophysical and neuroimaging studies of active and passive touch
Investigators: Dr. Arindam Bhattacharjee, Dr. Diljit Singh Kajal, Prof. Dr. Cornelius Schwarz, Prof. Dr. Christoph Braun

Inhibition in the somatosensory system: a combined neuropharmacological and neuroimaging approach
Investigators: Chiara Fioravanti, Dr. Diljit Singh Kajal, Prof. Dr. Ulf Ziemann, Prof. Dr. Christoph Braun

Third-Party Funding

ONGOING GRANTS

ERC Starting grant:
Spectral fingerprints of neuronal interactions
Project leader: Prof. Dr. Markus Siegel
Funding institution: European Research Council (ERC)

SFB 1233 – project 7:
Large-scale neuronal interactions during natural vision
(DFG SFB 1233 , Robust Vision', TP 7)
Project leader: Prof. Dr. Markus Siegel
Funding institution: German Research Foundation (DFG)

Large-scale neuronal interactions –
bridging funds W3 professorship
Project leader: Prof. Dr. Markus Siegel
Funding institution: Excellence Initiative/
German Research Foundation (DFG)

Development of a therapeutic vest for the prophylaxis of falling by training proprioception
Project leaders: Prof. Dr. Markus Siegel, Prof. Dr. Christoph Braun
Funding institution: German Ministry for Economics (BMBF)

Psychophysics and coding of vibrotactile signals in the human fingertip-related tactile system
Project leaders: Prof. Dr. Cornelius Schwarz, Prof. Dr. Christoph Braun
Funding institution: German Research Foundation (DFG)

NEW GRANTS

ERC Consolidator grant:
Neuronal information through neuronal interactions
Project leader: Prof. Dr. Markus Siegel
Funding institution: European Research Council (ERC)

Master Theses

(Completed in 2019)

Fabio Damiani
Visual and Electrical Entrainment of Neural Oscillations
Supervisor: Prof. Dr. Markus Siegel

Verónica Cuevas Villanueva
Neurophysiological assessment of the subcortical-cortical auditory pathway
Supervisor: Prof. Dr. Christoph Braun

Chiara Ballan
Effects of antibiotics on brain networks
Supervisor: Prof. Dr. Christoph Braun

Conferences & Workshops

2019 Tübingen Systems Neuroscience Symposium (SNS)
Tübingen, 26-27 September 2019
Coordinator: Prof. Dr. Markus Siegel

HIH Management

Management Staff

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Brigitte Hoffmann

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Natalie Adler (Student Assistance)
Johannes Gläser (Student Assistance)

COORDINATOR TÜBINGEN NEURO CAMPUS

Silke Dutz

Publications and Student Training in 2019

List of Publications in 2019

(In alphabetical order)

Peer-Reviewed Articles

Abdelhak A, Hottenrott T, Morenas-Rodriguez E, Suarez-Calvet M, Zettl UK, Haass C, Meuth SG, Rauer S, Otto M, Tumani H, Huss A (2019) Glial Activation Markers in CSF and Serum From Patients With Primary Progressive Multiple Sclerosis: Potential of Serum GFAP as Disease Severity Marker? *Frontiers in Neurology* 10:280

Agalliu I, Ortega RA, San Luciano M, Mirelman A, Pont-Sunyer C, **Brockmann K**, Vilas D, Tolosa E, **Berg D**, Waro B, Glickman A, Raymond D, Inzelberg R, Ruiz-Martinez J, Mondragon E, Friedman E, Hassin-Baer S, Alcalay RN, Mejia-Santana H, Aasly J, Foroud T, Marder K, Giladi N, Bressman S, Saunders-Pullman R (2019) Cancer outcomes among Parkinson's disease patients with leucine rich repeat kinase 2 mutations, idiopathic Parkinson's disease patients, and nonaffected controls. *Movement Disorders* 34:1392-98

Albrecht F, Mueller K, Ballarini T, Lampe L, Diehl-Schmid J, Fassbender K, Fliessbach K, Jahn H, Jech R, Kassubek J, Kornhuber J, Landwehrmeyer B, Lauer M, Ludolph AC, Lyros E, Prudlo J, Schneider A, **Synofzik M**, Wiltfang J, Danek A, Otto M, Schroeter ML, Anderl-Straub S, Bruggen K, Fischer M, Forstl H, Hammer A, Homola G, Just W, Levin J, Marroquin N, Marschhauser A, Nagl M, Oberstein T, Polyakova M, Pellkofer H, Richter-Schmidinger T, Rossmeier C, Schuemberg K, Semler E, Spottke A, Steinacker P, Thone-Otto A, Uttner I, Zech H, Consortium F (2019) Unraveling corticobasal syndrome and alien limb syndrome with structural brain imaging. *Cortex* 117:33-40

Almekhlafi MA, **Poli S**, Goyal M, Demchuk AM (2019) Therapeutic hypothermia in stroke: Quo Vadis? *Brain Circulation* 5:157-59

Amara AW, Chahine L, Seedorff N, Caspell-Garcia CJ, Coffey C, Simuni T, Parkinsons Progression Markers Initiative (**Berg D, Brockman K, Wurster I** et al; 2019) Self-reported physical activity levels and clinical progression in early Parkinson's disease. *Parkinsonism & Related Disorders* 61:118-25

Amaral T, Tampouri I, Eigentler T, Keim U, Klumpp B, Heinrich V, Zips D, Paulsen F, **Gepfner-Tuma I**, Skardelly M, Tatagiba M, **Tabatabai G**, Garbe C, Forschner A (2019) Immunotherapy plus surgery/radiosurgery is associated with favorable survival in patients with melanoma brain metastasis. *Immunotherapy* 11:297-309

Amin M, Bakhit Y, **Koko M**, Ibrahim MOM, Salih MA, Ibrahim M, Seidi OA (2019) Rare variant in LAMA2 gene causing congenital muscular dystrophy in a Sudanese family. A case report. *Acta myologica : myopathies and cardiomyopathies : official journal of the Mediterranean Society of Myology* 38:21-4

Annak O, Heidegger T, Walter C, Deichmann R, Noth U, Hansen-Goos O, **Ziemann U**, Lotsch J (2019) Effects of continuous theta-burst stimulation of the primary motor and secondary somatosensory areas on the central processing and the perception of trigeminal nociceptive input in healthy volunteers. *Pain* 160:172-86

Bachoud-Levi AC, Ferreira J, Massart R, Youssov K, Rosser A, Busse M, Craufurd D, **Reilmann R**, De Michele G, Rae D, Squitieri F, Seppi K, Perrine C, Scherer-Gagou C, Audrey O, Verny C, Burgunder JM (2019) International Guidelines for the Treatment of Huntington's Disease. *Frontiers in Neurology* 10:18

Balslev D, Odoj B (2019) Distorted gaze direction input to attentional priority map in spatial neglect. *Neuropsychologia* 131:119-28

Barbe MT, Tonder L, Krack P, Debu B, Schupbach M, Paschen S, Dembek TA, Kuhn AA, Fraix V, Brefel-Courbon C, Wojtecki L, Maltete D, Damier P, Sixel-Doring F, **Weiss D**, Pinsker M, Witjas T, Thobois S, Schade-Brittinger C, Rau J, Houeto JL, Hartmann A, Timmermann L, Schnitzler A, Stoker V, Vidailhet M, Deuschl G, Knudsen K, Volkmann J, Falk D, Mehdorn M, Halbig TD, Hesekamp H, Navarro SM, Meier N, Agid Y, Seigneuret E, Kistner A, Chaynes P, Ory-Magne F, Bataille B, Raoul S, Regis JM, Mertens P, Helwig D, Oertel WH, Maarouf M, Fink GR, Kupsch A, Gruber D, Schneider GH, Vesper J, Gharabaghi A, **Kruger R**, Amtage F, Grp ES Deep Brain Stimulation for Freezing of Gait in Parkinson's Disease With Early Motor Complications. *Movement Disorders* 10.1002/mds.278929

Barthel FP, Johnson KC, Varn FS, Moskalik AD, Tanner G, Kocakavuk E, Anderson KJ, Abiola O, Aldape K, Alfaro KD, Alpar D, Amin SB, Ashley DM, Bandopadhayay P, Barnholtz-Sloan JS, Beroukhim R, Bock C, Brastianos PK, Brat DJ, Brodbelt AR, Bruns AF, Bulsara KR, Chakrabarty A, Chakravarti A, Chuang JH, Claus EB, Cochran EJ, Connelly J, Costello JF, Finocchiaro G, Fletcher MN, French PJ, Gan HK, Gilbert MR, Gould PV, Grimmer MR, Iavarone A, Ismail A, Jenkinson MD, Khasraw M, Kim H, Kouwenhoven MCM, LaViolette PS, Li MH, Lichter P, Ligon KL, Lowman AK, Malta TM, Mazor T, McDonald KL, Molinaro AM, Nam DH, Nayyar N, Ng HK, Ngan CY, Niclou SP, Niers JM, Noushmehr H, Noorbakhsh J, Ormond DR, Park CK, Poisson LM, Rabadan R, Radlwimmer B, Rao G, Reifenberger G, Sa JK, Schuster M, Shaw BL, Short SC, Smitt PAS, Sloan AE, Smits M, Suzuki H, **Tabatabai G**, Van Meir EG, Watts C, Weller M, Wesseling P, Westerman BA, Widhalm G, Woehrer A, Yung WKA, Zadeh G, Huse JT, De Groot JF, Stead LF, Verhaak RGW, Consortium G (2019) Longitudinal molecular trajectories of diffuse glioma in adults. *Nature* 576:112-20

Bayat A, Knaus A, Juul AW, Dukic D, Gardella E, Charzewska A, Clement E, Hjalgrim H, Hoffman-Zacharska D, Horn D, Horton R, Hurst JA, Josifova D, Larsen LHG, Lascelles K, Obersztyn E, Pagnamenta A, Pal DK, Pendziwiat M, Ryten M, Taylor J, Vogt J, **Weber Y**, Krawitz PM, Helbig I, Kini U, Moller RS, Ddd Study G (2019) PIGT-CDG, a disorder of the glycosylphosphatidylinositol anchor: description of 13 novel patients and expansion of the clinical characteristics. *Genetics in Medicine* 21:2216-23

Behling F, Ries V, Skardelly M, **Gepfner-Tuma I**, Schuhmann M, Ebner FH, **Tabatabai G**, Bornemann A, Schittenhelm J, Tatagiba M (2019) COX2 expression is associated with proliferation and tumor extension in vestibular schwannoma but is not influenced by acetylsalicylic acid intake. *Acta Neuropathologica Communications* 7:10

Behnke S, Pilotto A, **Liepelt-Scarfone I**, Yilmaz R, Pausch C, Dieterich S, Burmann J, Spiegel J, Dillmann U, Unger M, Posner I, **Berg D** (2019) Third ventricular width assessed by transcranial ultrasound correlates with cognitive performance in Parkinson's disease. *Parkinsonism & Related Disorders* 66:68-73

Belardinelli P, Azodi-Avval R, Ortiz E, Naros G, Grimm F, **Weiss D**, Gharabaghi A (2019) Intraoperative localization of spatially and spectrally distinct resting-state networks in Parkinson's disease. *Journal of Neurosurgery* 1:1-9

Belardinelli P, Biabani M, Blumberger DM, Bortoletto M, Casarotto S, David O, **Desideri D**, Etkin A, Ferrarelli F, Fitzgerald PB, Fornito A, **Gordon PC**, Gosseries O, Harquel S, Julkunen P, Keller CJ, Kimiskidis VK, Lioumis P, Miniussi C, Rosanova M, Rossi S, Sarasso S, Wu W, **Zrenner C**, Daskalakis ZJ, Rogasch NC, Massimini M, **Ziemann U**, Ilmoniemi RJ (2019) Reproducibility in TMS-EEG studies: A call for data sharing, standard procedures and effective experimental control. *Brain Stimulation* 12:787-90

Bellet ME, **Bellet J**, Nienborg H, **Hafed ZM**, Berens P (2019) Human-level saccade detection performance using deep neural networks. *Journal of Neurophysiology* 121:646-61

Berghuis B, Stapleton C, Sonsma ACM, Hulst J, de Haan G-J, Lindhout D, Demurtas R, Krause R, Depondt C, Kunz WS, Zara F, Striano P, Craig J, Auce P, Marson AG, Stefansson H, O'Brien TJ, Johnson MR, Sills GJ, **Wolking S, Lerche H**, Sisodiya SM, Sander JW, Cavalleri GL, Koeleman BPC, McCormack M, Epi PGXC (2019) A genome-wide association study of sodium levels and drug metabolism in an epilepsy cohort treated with carbamazepine and oxcarbazepine. *Epilepsia Open* 4:102-09

Bergmann TO, Lieb A, Zrenner C, Ziemann U (2019) Pulsed Facilitation of Corticospinal Excitability by the Sensorimotor mu-Alpha Rhythm. *Journal of Neuroscience* 39:10034-43

Blauwendraat C, Heilbron K, Vallerga CL, Bandres-Ciga S, von Coelln R, Pihlstrom L, **Simon-Sanchez J, Schulte C**, Sharma M, Krohn L, Siitonen A, Iwaki H, Leonard H, Noyce AJ, Tan M, Gibbs JR, Hernandez DG, Scholz SW, Jankovic J, Shulman LM, Lesage S, Corvol JC, Brice A, van Hilten JJ, Marinus J, Eerola-Rautio J, Tienari P, Majamaa K, Toft M, Grosset DG, **Gasser T, Heutink P**, Shulman JM, Wood N, Hardy J, Morris HR, Hinds DA, Gratten J, Visscher PM, Gan-Or Z, Nalls MA, Singleton AB, andMe Res T, Ipdgc (2019) Parkinson's disease age at onset genome-wide association study: Defining heritability, genetic loci, and alpha-synuclein mechanisms. *Movement Disorders* 34:866-75

Blum D, Liepelt-Scarfone I, Berg D, **Gasser T**, la Fougere C, Reimold M, Alzheimers Dis N (2019) Controls-based denoising, a new approach for medical image analysis, improves prediction of conversion to Alzheimer's disease with FDG-PET. *European Journal of Nuclear Medicine and Molecular Imaging* 46:2370-79

Bohmann FO, Kurka N, de Rochemont RD, Gruber K, Guenther J, Rostek P, Rai HK, Zickler P, Ertl M, Berlis A, **Poli S, Mengel A**, Ringleb P, Nagel S, Pfaff J, Wollenweber FA, Kellert L, Herzberg M, Koehler L, Haeusler KG, Alegiani A, Schubert C, Brekenfeld C, Doppler CEJ, Onur OA, Kabbasch C, Manser T, Pfeilschifter W, Investigators ST (2019) Simulation-Based Training of the Rapid Evaluation and Management of Acute Stroke (STREAM)-A Prospective Single-Arm Multicenter Trial. *Frontiers in Neurology* 10:969

Bosselmann C, Poli S (2019) Sonographic features of carotid artery dissection due to extension of aortic dissection: a case report. *Ultrasound Journal* 11:4

Bosselmann C, Zurloh J, **Stefanou MI, Stadler V, Weber Y, Lerche H, Poli S, Ziemann U, Mengel A** (2019) Delirium Screening in Aphasic Patients With the Intensive Care Delirium Screening Checklist (ICDSC): A Prospective Cohort Study. *Frontiers in Neurology* 10:5

Brandsma R, Verschuuren-Bemelmans CC, Amrom D, Barisic N, Baxter P, Bertini E, Blumkin L, Brankovic-Sreckovic V, Brouwer OF, Burk K, Catsman-Berrevoets CE, Craiu D, de Coo IFM, Gburek J, Kennedy C, de Koning TJ, Kremer HPH, Kumar R, Macaya A, Micalizzi A, Mirabelli-Badenier M, Nemeth A, Nuovo S, Poll-The B, Lerman-Sagie T, Steinlin M, **Synofzik M**, Tijssen MAJ, Vasco G, Willemsen M, Zanni G, Valente EM, Boltshauser E, Sival DA (2019) A clinical diagnostic algorithm for early onset cerebellar ataxia. *European Journal of Paediatric Neurology* 23:692-706

Brittain C, McCarthy A, Irizarry MC, McDermott D, Biglan K, Hoglinger GU, Lorenzl S, del Ser T, Boxer AL, AL-108-231 Study Group, PROSPERSA Investigators, 4RNTI-1authors, Tau Restoration on PSP (TAUROS) Investigators (**Berg D, Maetzler W** et al; 2019) Severity dependent distribution of impairments in PSP and CBS: Interactive visualizations. *Parkinsonism & Related Disorders* 60:138-45

Brueggen K, Dyrba M, Cardenas-Blanco A, Schneider A, Fliessbach K, Buerger K, Janowitz D, Peters O, Menne F, Priller J, Spruth E, Wiltfang J, Vukovich R, **Laske C**, Buchmann M, Wagner M, Roske S, Spottke A, Rudolph J, Metzger CD, Kilimann I, Dobisch L, Duzel E, Jessen F, Teipel SJ (2019) Structural integrity in subjective cognitive decline, mild cognitive impairment and Alzheimer's disease based on multicenter diffusion tensor imaging. *Journal of Neurology* 266:2465-74

Buonocore A, Skinner J, Hafed ZM (2019) Eye Position Error Influence over „Open-Loop" Smooth Pursuit Initiation. *Journal of Neuroscience* 39:2709-21

Campbell BCV MC, Albers GW, Menon BK, Yassi N, Sharma G, van Zwam WH, van Oostenbrugge RJ, Demchuk AM, Guillemin F, White P, Dávalos A, van der Lugt A, Butcher KS, Cherifi A, Marquering HA, Cloud G, Macho Fernández JM, Madigan J, Oppenheim C, Donnan GA, Roos YBWEM, Shankar J, Lingsma H, Bonafé A, Raoult H, Hernández-Pérez M, Bharatha A, Jahan R, Jansen O, Richard S, Levy EI, Berkhemer OA, Soudant M, Aja L, Davis SM, Krings T, Tisserand M, San Román L, Tomasello A, Beumer D, Brown S, Liebeskind DS, Bracard S, Muir KW, Dippel DWJ, Goyal M, Saver JL, Jovin TG, Hill MD, Mitchell PJ; HERMES collaborators (**Kowarik M** et al; 2019) Penumbral imaging and functional outcome in patients with anterior circulation ischaemic stroke treated with endovascular thrombectomy versus medical therapy: a meta-analysis of individual patient-level data. *Lancet Neurology* 18:46-55

Cauley ES, Hamed A, Mohamed IN, Elseed M, Martinez S, Yahia A, Abozar F, Abubakr R, **Koko M**, Elsayed L, Piao XH, Salih MA, Manzini MC (2019) Overlap of polymicrogyria, hydrocephalus, and Joubert syndrome in a family with novel truncating mutations in ADGRG1/GPR56 and KIAA0556. *Neurogenetics* 20:91-8

Chahine LM, Siderowf A, Barnes J, Seedorff N, Caspell-Garcia C, Simuni T, Coffey CS, Galasko D, Mollenhauer B, Arnedo V, Daegele N, Frasier M, Tanner C, Kieburtz K, Marek K, Parkinsons Progression Markers Initiative (**Brockmann K;** 2019) Predicting Progression in Parkinson's Disease Using Baseline and 1-Year Change Measures. *Journal of Parkinson's Disease* 9:665-79

Chen CY, Hoffmann KP, Distler C, **Hafed ZM** (2019) The Foveal Visual Representation of the Primate Superior Colliculus. *Current Biology* 29:2109-19

Coarelli G, **Schule R**, van de Warrenburg BPC, De Jonghe P, Ewenczyk C, Martinuzzi A, **Synofzik M**, Hamer EG, Baets J, Anheim M, **Schols L**, Deconinck T, Masrori P, Fontaine B, Klockgether T, D'Angelo MG, Monin ML, De Bleecker J, Migeotte I, Charles P, Bassi MT, Klopstock T, Mochel F, Ollagnon-Roman E, D'Hooghe M, Kamm C, Kurzwelly D, Papin M, Davoine CS, Banneau G, du Montcel ST, Seilhean D, Brice A, Duyckaerts C, Stevanin G, Durr A (2019) Loss of paraplegin drives spasticity rather than ataxia in a cohort of 241 patients with SPG7. *Neurology* 92:E2679-E90

Conde V, Tomasevic L, Akopian I, Stanek K, Saturnino GB, Thielscher A, **Bergmann TO**, Siebner HR (2019) The non-transcranial TMS-evoked potential is an inherent source of ambiguity in TMS-EEG studies. *Neuroimage* 185:300-12

Cook A, Boesch S, Heck S, Brunt E, Klockgether T, **Schols L**, Schulz A, Giunti P (2019) Patient-reported outcomes in Friedreich's ataxia after withdrawal from idebenone. *Acta Neurologica Scandinavica* 139:533-39

Coppola A, Cellini E, Stamberger H, Saarentaus E, Cetica V, Lal D, Djemie T, Bartnik-Glaska M, Ceulemans B, Cross JH, Deconinck T, De Masi S, Dorn T, Guerrini R, Hoffman-Zacharska D, Kooy F, Lagae L, Lench N, Lemke JR, Lucenteforte E, Madia F, Mefford HC, Morrogh D, Nuernberg P, Palotie A, Schoonjans AS, Striano P, Szczepanik E, Tostevin A, Vermeesch JR, Van Esch H, Van Paesschen W, Waters JJ, Weckhuysen S, Zara F, Jonghe PD, Sisodiya SM, Marini C, Lehesjioki AE, Craiu D, Talvik T, Caglayan H, Serratosa J, Sterbova K, Moller RS, Hjalgrim H, **Lerche H, Weber Y**, Helbig I, von Spiczak S, Barba C, Bogaerts A, Boni A, Galizia EC, Chiari S, Clementella C, Di Gacomo G, Ferrari A, Guarducci S, Giglio S, Holmgren P, Leu C, Mari F, Melani F, Novara F, Pantaleo M, Peeters E, Pisano T, Rosati A, Sander J, Schoeler N, Stankiewicz P, Striano S, Suls A, Traverso M, Vandeweyer G, Van Dijck A, Zuffardi O, Euro E-RESC, Epi CNVC (2019) Diagnostic implications of genetic copy number variation in epilepsy plus. *Epilepsia* 60:689-706

Czolk R, Schwarz N, Koch H, Schotterl S, Wuttke TV, Holm PS, Huber SM, **Naumann U** (2019) Irradiation enhances the therapeutic effect of the oncolytic adenovirus XVir-N-31 in brain tumor initiating cells. *International Journal of Molecular Medicine* 44:1484-94

Darmani G, Bergmann TO, Zipser C, Baur D, Muller-Dahlhaus F, Ziemann U (2019) Effects of antiepileptic drugs on cortical excitability in humans: A TMS-EMG and TMS-EEG study. *Human Brain Mapping* 40:1276-89

Del Din S, Elshehabi M, Galna B, Hobert MA, Warmerdam E, Suenkel U, **Brockmann K**, Metzger F, Hansen C, **Berg D**, Rochester L, **Maetzler W** (2019) Gait analysis with wearables predicts conversion to parkinson disease. *Annals of Neurology* 86:357-67

Desideri D, Zrenner C, Ziemann U, Belardinelli P (2019) Phase of sensorimotor mu-oscillation modulates cortical responses to transcranial magnetic stimulation of the human motor cortex. *Journal of Physiology* 597:5671-86

Di Tacchio M, Macas J, Weissenberger J, Sommer K, Bahr O, Steinbach JP, Senft C, Seifert V, Glas M, Herrlinger U, Krex D, Meinhardt M, Weyerbrock A, Timmer M, Goldbrunner R, Deckert M, Scheel AH, Buttner R, Grauer OM, Schittenhelm J, **Tabatabai G**, Harter PN, Gunther S, Devraj K, Plate KH, Reiss Y (2019) Tumor Vessel Normalization, Immunostimulatory Reprogramming, and Improved Survival in Glioblastoma with Combined Inhibition of PD-1, Angiopoietin-2, and VEGF. *Cancer Immunology Research* 7:1910-27

Diallo A, Jacobi H, Cook A, Giunti P, Parkinson MH, Labrum R, Durr A, Brice A, Charles P, Marelli C, Mariotti C, Nanetti L, Panzeri M, Castaldo A, Rakowicz M, Rola R, Sulek A, Schmitz-Hubsch T, **Schols L, Hengel H**, Baliko L, Melegh B, Filla A, Antenora A, Infante J, Berciano J, van de Warrenburg BP, Timmann D, Boesch S, Nachbauer W, Pandolfo M, Schulz JB, Bauer P, Jun-Suk K, Klockgether T, du Montcel ST (2019) Prediction of Survival With Long-Term Disease Progression in Most Common Spinocerebellar Ataxia. *Movement Disorders* 34:1220-7

Dietrich S, **Hertrich I**, Seibold VC, Rolke B (2019) Discourse management during speech perception: A functional magnetic resonance imaging (fMRI) study. *Neuroimage* 202:16

Dinamarca MC, Raveh A, Schneider A, Fritzius T, Fruh S, Rem PD, Stawarski M, Lalanne T, Turecek R, Choo M, Besseyrias V, Bildl W, Bentrop D, **Staufenbiel M**, Gassmann M, Fakler B, Schwenk J, Bettler B (2019) Complex formation of APP with GABAB receptors links axonal trafficking to amyloidogenic processing. *Nature Communications* 10:1331

Dogan I, Romanzetti S, Didszun C, Mirzazade S, Timmann D, Saft C, **Schols L, Synofzik M**, Giordano IA, Klockgether T, Schulz JB, Reetz K (2019) Structural characteristics of the central nervous system in Friedreich ataxia: an in vivo spinal cord and brain MRI study. *Journal of Neurology Neurosurgery and Psychiatry* 90:615-7

Drew CJG, Quinn L, Hamana K, Williams-Thomas R, Marsh L, Dimitropoulou P, Playle R, Griffin BA, Kelson M, Schubert R, Muratori L, **Reilmann R**, Rosser A, Busse M (2019) Physical Activity and Exercise Outcomes in Huntington Disease (PACE-HD): Protocol for a 12-Month Trial Within Cohort Evaluation of a Physical Activity Intervention in People With Huntington Disease. *Physical Therapy* 99:1201-10

Ebrahimi A, Skardelly M, Schuhmann MU, Ebinger M, Reuss D, Neumann M, **Tabatabai G**, Kohlhof-Meinecke P, Schittenhelm J (2019) High frequency of H3 K27M mutations in adult midline gliomas. *Journal of Cancer Research and Clinical Oncology* 145:839-50

Eckert F, Clasen K, Kelbsch C, Tonagel F, Bender B, **Tabatabai G**, Zips D, Thorwarth D, Frey B, Becker G, Wilhelm H, Paulsen F (2019) Retrospective analysis of fractionated intensity-modulated radiotherapy (IMRT) in the interdisciplinary management of primary optic nerve sheath meningiomas. *Radiation Oncology* 14:240

Elgun S, Waibel J, Kehrer C, van Rappard D, Bohringer J, Beck-Wodl S, Just J, **Schols L**, Wolf N, Krageloh-Mann I, Groeschel S (2019) Phenotypic variation between siblings with Metachromatic Leukodystrophy. *Orphanet Journal of Rare Diseases* 14:10

Fard MAF, Rebelo AP, Buglo E, Nemati H, Dastsooz H, Gehweiler I, Reich S, Reichbauer J, Quintans B, Ordonez-Ugalde A, Cortese A, Courel S, Abreu L, Powell E, Danzi M, Martuscelli NB, Bis-Brewer DM, Tao FF, Zarei F, Habibzadeh P, Yavarian M, Modarresi F, Silawi M, Tabatabaei Z, Yousefi M, Farpour HR, Kessler C, Mangold E, Kobeleva X, Mueller AJ, Haack TB, Tarnopolsky M, Gan-Or Z, Rouleau GA, **Synofzik M**, Sobrido MJ, Jordanova A, **Schule R**, Zuchner S, Faghihi MA (2019) Truncating Mutations in UBAP1 Cause Hereditary Spastic Paraplegia. *American Journal of Human Genetics* 104:767-73

Farhan SMK, Howrigan DP, Abbott LE, Klim JR, Topp SD, Byrnes AE, Churchhouse C, Phatnani H, Smith BN, Rampersaud E, Wu G, Wuu J, Shatunov A, Iacoangeli A, Al Khleifat A, Mordes DA, Ghosh S, Eggan K, Rademakers R, McCauley JL, **Schule R**, Zuchner S, Benatar M, Taylor JP, Nalls M, Gotkine M, Shaw PJ, Morrison KE, Al-Chalabi A, Traynor B, Shaw CE, Goldstein DB, Harms MB, Daly MJ, Neale BM, Consortium A, Consortium F, Project Min EC, Consortium CR (2019) Exome sequencing in amyotrophic lateral sclerosis implicates a novel gene, DNAJC7, encoding a heat-shock protein. *Nature Neuroscience* 22:1966-74

Feichtinger RG, Mucha BE, Hengel H, Orfi Z, Makowski C, Dort J, D'Anjou G, Nguyen TTM, Buchert R, Juenger H, Freisinger P, Baumeister S, Schoser B, Ahting U, Keimer R, Nguyen CTE, Fabre P, Gauthier J, Miguet M, Lopes F, AlHakeem A, AlHashem A, Tabarki B, Kandaswamy KK, Bauer P, Steinbacher P, Prokisch H, Sturm M, Strom TM, Ellezam B, Mayr JA, **Schols L**, Michaud JL, Campeau PM, Haack TB, Dumont NA (2019) Biallelic variants in the transcription factor PAX7 are a new genetic cause of myopathy. *Genetics in Medicine* 21:2521-31

Feierabend M, Karnath HO, Lewald J (2019) Auditory Space Perception in the Blind: Horizontal Sound Localization in Acoustically Simple and Complex Situations. *Perception* 48:1039-57

Feng YCA, Howrigan DP, Abbott LE, Tashman K, Cerrato F, Singh T, Heyne H, Byrnes A, Churchhouse C, Watts N, Solomonson M, Lal D, Heinzen EL, Dhindsa RS, Stanley KE, Cavalleri GL, Hakonarson H, (...), Muhle H, Rademacher A, van Baalen A, von Spiczak S, Stephani U, Afawi Z, Korczyn AD, Kanaan M, Canavati C, Kurlemann G, Muller-Schluter K, Kluger G, Hausler M, Blatt I, Lemke JR, Krey I, **Weber YG, Wolking S, Becker F, Hengsbach C**, Rau S, Maisch AF, Steinhoff BJ, Schulze-Bonhage A, Schubert-Bast S, Schreiber H, Borggrafe I, Schankin CJ, Mayer T, Korinthenberg R, **Brockmann K**, Dennig D, Madeleyn R, Kalviainen R , (...), Goldstein DB, **Lerche H**, Berkovic SF, Neale BM, Epi C, Genomic Psychiat Cohort GPCC (2019) Ultra-Rare Genetic Variation in the Epilepsies: A Whole-Exome Sequencing Study of 17,606 Individuals. *American Journal of Human Genetics* 105:267-82

Fernandez IM, Macrini C, **Krumbholz M**, Hensbergen PJ, Ederveen ALH, Winklmeier S, Vural A, Kurne A, Jenne D, Kamp F, Gerdes LA, Hohlfeld R, Wuhrer M, Kumpfel T, Meinl E (2019) The Glycosylation Site of Myelin Oligodendrocyte Glycoprotein Affects Autoantibody Recognition in a Large Proportion of Patients. *Frontiers in Immunology* 10:1189

Fernandez-Santiago R, Martin-Flores N, Antonelli F, Cerquera C, Moreno V, Bandres-Ciga S, Manduchi E, Tolosa E, Singleton AB, Moore JH, C. Int Parkinson's Dis Genomics (**Brockmann K**, **Heutink P**, **Gasser T** et al), M. Ezquerra, C. Malagelada (2019) SNCA and mTOR Pathway Single Nucleotide Polymorphisms Interact to Modulate the Age at Onset of Parkinson's Disease. *Movement Disorders* 34:1333-44

Fioravanti C, Kajal SD, Carboni M, Mazzetti C, **Ziemann U***, **Braun C*** (2019) Inhibition in the somatosensory system: An integrative neuropharmacological and neuroimaging approach. *Neuroimage* 202:116139 (*shared senior authorship)

Fleischer V, Koirala N, Droby A, Gracien RM, Deichmann R, **Ziemann U**, Meuth SG, Muthuraman M, Zipp F, Groppa S (2019) Longitudinal cortical network reorganization in early relapsing-remitting multiple sclerosis. *Therapeutic Advances in Neurological Disorders* 12:15

Fleszar Z, Mellone S, **Giese MA**, Tacconi C, Becker C, **Schols L, Synofzik M**, Ilg W (2019) Real-time use of audio-biofeedback can improve postural sway in patients with degenerative ataxia. *Annals of Clinical and Translational Neurology* 6:285-94

Flierman NA, Ignashchenkova A, Negrello M, **Thier P**, De Zeeuw CI, Badura A (2019) Glissades Are Altered by Lesions to the Oculomotor Vermis but Not by Saccadic Adaptation. *Frontiers in Behavioral Neuroscience* 13:194

Fornari S, Schafer A, **Jucker M**, Goriely A, Kuhl E (2019) Prion-like spreading of Alzheimer's disease within the brain's connectome. *Journal of the Royal Society Interface* 16:20190356

Friederich A, Flinspach A, Suenkel U, Eschweiler GW, Greulich K, Maetzler W, **Berg D**, Heinzel S, Team Ts (2019) Prodromal features of Parkinson's disease: Self-reported symptoms versus clinically assessed signs. *Movement Disorders* 34:144-46

Funk N, Munz M, Ott T, **Brockmann K**, Wenninger-Weinzierl A, Kuhn R, Vogt-Weisenhorn D, Giesert F, Wurst W, **Gasser T, Biskup S** (2019) The Parkinson's disease-linked Leucine-rich repeat kinase 2 (LRRK2) is required for insulin-stimulated translocation of GLUT4. *Scientific Reports* 9:16

Gasperi C, Salmen A, Antony G, Bayas A, Heesen C, Kumpfel T, Linker RA, Paul F, Stangel M, Tackenberg B, Bergh FT, Warnke C, Weber F, Wiendl H, Wildemann B, Zettl UK, **Ziemann U**, Zipp F, Tumani H, Gold R, Hemmer B, Aktas O, Antony G, Ayzenberg I, Gold R, Hellwig K, Salmen A, Lukas C, Bahn E, Bruck W, Flugel A, Friede T, Lodygin D, Meissner T, Berger K, Buck D, Hemmer B, German Competence Network of Multiple S (2019) Association of Intrathecal Immunoglobulin G Synthesis With Disability Worsening in Multiple Sclerosis. *JAMA Neurol* 76:841-9

Gazzina S, Grassi M, Premi E, Cosseddu M, Alberici A, Archetti S, Gasparotti R, Van Swieten J, Galimberti D, Sanchez-Valle R, Laforce RJ, Moreno F, **Synofzik M**, Graff C, Masellis M, Tartaglia MC, Rowe JB, Vandenberghe R, Finger E, Tagliavini F, de Mendonca A, Santana I, Butler CR, Ducharme S, Gerhard A, Danek A, Levin J, Otto M, Frisoni G, Sorbi S, Padovani A, Rohrer JD, Borroni B, Genetic FTDI, Genfi (2019) Education modulates brain maintenance in presymptomatic frontotemporal dementia. *Journal of Neurology Neurosurgery and Psychiatry* 90:1124-30

Geisler S, Jager L, Golombek S, Nakanishi E, Hans F, Casadei N, Terradas AL, Linnemann C, **Kahle PJ** (2019) Ubiquitin-specific protease USP36 knockdown impairs Parkin-dependent mitophagy via downregulation of Beclin-1-associated autophagy-related ATG14L. *Experimental Cell Research* 384:15

Gordon PC, Valiengo LDL, de Paula VJR, Galhardoni R, **Ziemann U**, de Andrade DC, Brunoni AR (2019) Changes in motor cortical excitability in schizophrenia following transcranial direct current stimulation. *Progress in Neuropsychopharmacology & Biological Psychiatry* 90:43-48

Gorges M, Muller HP, **Liepelt-Scarfone I,** Storch A, Dodel R, LANDSCAPE Consortium, Hilker-Roggendorf R, Berg D, Kunz MS, Kalbe E, Baudrexel S, Kassubek J, Baudrexel S, Dodel R, **Berg D**, Hilker-Roggendorf R, Kalbe E, Kassubek J (2019) Structural brain signature of cognitive decline in Parkinson's disease: DTI-based evidence from the LANDSCAPE study. *Therapeutic Advances in Neurological Disorders* 12:15

Grimm A, Oertl H, Auffenberg E, Schubert V, Ruschil C, Axer H, **Winter N** (2019) Differentiation Between Guillain-Barre Syndrome and Acute-Onset Chronic Inflammatory Demyelinating Polyradiculoneuritis-a Prospective Follow-up Study Using Ultrasound and Neurophysiological Measurements. *Neurotherapeutics* 16:838-47

Grossmann D, Berenguer-Escuder C, Bellet ME, Scheibner D, Bohler J, Massart F, Rapaport D, Skupin A, d'Herouel AF, Sharma M, Ghelfi J, Rakovic A, Lichtner P, Antony P, Glaab E, May P, Dimmer KS, **Fitzgerald JC**, Grunewald A, **Kruger R** (2019) Mutations in RHOT1 Disrupt Endoplasmic Reticulum-Mitochondria Contact Sites Interfering with Calcium Homeostasis and Mitochondrial Dynamics in Parkinson's Disease. *Antioxidants & Redox Signaling* 31:1213-34

Guven G, Bilgic B, Tufekcioglu Z, Unaltuna NE, Hanagasi H, Gurvit H, Singleton A, Hardy J, Emre M, Gulec C, Bras J, Guerreiro R, **Lohmann E** (2019) Peripheral GRN mRNA and Serum Progranulin Levels as a Potential Indicator for Both the Presence of Splice Site Mutations and Individuals at Risk for Frontotemporal Dementia. *Journal of Alzheimers Disease* 67:159-67

Guven G, Vurgun E, Bilgic B, Hanagasi H, Gurvit H, Ozer E, **Lohmann E**, Erginel-Unaltuna N (2019) Association between selected cholesterol-related gene polymorphisms and Alzheimer's disease in a Turkish cohort. *Molecular Biology Reports* 46:1701-07

Haas K, Stangl S, Steigerwald F, Matthies C, Gruber D, Kuhn AA, Krauss JK, Sixel-Doring F, von Eckardstein K, Deuschl G, Classen J, Winkler D, Voges J, Galazky I, Oertel W, Ceballos-Baumann AO, Lange M, Gharabaghi A, **Weiss DT**, Volkmann J, Heuschmann PU (2019) Development of evidence-based quality indicators for deep brain stimulation in patients with Parkinson's disease and first year experience of implementation of a nation-wide registry. *Parkinsonism & Related Disorders* 60:3-9

Hammer M, Gunther M, **Haeufle DFB**, Schmitt S (2019) Tailoring anatomical muscle paths: a sheath-like solution for muscle routing in musculoskeletal computer models. *Mathematical Biosciences* 311:68-81

Hauser S, Poenisch M, Schelling Y, Hoflinger P, Schuster S, Teegler A, Betten R, Gustafsson JA, Hubener-Schmid J, Schlake T, Chevessier-Tunnesen F, Horscroft N, Bjorkhem I, **Schols L** (2019) mRNA as a Novel Treatment Strategy for Hereditary Spastic Paraplegia Type 5. *Molecular Therapy-Methods & Clinical Development* 15:359-70

Heavin SB, McCormack M, **Wolking S**, Slattery L, Walley N, Avbersek A, Novy J, Sinha SR, Radtke R, Doherty C, Auce P, Craig J, Johnson MR, Koeleman BPC, Krause R, Kunz WS, Marson AG, O'Brien TJ, Sander JW, Sills GJ, Stefansson H, Striano P, Zara F, Depondt C, Sisodiya S, Goldstein D, Lerche H, Cavalleri GL, Delanty N, Consortium E, Epi PGXC (2019) Genomic and clinical predictors of lacosamide response in refractory epilepsies. *Epilepsia Open* 4:563-71

Heilbronn M, Scholten M, Schlenstedt C, Mancini M, Schollmann A, Cebi I, Potter-Nerger M, Gharabaghi A, **Weiss D** (2019) Anticipatory postural adjustments are modulated by substantia nigra stimulation in people with Parkinson's disease and freezing of gait. *Parkinsonism & Related Disorders* 66:34-39

Helbig I, Lopez-Hernandez T, Shor O, Galer P, Ganesan S, Pendziwiat M, Rademacher A, Ellis CA, Humpfer N, **Schwarz N, Seiffert S**, Peeden J, Shen J, Sterbova K, Hammer TB, Moller RS, Shinde DN, Tang S, Smith L, Poduri A, Krause R, Benninger F, Helbig KL, Haucke V, **Weber YG**, Balling R, Barisic N, Baulac S, Caglayan H, Craiu D, De Jonghe P, Depienne C, Guerrini R, Hjalgrim H, Hoffman-Zacharska D, Jahn J, Klein KM, Koeleman BPC, Komarek V, Leguern E, Lehesjoki AE, Lemke JR, Lerche H, Linnan-Kivi T, Marini C, May P, Muhle H, Pal DK, Palotie A, Rosenow F, Schubert-Bast S, Selmer K, Serratosa JM, Sisodiya S, Stephani U, Striano P, Suls A, Talvik T, von Spiczak S, Weckhuysen S, Zara F, Avillach P, Bartels A, Biswas S, Bourgeois F, Devkota B, Glauser T, Hallinan B, Heath A, Hirschhorn J, Kilbourn J, Kong S, Krantz I, Lee IH, Mandl KD, Marsh E, Sund K, Taylor D, White P, Euro E-RESC, Consortium G (2019) A Recurrent Missense Variant in AP2M1 Impairs Clathrin-Mediated Endocytosis and Causes Developmental and Epileptic Encephalopathy. *American Journal of Human Genetics* 104:1060-72

Hempel JM, Schittenhelm J, Klose U, Bender B, Bier G, Skardelly M, **Tabatabai G**, Vega SC, Ernemann U, Brendle C (2019) In Vivo Molecular Profiling of Human Glioma Cross-Sectional Observational Study Using Dynamic Susceptibility Contrast Magnetic Resonance Perfusion Imaging. *Clinical Neuroradiology* 29:479-91

Herring JD, Esterer S, Marshall TR, Jensen O, **Bergmann TO** (2019) Low-frequency alternating current stimulation rhythmically suppresses gamma-band oscillations and impairs perceptual performance. *Neuroimage* 184:440-9

Herrlinger U, Tzaridis T, Mack F, Steinbach JP, Schlegel U, Sabel M, Hau P, Kortmann RD, Krex D, Grauer O, Goldbrunner R, Schnell O, Bahr O, Uhl M, Seidel C, **Tabatabai G**, Kowalski T, Ringel F, Schmidt-Graf F, Suchorska B, Brehmer S, Weyerbrock A, Renovanz M, Bullinger L, Galldiks N, Vajkoczy P, Misch M, Vatter H, Stuplich M, Schafer N, Kebir S, Weller J, Schaub C, Stummer W, Tonn JC, Simon M, Keil VC, Nelles M, Urbach H, Coenen M, Wick W, Weller M, Fimmers R, Schmid M, Hattingen E, Pietsch T, Coch C, Glas M, German Canc S (2019) Lomustine-temozolomide combination therapy versus standard temozolomide therapy in patients with newly diagnosed glioblastoma with methylated MGMT promoter (CeTeG/NOA-09): a randomised, open-label, phase 3 trial. *Lancet* 393:678-88

Heyne HO, Artomov M, Battke F, Bianchini C, Smith DR, Liebmann N, Tadigotla V, Stanley CM, Lal D, Rehm H, **Lerche H**, Daly MJ, Helbig I, Biskup S, **Weber YG**, Lemke JR (2019) Targeted gene sequencing in 6994 individuals with neurodevelopmental disorder with epilepsy. *Genetics in Medicine* 21:2496-503

Heyne HO, Singh T, Stamberger H, Poduri A, **Weber Y**, Weckhuysen S, Sisodiya SM, Daly MJ, Helbig I, Lal D, Lemke JR, Euro ERESC (2019) De novo variants in neurodevelopmental disorders with epilepsy. *European Journal of Human Genetics* 27:276

Hickmann AK, Frick M, Hadaschik D, Battke F, Bittl M, Ganslandt O, **Biskup S**, Docker D (2019) Molecular tumor analysis and liquid biopsy: a feasibility investigation analyzing circulating tumor DNA in patients with central nervous system lymphomas. *BMC Cancer* 19:12

Hidding U, Gulberti A, Pflug C, Choe C, Horn A, Prilop L, Braass H, Frundt O, Buhmann C, **Weiss D**, Westphal M, Engel AK, Gerloff C, Koppen JA, Hamel W, Moll CKE, Potter-Nerger M (2019) Modulation of specific components of sleep disturbances by simultaneous subthalamic and nigral stimulation in Parkinson's disease. *Parkinsonism & Related Disorders* 62:141-47

Hilf N, Kuttruff-Coqui S, Frenzel K, Bukur V, Stevanovic S, Gouttefangeas C, Platten M, **Tabatabai G**, Dutoit V, van der Burg SH, Straten PT, Martinez-Ricarte F, Ponsati B, Okada H, Lassen U, Admon A, Ottensmeier CH, Ulges A, Kreiter S, von Deimling A, Skardelly M, Migliorini D, Kroep JR, Idorn M, Rodon J, Piro J, Poulsen HS, Shraibman B, McCann K, Mendrzyk R, Lower M, Stieglbauer M, Britten CM, Capper D, Welters MJP, Sahuquillo J, Kiesel K, Derhovanessian E, Rusch E, Bunse L, Song C, Heesch S, Wagner C, Kemmer-Bruck A, Ludwig J, Castle JC, Schoor O, Tadmor AD, Green E, Fritsche J, Meyer M, Pawlowski N, Dorner S, Hoffgaard F, Rossler B, Maurer D, Weinschenk T, Reinhardt C, Huber C, Rammensee HG, Singh-Jasuja H, Sahin U, Dietrich PY, Wick W (2019) Actively personalized vaccination trial for newly diagnosed glioblastoma. *Nature* 565:240-5

Hobert MA, Bernhard FP, Bettecken K, Sartor J, **Maetzler W**, Jamour M (2019) Validation of the Geriatric Check in a cohort of hospitalized neurological patients. *Zeitschrift Fur Gerontologie und Geriatrie* 52:172-78

Hobert MA, Nussbaum S, Heger T, **Berg D, Maetzler W**, Heinzel S (2019) Progressive Gait Deficits in Parkinson's Disease: A Wearable-Based Biannual 5-Year Prospective Study. *Frontiers in Aging Neuroscience* 11:7

Hofmann JI, Schwarz C, Rudolph U, Antkowiak B (2019) Effects of Diazepam on Low-Frequency and High-Frequency Electrocortical gamma-Power Mediated by alpha 1-and alpha 2-GABA(A) Receptors. *International Journal of Molecular Sciences* 20:3486

Hohenfeld C, Dogan I, Schubert R, Didszun C, **Schols L, Synofzik M**, Giordano IA, Klockgether T, Schulz JB, **Reilmann R**, Reetz K (2019) Application of Quantitative Motor Assessments in Friedreich Ataxia and Evaluation of Their Relation to Clinical Measures. *Cerebellum* 18:896-909

Hopfner F, Muller SH, Steppat D, Miller J, Schmidt N, Wandinger KP, Leypoldt F, **Berg D**, Franke A, Lieb W, Tittmann L, Balzer-Geldsetzer M, Baudrexel S, Dodel R, Hilker-Roggendorf R, Kalbe E, Kassubek J, Klockgether T, **Liepelt-Scarfone I**, Mollenhauer B, Neuser P, Reetz K, Riedel O, **Schulte C**, Schulz JB, Spottke A, Storch A, Trenkwalder C, Wittchen HU, Witt K, Wullner U, Deuschl G, Kuhlenbeumer G (2019) No association between Parkinson disease and autoantibodies against NMDA-type glutamate receptors. *Translational Neurodegeneration* 8**:**7

Hu X, Teunissen CE, Spottke A, Heneka MT, Duzel E, Peters O, Li S, Priller J, Buerger K, Teipel S, **Laske C**, Verfaillie SCJ, Barkhof F, Coll-Padros N, Rami L, Molinuevo JL, van der Flier WM, Jessen F (2019) Smaller medial temporal lobe volumes in individuals with subjective cognitive decline and biomarker evidence of Alzheimer‘s disease-Data from three memory clinic studies. *Alzheimer’s & Dementia* 15**:**185-93

Huang RY, Bi WL, Griffith B, Kaufmann TJ, la Fougere C, Schmidt NO, Tonn JC, Vogelbaum MA, Wen PY, Aldape K, Nassiri F, Zadeh G, Dunn IF, Aldape K, Au K, Barnhartz-Sloan J, Bi WL, Brastianos PK, Butowski N, Carlotti C, Cusimano MD, DiMeco F, Drummond K, Dunn IF, Galanis E, Giannini C, Goldbrunner R, Griffith B, Hashizume R, Hanemann CO, Herold-Mende C, Horbinski C, Huang RY, James D, Jenkinson MD, Jungk C, Kaufman TJ, Krischek B, Lachance D, Lafougere C, Lee I, Liu JC, Mamatjan Y, Mansouri A, Mawrin C, McDermott M, Munoz D, Nassiri F, Noushmehr H, Ng HK, Perry A, Pirouzmand F, Poisson LM, Pollo B, Raleigh D, Sahm F, Saladino A, Santarius T, Schichor C, Schultz D, Schmidt NO, Selman W, Sloan A, Spears J, Snyder J, Suppiah S, Tabatabai G, Tatagiba M, Tirapelli D, Tonn JC, Tsang D, Vogelbaum MA, von Deimling A, Wen PY, Walbert T, Westphal M, Workewych AM, Zadeh G, Int Consortium M (2019) Imaging and diagnostic advances for intracranial meningiomas. *Neuro-Oncology* 21**:**I44-I61

Hurth H BU, Steiner J, **Schlak D**, Hennersdorf F, Ebner FH (2019) Delayed Cerebral Ischemia in Patients with Aneurysmal Subarachnoid Hemorrhage - Serum D-dimer and C-reactive Protein as Early Markers. *Journal of Stroke and Cerebrovascular Diseases* 104558

Hussain SJ, Claudino L, Bonstrup M, Norato G, Cruciani G, Thompson R, **Zrenner C, Ziemann U**, Buch E, Cohen LG (2019) Sensorimotor Oscillatory Phase-Power Interaction Gates Resting Human Corticospinal Output. *Cerebral Cortex* 29**:**3766-77

Ilg U (2019) Neuroscience for the next generation: Was Schülerlabore für die Neurowissenschaft leisten. *Neuroforum* 25**:**139-42

International Multiple Sclerosis Genetics Consortium (**Ziemann U** et al; 2019) Low-Frequency and Rare-Coding Variation Contributes to Multiple Sclerosis Risk. *Cell* 178**:**262

Iwaki H, Blauwendraat C, Leonard HL, Kim JJ, Liu GQ, Maple-Grodem J, Corvol JC, Pihlstrom L, van Nimwegen M, Hutten SJ, Nguyen KDH, Rick J, Eberly S, Faghri F, Auinger P, Scott KM, Wijeyekoon R, Van Deerlin VM, Hernandez DG, Gibbs JR, Chitrala KN, Day-Williams AG, Brice A, Alves G, Noyce AJ, Tysnes OB, Evans JR, Breen DP, Estrada K, Wegel CE, Danjou F, Simon DK, Andreassen O, Ravina B, Toft M, **Heutink P**, Bloem BR, Weintraub D, Barker RA, Williams-Gray CH, van de Warrenburg BP, Van Hilten JJ, Scherzer CR, Singleton AB, Nalls MA, Int Parkinson‘s Dis Genomics C (2019) Genomewide association study of Parkinson‘s disease clinical biomarkers in 12 longitudinal patients‘ cohorts. *Movement Disorders*, 10.1002/mds.2784512

Jain G, Stuendl A, Rao P, Berulava T, Centeno TP, Kaurani L, Burkhardt S, Delalle I, Kornhuber J, Hull M, Maier W, Peters O, Esselmann H, **Schulte C**, Deuschle C, **Synofzik M**, Wiltfang J, Mollenhauer B, **Maetzler W**, Schneider A, Fischer A (2019) A combined miRNA-piRNA signature to detect Alzheimer‘s disease. *Translational Psychiatry* 9**:**12

Johnen A, Burkner PC, Landmeyer NC, Ambrosius B, Calabrese P, Motte J, Hessler N, Antony G, Konig IR, Klotz L, Hoshi MM, Aly L, Groppa S, Luessi F, Paul F, Tackenberg B, Bergh FT, Kumpfel T, Tumani H, Stangel M, Weber F, Bayas A, Wildemann B, Heesen C, Zettl UK, Zipp F, Hemmer B, Meuth SG, Gold R, Wiendl H, Salmen A, Demir S, Schroder C, Voithenleitner LA, Berthele A, Haars S, Nischwitz S, Knop MJ, Rothacher S, Pottgen J, Warnke C, Linker RA, **Ziemann U**, German Competence Network M (2019) Can we predict cognitive decline after initial diagnosis of multiple sclerosis? Results from the German National early MS cohort (KKNMS). *Journal of Neurology* 266**:**386-97

Kapitany-Foveny M, Ferenci T, Sulyok Z, **Kegele J, Richter H**, Valyi-Nagy I, **Sulyok M** (2019) Can Google Trends data improve forecasting of Lyme disease incidence? *Zoonoses and Public Health* 66:101-7

Karnath HO, Kriechel I, Tesch J, Mohler BJ, Molbert SC (2019) Caloric vestibular stimulation has no effect on perceived body size. *Scientific Reports* 9:11411

Karnath HO, Molbert SC, Klaner AK, Tesch J, Giel KE, Wong HY, Mohler BJ (2019) Visual perception of one's own body under vestibular stimulation using biometric self-avatars in virtual reality. *PLoS ONE* 14:e0213944

Karnath HO, Sperber C, Rorden C (2019) Mapping human brain lesions and their functional consequences (Reprinted from Neuroimage, vol 165, pg 190-199, 2018). *Neuroimage* 190:4-13

Keane PC, Hanson PS, Patterson L, Blain PG, Hepplewhite P, Khundakar AA, Judge SJ, **Kahle PJ**, LeBeau FEN, Morris CM (2019) Trichloroethylene and its metabolite TaClo lead to degeneration of substantia nigra dopaminergic neurones: Effects in wild type and human A30P mutant alpha-synuclein mice. *Neuroscience Letters* 711:6

Kebir S, Schaub C, Junold N, Hattingen E, Schafer N, Steinbach JP, Weyerbrock A, Hau P, Goldbrunner R, Galldiks N, Weller J, Mack F, Tzaridis T, Bahr O, Seidel C, Schlegel U, Schmidt-Graf F, Rohde V, Borchers C, **Tabatabai G**, Hanel M, Sabel M, Gerlach R, Krex D, Belka C, Vatter H, Proescholdt M, Glas M, Herrlinger U (2019) Baseline T1 hyperintense and diffusion-restricted lesions are not linked to prolonged survival in bevacizumab-treated glioblastoma patients of the GLARIUS trial. *Journal of Neuro-Oncology* 144:501-09

Keskin I, Forsgren E, Lehmann M, Andersen PM, Brannstrom T, Lange DJ, **Synofzik M**, Nordstrom U, Zetterstrom P, Marklund SL, Gilthorpe JD (2019) The molecular pathogenesis of superoxide dismutase 1-linked ALS is promoted by low oxygen tension. *Acta Neuropathologica* 138:85-101

Kiernan MC, **Ziemann U**, Eisen A (2019) Amyotrophic lateral sclerosis: Origins traced to impaired balance between neural excitation and inhibition in the neonatal period. *Muscle & Nerve* 60:232-35

Kishore A, Sreelatha AAK, Sturm M, von-Zweydorf F, Pihlstrom L, Raimondi F, Russell R, Lichtner P, Banerjee M, Krishnan S, Rajan R, Puthenveedu DK, Chung SJ, Bauer P, Riess O, Gloeckner CJ, **Kruger R, Gasser T**, Sharma M, Ipdgc, Courage PD (2019) Understanding the role of genetic variability in LRRK2 in Indian population. *Movement Disorders* 34:496-505

Klehmet J, Beutner S, Hoffmann S, Dornauer M, Paul F, **Reilmann R**, Brandt AU, Meisel A (2019) Quantitative grip force assessment of muscular weakness in chronic inflammatory demyelinating polyneuropathy. *BMC Neurology* 19:9

Kloth K, **Synofzik M**, Kernstock C, Schimpf-Linzenbold S, Schuettauf F, Neu A, Wissinger B, Weisschuh N (2019) Novel likely pathogenic variants in TMEM126A identified in non-syndromic autosomal recessive optic atrophy: two case reports. *BMC Medical Genetics* 20:10

Knudsen K, Krack P, Tonder L, Houeto JL, Rau J, Schade-Brittinger C, Hartmann A, Halbig TD, Paschen S, Barbe MT, Kuhn A, Fraix V, Brefel-Courbon C, Vesper J, Maltete D, Sixel-Doring F, Weiss D, Witjas T, Thobois S, Agid Y, Schnitzler A, Schuepbach WMM, Timmermann L, Damier P, Vidailhet M, Deuschl G, EARLYSTIM Study Group (**Kruger R** et al; 2019) Programming parameters of subthalamic deep brain stimulators in Parkinson's disease from a controlled trial. *Parkinsonism & Related Disorders* 65:217-23

Koch H, Niturad CE, Theiss S, Bien CG, Elger C, Wandinger KP, Vincent A, Malter M, Kortvelyessy P, **Lerche H, Dihne M** (2019) In vitro neuronal network activity as a new functional diagnostic system to detect effects of Cerebrospinal fluid from autoimmune encephalitis patients. *Scientific Reports* 9:5591

Kollmer M, Close W, Funk L, **Rasmussen J**, Bsoul A, Schierhorn A, Schmidt M, Sigurdson CJ, **Jucker M**, Fandrich M (2019) Cryo-EM structure and polymorphism of Abeta amyloid fibrils purified from Alzheimer's brain tissue. *Nature Communications* 10:4760

Kotikalapudi R, Martin P, Erb M, Scheffler K, **Marquetand J**, Bender B, **Focke NK** (2019) MP2RAGE multispectral voxel-based morphometry in focal epilepsy. *Human Brain Mapping* 40:5042-55

Kroneberg D, Elshehabi M, Meyer AC, Otte K, Doss S, Paul F, Nussbaum S, **Berg D**, Kuhn AA, **Maetzler W**, Schmitz-Hubsch T (2019) Less Is More - Estimation of the Number of Strides Required to Assess Gait Variability in Spatially Confined Settings. *Frontiers in Aging Neuroscience* 10:13

Kruszynski S, **Stanaitis K, Brandes J**, Poets CF, **Koch H** (2019) Doxapram stimulates respiratory activity through distinct activation of neurons in the nucleus hypoglossus and the pre-Botzinger complex. *Journal of Neurophysiology* 121:1102-10

Kuchay RAH, Mir YR, Zeng X, Hassan A, Musarrat J, Parwez I, Kernstock C, **Traschutz A, Synofzik M** (2019) ARSACS as a Worldwide Disease: Novel SACS Mutations Identified in a Consanguineous Family from the Remote Tribal Jammu and Kashmir Region in India. *Cerebellum* 18:807-12

Kuehlewein L, **Schols L**, Llavona P, **Grimm A**, Biskup S, Zrenner E, Kohl S (2019) Phenotypic spectrum of autosomal recessive retinitis pigmentosa without posterior column ataxia caused by mutations in the FLVCR1 gene. *Graefes Archive for Clinical and Experimental Ophthalmology* 257:629-38

Kuhlenbaumer G, **Berg D** (2019) PARKINSON DISEASE Parkinson disease genetics: too early to predict progression? *Nature Reviews Neurology* 15:625-26

Langbehn DR, Stout JC, Gregory S, Mills JA, Durr A, Leavitt BR, Roos RAC, Long JD, Owen G, Johnson HJ, Borowsky B, Craufurd D, **Reilmann R**, Landwehrmeyer GB, Scahill RI, Tabrizi SJ, TRACK-HD, Track-On HD Groups (2019) Association of CAG Repeats With Long-term Progression in Huntington Disease. *JAMA Neurology* 76:1375-85

Lederer S, **Dijkstra TMH**, Heskes T (2019) Additive Dose Response Models: Defining Synergy. *Frontiers in Pharmacology* 10:1384

Lehtimaki K, Coenen VA, Ferreira AG, Boon P, Elger C, Taylor RS, Ryvlin P, Gil-Nagel A, Gielen F, Brionne TC, Abouihia A, Beth G, MORE Investigators (**Dammeier N** et al; 2019) The Surgical Approach to the Anterior Nucleus of Thalamus in Patients With Refractory Epilepsy: Experience from the International Multicenter Registry (MORE). *Neurosurgery* 84:141-49

Lepennetier G, Hracsko Z, Unger M, Van Griensven M, Grummel V, **Krumbholz M**, Berthele A, Hemmer B, **Kowarik MC** (2019) Cytokine and immune cell profiling in the cerebrospinal fluid of patients with neuro-inflammatory diseases. *Journal of Neuroinflammation* 16:11

Lerche H, Berkovic SF, Lowenstein DH, EuroEPINOMICS-CoGIE Consortium, Epi PGX Consortium, Epi4K Consortium/Epilepsy Phenome/Genome Project (**Wolking S, Schubert J, Becker F, Weber Y** et al; 2019) Intestinal-Cell Kinase and Juvenile Myoclonic Epilepsy. *New England Journal of Medicine* 380:1

Lerche S, Machetanz G, Wurster I, Roeben B, Zimmermann M, Pilotto A, Preische O, Stransky E, **Deuschle C, Hauser AK, Schulte C**, Lachmann I, Waniek K, **Gasser T**, Berg D, Maetzler W, **Brockmann K** (2019) Dementia with lewy bodies: GBA1 mutations are associated with cerebrospinal fluid alpha-synuclein profile. *Movement Disorders* 34:1069-73

Lerche S, Wurster I, Roben B, Machetanz G, Zimmermann M, Bernhard F, Stransky E, **Deuschle C, Schulte C**, Hansson O, Zetterberg H, **Gasser T**, Berg D, Maetzler W, **Brockmann K** (2019) Parkinson's disease: evolution of cognitive impairment and CSF A beta(1-42) profiles in a prospective longitudinal study. *Journal of Neurology Neurosurgery and Psychiatry* 90:165-70

Leu C, Stevelink R, Smith AW, Goleva SB, Kanai M, Ferguson L, Campbell C, Kamatani Y, Okada Y, Sisodiya SM, Cavalleri GL, Koeleman BPC, **Lerche H**, Jehi L, Davis LK, Najm IM, Palotie A, Daly MJ, Busch RM, Lal D, Epi C (2019) Polygenic burden in focal and generalized epilepsies. *Brain* 142:3473-81

Levin J, Maass S, Schuberth M, Giese A, Oertel WH, Poewe W, Trenkwalder C, Wenning GK, Mansmann U, Sudmeyer M, Eggert K, Mollenhauer B, Lipp A, Lohle M, Classen J, Munchau A, Kassubek J, Gandor F, **Berg D**, Egert-Schwender S, Eberhardt C, Paul F, Botzel K, Ertl-Wagner B, Huppertz HJ, Ricard I, Hoglinger GU, PROMESA Study Group (2019) Safety and efficacy of epigallocatechin gallate in multiple system atrophy (PROMESA): a randomised, double-blind, placebo-controlled trial. *Lancet Neurology* 18:724-35

Lindig T, Bender B, Kumar VJ, Hauser TK, Grodd W, Brendel B, Just J, **Synofzik M**, Klose U, Scheffler K, Ernemann U, **Schols L** (2019) Pattern of Cerebellar Atrophy in Friedreich's Ataxia-Using the SUIT Template. *Cerebellum* 18**:**435-47

Liu YY, Schubert J, Sonnenberg L, Helbig KL, Hoei-Hansen CE, **Koko M, Rannap M, Lauxmann S**, Huq M, Schneider MC, Johannesen KM, Kurlemann G, Gardella E, **Becker F, Weber YG**, Benda J, Moller RS, **Lerche H** (2019) Neuronal mechanisms of mutations in SCN8A causing epilepsy or intellectual disability. *Brain* 142**:**376-90

Ludwig N, Fehlmann T, Kern F, Gogol M, **Maetzler W**, Deutscher S, Gurlit S, **Schulte C, Von Thaler AK, Deuschle C**, Metzger F, **Berg D, Suenkel U**, Keller V, Backes C, Lenhof HP, Meese E, Keller A (2019) Machine Learning to Detect Alzheimer's Disease from Circulating Non-coding RNAs. *Genomics Proteomics & Bioinformatics* 17**:**430-40

Mao H, Hamodeh S, **Skodras A**, Sultan F (2019) Quantitative organization of the excitatory synapses of the primate cerebellar nuclei: further evidence for a specialized architecture underlying the primate cerebellum. *Brain Structure & Function* 224**:**1987-98

Marquetand J, Vannoni S, Carboni M, **Hegner YL, Stier C, Braun C, Focke NK** (2019) Reliability of Magnetoencephalography and High-Density Electroencephalography Resting-State Functional Connectivity Metrics. *Brain Connectivity* 9**:**539-53

Marti Fernandez I, Macrini C, **Krumbholz M**, Hensbergen PJ, Hipgrave Ederveen AL, Winklmeier S, Vural A, Kurne A, Jenne D, Kamp F, Gerdes LA, Hohlfeld R, Wuhrer M, Kumpfel T, Meinl E (2019) The Glycosylation Site of Myelin Oligodendrocyte Glycoprotein Affects Autoantibody Recognition in a Large Proportion of Patients. *Frontiers in Immunology* 10:1189

Mayer S, Chen J, Velmeshev D, Mayer A, Eze UC, Bhaduri A, Cunha CE, Jung D, Arjun A, Li E, Alvarado B, Wang S, Lovegren N, Gonzales ML, Szpankowski L, Leyrat A, West JAA, Panagiotakos G, Alvarez-Buylla A, Paredes MF, Nowakowski TJ, Pollen AA, Kriegstein AR (2019) Multimodal Single-Cell Analysis Reveals Physiological Maturation in the Developing Human Neocortex. *Neuron* 102:143-58 e7

McDermott EJ, Himmelbach M (2019) Effects of arm weight and target height on hand selection: A low-cost virtual reality paradigm. *PLoS ONE* 14

Meeter LHH, Steketee RME, Salkovic D, Vos ME, Grossman M, McMillan CT, Irwin DJ, Boxer AL, Rojas JC, Olney NT, Karydas A, Miller BL, Pijnenburg YAL, Barkhof F, Sanchez-Valle R, Llado A, Borrego-Ecija S, Diehl-Schmid J, Grimmer T, Goldhardt O, Santillo AF, Hansson O, Vestberg S, Borroni B, Padovani A, Galimberti D, Scarpini E, Rohrer JD, Woollacott IOC, **Synofzik M**, Wilke C, de Mendonca A, Vandenberghe R, Benussi L, Ghidoni R, Binetti G, Niessen WJ, Papma JM, Seelaar H, Jiskoot LC, de Jong FJ, Kaat LD, Del Campo M, Teunissen CE, Bron EE, Van den Berg E, Van Swieten JC (2019) Clinical value of cerebrospinal fluid neurofilament light chain in semantic dementia. *Journal of Neurology Neurosurgery and Psychiatry* 90**:**997-1004

Mengel A, Ulm L, Hotter B, Harms H, Piper SK, Grittner U, Montaner J, Meisel C, Meisel A, Hoffmann S (2019) Biomarkers of immune capacity, infection and inflammation are associated with poor outcome and mortality after stroke - the PREDICT study. *BMC Neurology* 19**:**10

Menzler K, Mross PM, Rosenow F, Schubert-Bast S, Willems LM, Zahnert F, Immisch I, Fuest S, von Podewils F, Kunz R, Hirsch M, Mueller T, **Marquetand J**, Winter Y, Langenbruch L, Cicanic M, Beyenburg S, Strzelczyk A, Knake S (2019) First clinical postmarketing experiences in the treatment of epilepsies with brivaracetam: a retrospective observational multicentre study. *BMJ Open* 9**:**e030746

Mico-Amigo ME, Kingma I, Heinzel S, **Nussbaum S, Heger T**, van Lummel RC, **Berg D, Maetzler W**, van Dieen JH (2019) Dual vs. Single Tasking During Circular Walking: What Better Reflects Progression in Parkinson's Disease? *Frontiers in Neurology* 10: 19

Mico-Amigo ME, Kingma I, Heinzel S, Rispens SM, **Heger T, Nussbaum S**, van Lummel RC, **Berg D**, **Maetzler W**, van Dieen JH (2019) Potential Markers of Progression in Idiopathic Parkinson's Disease Derived From Assessment of Circular Gait With a Single Body-Fixed-Sensor: A 5 Year Longitudinal Study. *Frontiers in Human Neuroscience* 13**:**14

Miebach L, Wolfsgruber S, Polcher A, Peters O, Menne F, Luther K, Incesoy E, Priller J, Spruth E, Altenstein S, Buerger K, Catak C, Janowitz D, Perneczky R, Utecht J, **Laske C**, Buchmann M, Schneider A, Fliessbach K, Kalbhen P, Heneka MT, Brosseron F, Spottke A, Roy N, Teipel SJ, Kilimann I, Wiltfang J, Bartels C, Duzel E, Dobisch L, Metzger C, Meiberth D, Ramirez A, Jessen F, Wagner M (2019) Which features of subjective cognitive decline are related to amyloid pathology? Findings from the DELCODE study. *Alzheimer's Research & Therapy* 11:66

Minnerop M, Kurzwelly D, Wagner H, **Schule R**, Ramirez A (2019) Reply: Biallelic POLR3A variants confirmed as a frequent cause of hereditary ataxia and spastic paraparesis. *Brain* 142:3

Mock J, Huber S, **Bloechle J,** Bahnmueller J, Moeller K, Klein E (2019) Processing symbolic and non-symbolic proportions: Domain-specific numerical and domain-general processes in intraparietal cortex. *Brain Research* 1714:133-46

Muller M, Marusic U, Boas MV, **Weiss D**, Bohnen NI (2019) Treatment options for postural instability and gait difficulties in Parkinson's disease. *Expert Review of Neurotherapeutics* 19:1229-51

Muller S, Herde L, Preische O, Zeller A, Heymann P, Robens S, Elbing U, **Laske C** (2019) Diagnostic value of digital clock drawing test in comparison with CERAD neuropsychological battery total score for discrimination of patients in the early course of Alzheimer's disease from healthy individuals. *Scientific Reports* 9:3543

Nagel M, Reichbauer J, Bohringer J, Schelling Y, Krageloh-Mann I, **Schule R, Ulmer U** (2019) Generation of two iPSC lines derived from two unrelated patients with Gaucher disease. *Stem Cell Research* 35:5

Nalls MA, Blauwendraat C, Vallerga CL, Heilbron K, Bandres-Ciga S, Chang D, Tan M, Kia DA, Noyce AJ, Xue A, Bras J, Young E, von Coelln R, **Simon-Sanchez J, Schulte C,** Sharma M, (...), Gan-Or Z, **Gasser T, Heutink P**, Shulman JM, Wood NW, Hinds DA, Hardy JA, Morris HR, Gratten J, Visscher PM, Graham RR, Singleton AB, Me Res T, Syst Genomics Parkinson's D, Int Parkinson's Dis G (2019) Identification of novel risk loci, causal insights, and heritable risk for Parkinson's disease: a meta-analysis of genome-wide association studies. *Lancet Neurology* 18:1091-102

Nassiri F, Mamatjan Y, Suppiah S, Badhiwala JH, Mansouri S, Karimi S, Saarela O, Poisson L, **Gepfner-Tuma I**, Schittenhelm J, Ng HK, Noushmehr H, Harter P, Baumgarten P, Weller M, Preusser M, Herold-Mende C, Tatagiba M, **Tabatabai G**, Sahm F, von Deimling A, Int Consortium Meningiomas, Zadeh G, Aldape KD (2019) DNA methylation profiling to predict recurrence risk in meningioma: development and validation of a nomogram to optimize clinical management. *Neuro-Oncology* 21:901-10

Nassiri F, **Tabatabai G**, Aldape K, Zadeh G (2019) Challenges and opportunities in meningiomas: recommendations from the International Consortium on Meningiomas. *Neuro-Oncology* 21:I2-I3

Neugebauer H, Schneider H, Bosel J, Hobohm C, **Poli S**, Kollmar R, Sobesky J, Wolf S, Bauer M, Tittel S, Beyersmann J, Woitzik J, Heuschmann PU, Juttler E (2019) Outcomes of Hypothermia in Addition to Decompressive Hemicraniectomy in Treatment of Malignant Middle Cerebral Artery Stroke A Randomized Clinical Trial. *JAMA Neurology* 76:571-79

Neuhaus O, Schimana R, Bengel D, Staudacher T, **Ziemann U**, Hennersdorf F, Prey N, Bernhard A (2019) It is more than transportation time only: „Drip and ship" delays endovascular thrombectomy in stroke. *Fortschritte Der Neurologie Psychiatrie* 87:429-35

Niestroj LM, May P, Artomov M, Kobow K, Coras R, Perez-Palma E, Altmuller J, Thiele H, Nurnberg P, Leu C, Palotie A, Daly MJ, Klein KM, Beschorner R, **Weber YG**, Blumcke I, Lal D (2019) Assessment of genetic variant burden in epilepsy-associated brain lesions. *European Journal of Human Genetics* 27:1738-44

Nikmaram N, Scholz DS, Grossbach M, Schmidt SB, **Spogis J, Belardinelli P, Muller-Dahlhaus F**, Remy J, Ziemann U, Rollnik JD, Altenmuller E (2019) Musical Sonification of Arm Movements in Stroke Rehabilitation Yields Limited Benefits. *Frontiers in Neuroscience* 13:14

Ninaus M, Greipl S, Kiili K, Lindstedt A, Huber S, Klein E, **Karnath HO**, Moeller K (2019) Increased emotional engagement in game-based learning - A machine learning approach on facial emotion detection data. *Computers & Education* 142:10

Nissen SK, Shrivastava K, **Schulte C**, Otzen DE, Goldeck D, Berg D, Moller HJ, Maetzler W, Romero-Ramos M (2019) Alterations in Blood Monocyte Functions in Parkinson's Disease. *Movement Disorders* 34**:**1711-21

O'Donnell-Luria AH, Pais LS, Faundes V, Wood JC, Sveden A, Luria V, Abou Jamra R, Accogli A, Amburgey K, Anderlid BM, Azzarello-Burri S, Basinger AA, Bianchini C, Bird LM, Buchert R, Carre W, Ceulemans S, Charles P, Cox H, Culliton L, Curro A, Deciphering Developmental Disorders (DDD) Study, Demurger F, Dowling JJ, Duban-Bedu B, Dubourg C, Eiset SE, (...) , McWalter K, Melchinger EU, Mercimek-Andrews S, Nava C, Pendziwiat M, Person R, Ramelli GP, Ramos LLP, Rauch A, Reavey C, Renieri A, Riess A, Sanchez-Valle A, Sattar S, Saunders C, **Schwarz N**, Smol T, Srour M, Steindl K, Syrbe S, Taylor JC, Telegrafi A, Thiffault I, Trauner DA, van der Linden H, van Koningsbruggen S, Villard L, Vogel I, Vogt J, **Weber YG**, Wentzensen IM, Widjaja E, Zak J, Baxter S, Banka S, Rodan LH (2019) Heterozygous Variants in KMT2E Cause a Spectrum of Neurodevelopmental Disorders and Epilepsy. *American Journal of Human Genetics* 104**:**1210-22

Opie GM, Hand BJ, Coxon JP, Ridding MC, **Ziemann U**, Semmler JG (2019) Visuomotor task acquisition is reduced by priming paired associative stimulation in older adults. *Neurobiology of Aging* 81**:**67-76

Parhizkar S, Arzberger T, Brendel M, Kleinberger G, Deussing M, Focke C, Nuscher B, Xiong M, Ghasemigharagoz A, Katzmarski N, Krasemann S, Lichtenthaler SF, Muller SA, Colombo A, Monasor LS, Tahirovic S, Herms J, Willem M, Pettkus N, Butovsky O, Bartenstein P, Edbauer D, Rominger A, Erturk A, **Grathwohl SA, Neher JJ**, Holtzman DM, Meyer-Luehmann M, Haass C (2019) Loss of TREM2 function increases amyloid seeding but reduces plaque-associated ApoE. *Nat Neurosci* 22**:**191-204

Park J, Colombo R, Schaferhoff K, Janiri L, Grimmel M, Sturm M, Grasshoff U, Dufke A, Haack TB, Kehrer M (2019) Novel *HIVEP2* Variants in Patients with Intellectual Disability. *Molecular Syndromology* 10**:**195-201

Park J, Flores BR, Scherer K, Kuepper H, Rossi M, Rupprich K, Rautenberg M, Deininger N, Weichselbaum A, **Grimm A**, Sturm M, Grasshoff U, Delpire E, Haack TB (2019) De novo variants in SLC12A6 cause sporadic early-onset progressive sensorimotor neuropathy. *Journal of Medical Genetics*,10.1136/jmedgenet-2019-106273

Park J, Koko M, Hedrich UBS, Hermann A, Cremer K, Haberlandt E, Grimmel M, Alhaddad B, Beck-Woedl S, **Harrer M**, Karall D, Kingelhoefer L, Tzschach A, Matthies LC, Strom TM, Ringelstein EB, Sturm M, Engels H, Wolff M, **Lerche H**, Haack TB (2019) KCNC1-related disorders: new de novo variants expand the phenotypic spectrum. *Annals of Clinical and Translational Neurology* 6**:**1319-26

Pilacinski A, Lindner A (2019) Distinct contributions of human posterior parietal and dorsal premotor cortex to reach trajectory planning. *Scientific Reports* 9:1962

Pilotto A, Blau N, Leks E, **Schulte C, Deuschl C**, Zipser C, Piel D, Freisinger P, Gramer G, Kolker S, Haas D, Burgard P, Nawroth P, Georg H, Scheffler K, **Berg D**, Trefz F (2019) Cerebrospinal fluid biogenic amines depletion and brain atrophy in adult patients with phenylketonuria. *Journal of Inherited Metabolic Disease* 42**:**398-406

Pinotsis DA, **Siegel M**, Miller EK (2019) Sensory Processing and Categorization in Cortical and Deep Neural Networks. *Neuroimage* 202:116118

Pogoda M, Hilke FJ, **Lohmann E**, Sturm M, Lenz F, Matthes J, Muyas F, Ossowski S, Hoischen A, Faust U, Sepahi I, Casadei N, Poths S, Riess O, Schroeder C, Grundmann K (2019) Single Molecule Molecular Inversion Probes for High Throughput Germline Screenings in Dystonia. *Frontiers in Neurology* 10**:**1332

Poli S, Bombach P, Geisler T (2019) Atrial fibrosis and its implications on a revised ESUS concept. *Neurology* 93**:**141-2

Pottier C, Ren Y, Ralph BI, Baker M, Jenkins GD, Blitterswijk M, DeJesus-Hernandez M, Rooij JGJ, Murray ME, Christopher E, McDonnell SK, Fogarty Z, Batzler A, Tian S, Vicente CT, Matchett B, Karydas AM, Hsiung GYR, Seelaar H, Mol MO, Finger EC, Graff C, Oijerstedt L, Neumann M, **Heutink P, Synofzik M, Wilke C**, Prudlo J, Rizzu P, **Simon-Sanchez J**, Edbauer D, Roeber S, Petrucelli L, Ahern GL, (...), Trojanowski JQ, Van Deerlin V, Bigio EH, Troakes C, Al-Sarraj S, Asmann Y, Miller BL, Graff-Radford NR, Boeve BF, Seeley WW, Mackenzie IRA, Swieten JC, Dickson DW, Biernacka JM, Rademakers R (2019) Genome-wide analyses as part of the international FTLD-TDP whole-genome sequencing consortium reveals novel disease risk factors and increases support for immune dysfunction in FTLD. *Acta Neuropathologica* 137**:**879-99

Prakash N, Caspell-Garcia C, Coffey C, Siderowf A, Tanner CM, Kieburtz K, Mollenhauer B, Galasko D, Merchant K, Foroud T, Chahine LM, Weintraub D, Casaceli C, Dorsey R, Wilson R, Herzog M, Daegele N, Arnedo V, Frasier M, Sherer T, Marek K, Frank S, Jennings D, Simuni T, Parkinson's Progression Markers Initiative Steering Committee (**Brockmann K** et al), Study Cores, Site Investigators, Coordinators, Industry and Scientific Advisory Board (2019) Feasibility and safety of lumbar puncture in the Parkinson's disease research participants: Parkinson's Progression Marker Initiative (PPMI). *Parkinsonism & Related Disorders* 62**:**201-09

Prasad V, Wasser Y, Hans F, Goswami A, Katona I, Outeiro TF, **Kahle PJ**, Schulz JB, Voigt A (2019) Monitoring -synuclein multimerization in vivo. *Faseb Journal* 33**:**2116-31

Prass M, de Haan B (2019) Multi-target attention and visual short-term memory capacity are closely linked in the intraparietal sulcus. *Human Brain Mapping* 40**:**3589-605

Preische O, Schultz SA, **Apel A**, Kuhle J, **Kaeser SA**, Barro C, Graber S, Kuder-Buletta E, LaFougere C, Laske C, Voglein J, Levin J, Masters CL, Martins R, Schofield PR, Rossor MN, Graff-Radford NR, Salloway S, Ghetti B, Ringman JM, Noble JM, Chhatwal J, Goate AM, Benzinger TLS, Morris JC, Bateman RJ, Wang G, Fagan AM, McDade EM, Gordon BA, **Jucker M** (2019) Serum neurofilament dynamics predicts neurodegeneration and clinical progression in presymptomatic Alzheimer's disease. *Nature Medicine* 25**:**277-83

Premi E, Calhoun VD, Diano M, Gazzina S, Cosseddu M, Alberici A, Archetti S, Paternico D, Gasparotti R, van Swieten J, Galimberti D, Sanchez-Valle R, Laforce R, Moreno F, **Synofzik M**, Graff C, Masellis M, Tartaglia MC, Rowe J, Vandenberghe R, Finger E, Tagliavini F, de Mendonca A, Santana I, Butler C, Ducharme S, Gerhard A, Danek A, Levin J, Otto M, Frisoni G, Cappa S, Sorbi S, Padovani A, Rohrer JD, Borroni B, Genetic FTDI, Genfi (2019) The inner fluctuations of the brain in presymptomatic Frontotemporal Dementia: The chronnectome fingerprint. *Neuroimage* 189**:**645-54

Przystal JM, Waramit S, Pranjol MZI, Yan WQ, Chu G, Chongchai A, Samarth G, Olaciregui NG, **Tabatabai G**, Carcaboso AM, Aboagye EO, Suwan K, Hajitou A (2019) Efficacy of systemic temozolomide-activated phage-targeted gene therapy in human glioblastoma. *EMBO Molecular Medicine* 11**:**21

Rajaraman S, Canjuga D, Ghosh M, Codrea MC, Sieger R, Wedekink F, Tatagiba M, Koch M, Lauer UM, Nahnsen S, Rammensee HG, Muhlebach MD, Stevanovic S, **Tabatabai G** (2019) Measles Virus-Based Treatments Trigger a Pro-inflammatory Cascade and a Distinctive Immunopeptidome in Glioblastoma. *Molecular Therapy-Oncolytics* 12**:**147-61

Rattay TW, Boldt A, Volker M, **Wiethoff S, Hengel H, Schule R, Schols L** (2019) Non-motor symptoms are relevant and possibly treatable in hereditary spastic paraplegia type 4 (SPG4). *Journal of Neurology*, 10.1007/s00415-019-09573-w11

Rattay TW, Lindig T, Baets J, Smets K, Deconinck T, Sohn AS, Hortnagel K, Eckstein KN, **Wiethoff S, Reichbauer J**, Dobler-Neumann M, Krageloh-Mann I, Auer-Grumbach M, Plecko B, Munchau A, Wilken B, Janauschek M, Giese AK, De Bleecker JL, Ortibus E, Debyser M, de Munain AL, Pujol A, Bassi MT, D'Angelo MG, De Jonghe P, Zuchner S, Bauer P, **Schols L, Schule R** (2019) FAHN/SPG35: a narrow phenotypic spectrum across disease classifications. *Brain* 142**:**1561-72

Rehbach K, Kesavan J, Hauser S, Ritzenhofen S, Jungverdorben J, **Schule R, Schols L**, Peitz M, Brustle O (2019) Multiparametric rapid screening of neuronal process pathology for drug target identification in HSP patient-specific neurons. *Scientific Reports* 9**:**13

Reilmann R, McGarry A, Grachev ID, Savola JM, Borowsky B, Eyal E, Gross N, Langbehn D, Schubert R, Wickenberg AT, Papapetropoulos S, Hayden M, Squitieri F, Kieburtz K, Landwehrmeyer GB, European Huntingtons Disease Network, Huntington Study Group Investigators (2019) Safety and efficacy of pridopidine in patients with Huntington's disease (PRIDE-HD): a phase 2, randomised, placebo-controlled, multicentre, dose-ranging study. *Lancet Neurology* 18**:**165-76

Reinhardt F, **Weber YG**, Mayer T, Luef G, Joeres L, Tennigkeit F, Dedeken P, De Backer M, Hellot S, Lauterbach T, Webers T, Arnold S (2019) Changes in drug load during lacosamide combination therapy: A noninterventional, observational study in German and Austrian clinical practice. *Epilepsia Open* 4**:**409-19

Rinaldi L, Delle Donne R, Catalanotti B, Torres-Quesada O, Enzler F, Moraca F, Nistico R, Chiuso F, Piccinin S, Bachmann V, Lindner HH, Garbi C, Scorziello A, Russo NA, **Synofzik M**, Stelzl U, Annunziato L, Stefan E, Feliciello A (2019) Feedback inhibition of cAMP effector signaling by a chaperone-assisted ubiquitin system. *Nature Communications* 10:14

Ringleb P BM, Bluhmki E, Donnan G, Eschenfelder C, Fatar M, Kessler C, Molina C, Leys D, Muddegowda G, **Poli S**, Schellinger P, Schwab S, Serena J, Toni D, Wahlgren N, Hacke W, group E-s (2019) Extending the time window for intravenous thrombolysis in acute ischemic stroke using magnetic resonance imaging-based patient selection. *International Journal of Stroke* 14:483-90

Robens S, Heymann P, Gienger R, Hett A, Muller S, **Laske C**, Loy R, Ostermann T, Elbing U (2019) The Digital Tree Drawing Test for Screening of Early Dementia: An Explorative Study Comparing Healthy Controls, Patients with Mild Cognitive Impairment, and Patients with Early Dementia of the Alzheimer Type. *Journal of Alzheimer's Disease* 68:1561-74

Roeben B, Blum D, Gabriel H, **Synofzik M** (2019) Atypical parkinsonism with severely reduced striatal dopamine uptake associated with a 16p11.2 duplication syndrome. *Journal of Neurology* 266:775-76

Roeben B, Wilke C, Bender B, **Ziemann U, Synofzik M** (2019) The motor band sign in ALS: presentations and frequencies in a consecutive series of ALS patients. *Journal of the Neurological Sciences* 406:4

Sandhaeger F, von Nicolai C, Miller EK, **Siegel M** (2019) Monkey EEG links neuronal color and motion information across species and scales. *eLife* 8:e45645

Schaeffer E, Busch JH, **Roeben B**, Otterbein S, Saraykin P, Leks E, **Liepelt-Scarfone I, Synofzik M, Elshehabi M, Maetzler W**, Hansen C, Andris S, **Berg D** (2019) Effects of Exergaming on Attentional Deficits and Dual-Tasking in Parkinson's Disease. *Frontiers in Neurology* 10:8

Schaeffer E, Streich S, **Wurster I**, Schubert R, **Reilmann R**, Wolfram S, Berg D (2019) How to evaluate effects of occupational therapy - lessons learned from an exploratory randomized controlled trial. *Parkinsonism & Related Disorders* 67:42-47

Schaworonkow N, Triesch J, **Ziemann U, Zrenner C** (2019) EEG-triggered TMS reveals stronger brain state-dependent modulation of motor evoked potentials at weaker stimulation intensities. *Brain Stimulation* 12:110-18

Schelle J, Wegenast-Braun BM, Fritschi SK, Kaeser SA, Jahrling N, Eicke D, **Skodras A, Beschorner N, Obermueller U, Hasler LM,** Wolfer DP, Mueggler T, Shimshek DR, Neumann U, Dodt HU, **Staufenbiel M, Jucker M** (2019) Early Abeta reduction prevents progression of cerebral amyloid angiopathy. Annals of Neurology 86:561-71

Schindler SE, Li Y, Todd KW, Herries EM, Henson RL, Gray JD, Wang G, Graham DL, Shaw LM, Trojanowski JQ, Hassenstab JJ, Benzinger TLS, Cruchaga C, **Jucker M**, Levin J, Chhatwal JP, Noble JM, Ringman JM, Graff-Radford NR, Holtzman DM, Ladenson JH, Morris JC, Bateman RJ, Xiong C, Fagan AM (2019) Emerging cerebrospinal fluid biomarkers in autosomal dominant Alzheimer's disease. Alzheimer's & Dementia 15:655-65

Schittenhelm J, Krischker N, Gepfner-Tuma I, Behling F, Noell S, Eckert F, Biskup S, **Tabatabai G** (2019) Oncogenic KRAS hotspot mutations are rare in IDH-mutant gliomas. Brain Pathology 29:321-24

Schmitt S, Günther M, **Häufle DFB** (2019) The dynamics of the skeletal muscle: A systems biophysics perspective on muscle modeling with the focus on Hill-type muscle models. *GAMM-Mitteilungen* 42:e201900013

Schoellmann A, Scholten M, Wasserka B, Govindan RB, **Kruger R**, Gharabaghi A, Plewnia C, **Weiss D** (2019) Anodal tDCS modulates cortical activity and synchronization in Parkinson's disease depending on motor processing. *Neuroimage-Clinical* 22:9

Schotterl S, Hubner M, Armento A, Veninga V, Wirsik NM, Bernatz S, Lentzen H, Mittelbronn M, **Naumann U** (2019) Mistletoe lectin I reduces glioma cell motility by changing mainly the expression of genes associated to TGF-beta signaling. *Phytomedicine* 61:2

Schotterl S, Miemietz JT, Ilina EI, Wirsik NM, **Ehrlich I, Gall A**, Huber SM, Lentzen H, Mittelbronn M, **Naumann U** (2019) Mistletoe-Based Drugs Work in Synergy with Radio-Chemotherapy in the Treatment of Glioma In Vitro and In Vivo in Glioblastoma Bearing Mice. *Evidence-Based Complementary and Alternative Medicine* 1376140

Schuepbach WMM, Tonder L, Schnitzler A, Krack P, Rau J, Hartmann A, Halbig TD, Pineau F, Falk A, Paschen L, Paschen S, Volkmann J, Dafsari HS, Barbe MT, Fink GR, Kuhn A, Kupsch A, Schneider GH, Seigneuret E, Fraix V, Kistner A, Chaynes PP, Ory-Magne F, Brefel-Courbon C, Vesper J, Wojtecki L, Derrey S, Maltete D, Damier P, Derkinderen P, Sixel-Doring F, Trenkwalder C, Gharabaghi A, Wachter T, **Weiss D**, Pinsker MO, Regis JM, Witjas T, Thobois S, Mertens P, Knudsen K, Schade-Brittinger C, Houeto JL, Agid Y, Vidailhet M, Timmermann L, Deuschl G, Grp ES (2019) Quality of life predicts outcome of deep brain stimulation in early Parkinson disease. *Neurology* 92:E1109-E20

Schulz H, Ruppert AK, Zara F, Madia F, Iacomino M, Vari MS, Balagura G, Minetti C, Striano P, Blanche A, Marini C, Guerrini R, **Weber YG, Becker F, Lerche H**, Kapser C, Schankin CJ, Kunz WS, Moller RS, Oliver KL, Bellows ST, Mullen SA, Berkovic SF, Scheffer IE, Caglayan H, Ozbek U, Hoffmann P, Schramm S, Tsortouktzidis D, Becker AJ, Sander T (2019) No evidence for a BRD2 promoter hypermethylation inblood leukocytes of Europeans with juvenile myoclonic epilepsy. *Epilepsia* 60:E31-E36

Schuster S, Saravanakumar S, **Schols L**, Hauser S (2019) Generation of a homozygous CRISPR/Cas9-mediated knockout human iPSC line for the STUB1 locus. *Stem Cell Research* 34:4

Schwarz N, Bast T, Gaily E, Golla G, Gorman KM, Griffiths LR, Hahn A, Hukin J, King M, Korff C, Miranda MJ, Moller RS, Neubauer B, Smith RA, Smol T, Striano P, Stroud B, Vaccarezza M, Kluger G, **Lerche H**, Fazeli W (2019) Clinical and genetic spectrum of SCN2A-associated episodic ataxia. *European Journal of Paediatric Neurology* 23:438-47

Schwarz N, Uysal B, Rosa F, Loffler H, Mau-Holzmann UA, Liebau S, **Lerche H** (2019) Establishment of a human induced pluripotent stem cell (iPSC) line (HIHDNEi002-A) from a patient with developmental and epileptic encephalopathy carrying a KCNA2 (p.Arg297Gln) mutation. *Stem Cell Research* 37:5

Schwarz N, Uysal B, Welzer M, Bahr JC, Layer N, Loffler H, Stanaitis K, Harshad PA, Weber YG, Hedrich UBS, Honegger JB, **Skodras A**, Becker AJ, **Wuttke TV, Koch H** (2019) Long-term adult human brain slice cultures as a model system to study human CNS circuitry and disease. *Elife* 8:26

Sharkia R, Wierenga KJ, Kessel A, Azem A, Bertini E, Carrozzo R, Torraco A, Goffrini P, Berti CC, McCormick ME, Plecko B, Klein A, Abela L, **Hengel H, Schols L**, Shalev S, Khayat M, Mahajnah M, Spiegel R (2019) Clinical, radiological, and genetic characteristics of 16 patients with ACO2 gene defects: Delineation of an emerging neurometabolic syndrome. *Journal of Inherited Metabolic Disease* 42:264-75

Sharkia R, Zalan A, Jabareen-Masri A, **Hengel H, Schols L**, Kessel A, Azem A, Mahajnah M (2019) A novel biallelic loss-of-function mutation in TMCO1 gene confirming and expanding the phenotype spectrum of cerebro-facio-thoracic dysplasia. *American Journal of Medical Genetics Part A* 179:1338-45

Shoeibi A, Litvan I, Tolosa E, del Ser T, Lee E, Gomez JC, Tijero B, Berganzo K, de Yebenes JG, Sendon JLL, Garcia G, Buongiorno MT, Bargallo N, Burguera JA, Martinez I, Ruiz-Martinez J, Narrativel I, Vivancos F, Ybot I, Aguilar M, Quilez P, Boada M, Lafuente A, Hernandez I, Lopez-Lozano JJ, Mata M, Kupsch A, Lipp A, Ebersbach G, Schmidt T, Hahn K, Heoglinger G, Hollerhage M, Oertel WH, Respondek G, Stamelou M, Reichmann H, Wolz M, Schneider C, Klingelhofer L, **Berg D, Maetzler W**, Srulijes KK, Ludolph A, Kassubek J, Steiger M, Tyler K, Burn DJ, Morris L, Lees A, Ling H, Hauser R, McClain T, Truong D, Jenkins S, Litvan I, Houghton D, Ferrara J, Bordelon Y, Gratiano A, Golbe L, Mark M, Uitti R, Gerpen JV, Investigators T (2019) Progression of two Progressive Supranuclear Palsy phenotypes with comparable initial disability. *Parkinsonism & Related Disorders* 66:87-93

Shraibman B, Barnea E, Kadosh DM, Haimovich Y, Slobodin G, Rosner I, Lopez-Larrea C, Hilf N, Kuttruff S, Song C, Britten C, Castle J, Kreiter S, Frenzel K, Tatagiba M, **Tabatabai G**, Dietrich PY, Dutoit V, Wick W, Platten M, Winkler F, von Deimling A, Kroep J, Sahuquillo J, Martinez-Ricarte F, Rodon J, Lassen U, Ottensmeier C, van der Burg SH, Straten PT, Poulsen HS, Ponsati B, Okada H, Rammensee HG, Sahin U, Singh H, Admon A (2019) Identification of Tumor Antigens Among the HLA Peptidomes of Glioblastoma Tumors and Plasma. *Molecular & Cellular Proteomics* 18:1255-68

Siebner HR, Conde V, Tomasevic L, Thielscher A, **Bergmann TO** (2019) Distilling the essence of TMS-evoked EEG potentials (TEPs): A call for securing mechanistic specificity and experimental rigor. *Brain Stimulation* 12:1051-54

Siekierska A, Stamberger H, Deconinck T, Oprescu SN, Partoens M, Zhang YF, Sourbron J, Adriaenssens E, Mullen P, Wiencek P, (...), Leguern E, Lemke JR, **Lerche H**, Marini C, Moller RS, Muhle H, Rosenow F, Serratosa J, Suls A, Stephani U, Sterbova K, Striano P, Zara F, Weckhuysen S, Francklyn C, Antonellis A, de Witte P, De Jonghe P, Grp CRR, RES ARWGE (2019) Biallelic VARS variants cause developmental encephalopathy with microcephaly that is recapitulated in vars knockout zebrafish. *Nature Communications* 10:15

Silvennoinen K, de Lange N, Zagaglia S, Balestrini S, Androsova G, Wassenaar M, Auce P, Avbersek A, **Becker F**, Berghuis B, Campbell E, Coppola A, Francis B, **Wolking S**, Cavalleri GL, Craig J, Delanty N, Johnson MR, Koeleman BPC, Kunz WS, **Lerche H**, Marson AG, O'Brien TJ, Sander JW, Sills GJ, Striano P, Zara F, van der Palen J, Krause R, Depondt C, Sisodiya SM, Epi PGXC (2019) Comparative effectiveness of antiepileptic drugs in juvenile myoclonic epilepsy. *Epilepsia Open* 4:420-30

Simuni T, Uribe L, Cho HR, Caspell-Garcia C, Coffey CS, Siderowf A, Trojanowski JQ, Shaw LM, Seibyl J, Singleton A, Toga AW, Galasko D, Foroud T, Tosun D, Poston K, Weintraub D, Mollenhauer B, Tanner CM, Kieburtz K, Chahine LM, Reimer A, Hutten SJ, Bressman S, Marek K, PPMI Investigators (**Brockmann K** et al; 2020) Clinical and dopamine transporter imaging characteristics of non-manifest LRRK2 and GBA mutation carriers in the Parkinson's Progression Markers Initiative (PPMI): a cross-sectional study. *Lancet Neurology* 19:71-80

Skinner J, Buonocore A, Hafed ZM (2019) Transfer function of the rhesus macaque oculomotor system for small-amplitude slow motion trajectories. *Journal of Neurophysiology* 121:513-29

Sohrabi HR, Weinborn M, **Laske C**, Bates KA, Christensen D, Taddei K, Rainey-Smith SR, Brown BM, Gardener SL, Laws SM, Martins G, Burnham SC, Bucks RS, Reisberg B, Lautenschlager NT, Foster J, Martins RN (2019) Subjective memory complaints predict baseline but not future cognitive function over three years: results from the Western Australia Memory Study. *International Psychogeriatrics* 31:513-25

Spadacenta S, Dicke PW, Thier P (2019) Reflexive gaze following in common marmoset monkeys. *Scientific Reports* 9:15292

Spalek K, Loos E, Schicktanz N, Hartmann F, de Quervain D, **Stier C**, Milnik A (2019) Women using hormonal contraceptives show increased valence ratings and memory performance for emotional information. *Neuropsychopharmacology* 44:1258-64

Sperber C, Wiesen D, Goldenberg G, **Karnath HO** (2019) A network underlying human higher-order motor control: Insights from machine learning-based lesion-behaviour mapping in apraxia of pantomime. *Cortex* 121:308-21

Sperber C, Wiesen D, Karnath HO (2019) An empirical evaluation of multivariate lesion behaviour mapping using support vector regression. *Human Brain Mapping* 40:1381-90

Srulijes K, Klenk J, Schwenk M, **Schatton C**, Schwickert L, Teubner-Liepert K, Meyer M, Srijana KC, **Maetzler W**, Becker C, **Synofzik M** (2019) Fall Risk in Relation to Individual Physical Activity Exposure in Patients with Different Neurodegenerative Diseases: a Pilot Study. *Cerebellum* 18:340-48

Stankovic I, Quinn N, Vignatelli L, Antonini A, **Berg D**, Coon E, Cortelli P, Fanciulli A, Ferreira JJ, Freeman R, Halliday G, Hoglinger GU, Iodice V, Kaufmann H, Klockgether T, Kostic V, Krismer F, Lang A, Levin J, Low P, Mathias C, Meissner WG, Kaufmann LN, Palma JA, Panicker JN, Pellecchia MT, Sakakibara R, Schmahmann J, Scholz SW, Singer W, Stamelou M, Tolosa E, Tsuji S, Seppi K, Poewe W, Wenning GK, Movement Disorder Soc Multiple S (2019) A critique of the second consensus criteria for multiple system atrophy. *Movement Disorders* 34:975-84

Stefanou MI, Baur D, Belardinelli P, Bergmann TO, Blum C, Gordon PC, Nieminen JO, Zrenner B, Ziemann U, Zrenner C (2019) Brain State-dependent Brain Stimulation with Real-time Electroencephalography-Triggered Transcranial Magnetic Stimulation. *Jove-Journal of Visualized Experiments* 10.3791/597117

Stefanou MI, Doycheva D, Ebrahimi A, Dorr JM, **Ziemann U** (2019) Susac Syndrome: A diagnostic Chameleon. *Laryngo-Rhino-Otologie* 98:268-75

Stefanou MI, Richter H, Hartig F, Wang Y, Orgel A, Bender B, **Mengel A, Ziemann U, Poli S** (2019) Recurrent ischaemic cerebrovascular events as presenting manifestations of myeloproliferative neoplasms. *European Journal of Neurology* 26:903-E64

Stefanou MI, Schubert V, Ruschil C, Winter N, Schuhmann MU, **Ziemann U, Grimm A** (2019) Median nerve dissection after brachial artery catheterization revealed by high-resolution ultrasound. *Clinical Neurophysiology* 130:1081-82

Stoynova N, **Laske C**, Plewnia C (2019) Combining electrical stimulation and cognitive control training to reduce concerns about subjective cognitive decline. *Brain Stimulation* 12:1083-1085

Sturzu A, Sheikh S, Kalbacher H, Nagele T, Weidenmaier C, **Wegenast-Braun BM**, Schilling N, Ernemann U, Heckl S (2019) Synthesis of a Novel Curcumin Derivative as a Potential Imaging Probe in Alzheimer's Disease Imaging. *Current Alzheimer's Research* 16:723-31

Sudre CH, Bocchetta M, Heller C, Convery R, Neason M, Moore KM, Cash DM, Thomas DL, Woollacott IOC, Foiani M, Heslegrave A, Shafei R, Greaves C, van Swieten J, Moreno F, Sanchez-Valle R, Borroni B, Laforce R, Masellis M, Tartaglia MC, Graff C, Galimberti D, Rowe JB, Finger E, **Synofzik M**, Vandenberghe R, de Mendonca A, Tagliavini F, Santana I, Ducharme S, Butler C, Gerhard A, Levin J, Danek A, Frisoni GB, Sorbi S, Otto M, Zetterberg H, Ourselin S, Cardoso MJ, Rohrer JD, GENFI (2019) White matter hyperintensities in progranulin-associated frontotemporal dementia: A longitudinal GENFI study. *Neuroimage-Clinical* 24:11

Tawfik EA, Cartwright MS, **Grimm A**, Boon AJ, Kerasnoudis A, Preston DC, Wilder-Smith E, Axer H, Hobson-Webb LD, van Alfen N, Crump N, Shahrizaila N, Inkpen P, Mandeville R, Sakamuri S, Shook SJ, Shin S, Walker FO (2019) Guidelines for neuromuscular ultrasound training. *Muscle & Nerve* 60:361-66

Teipel SJ, Kuper-Smith JO, Bartels C, Brosseron F, Buchmann M, Buerger K, Catak C, Janowitz D, Dechent P, Dobisch L, Ertl-Wagner B, Fliessbach K, Haynes JD, Heneka MT, Kilimann I, **Laske C**, Li S, Menne F, Metzger CD, Priller J, Pross V, Ramirez A, Scheffler K, Schneider A, Spottke A, Spruth EJ, Wagner M, Wiltfang J, Wolfsgruber S, Duzel E, Jessen F, Dyrba M (2019) Multicenter Tract-Based Analysis of Microstructural Lesions within the Alzheimer's Disease Spectrum: Association with Amyloid Pathology and Diagnostic Usefulness. *Journal of Alzheimer's Disease* 72:455-65

Thier P, Markanday A (2019) Role of the Vermal Cerebellum in Visually Guided Eye Movements and Visual Motion Perception. *Annual Review of Vision Science* 5:247-68

Toomsoo T, **Liepelt-Scarfone I, Berg D**, Kerner R, Pool AH, Kadastik-Eerme L, Rubanovits I, Asser T, Taba P (2019) Effect of age on substantia nigra hyper-echogenicity in Parkinson's disease patients and healthy controls. *Ultrasound in Medicine and Biology* 45:122-28

Trainito C, von Nicolai C, Miller EK, **Siegel M** (2019) Extracellular spike waveform dissociates four functionally distinct cell classes in primate cortex. *Current Biology* 29

Traschutz A, Hayer SN, Bender B, **Schols L, Biskup S, Synofzik M** (2019) TSFM mutations cause a complex hyperkinetic movement disorder with strong relief by cannabinoids. *Parkinsonism & Related Disorders* 60:176-78

Traschutz A, van Gaalen J, Oosterloo M, Vreeburg M, Kamsteeg EJ, Deininger N, Riess O, Reimold M, Haack T, **Schols L**, van de Warrenburg BP, **Synofzik M** (2019) The movement disorder spectrum of SCA21 (ATX-TMEM240): 3 novel families and systematic review of the literature. *Parkinsonism & Related Disorders* 62:215-20

Tremblay S, Rogasch NC, Premoli I, Blumberger DM, Casarotto S, Chen R, Di Lazzaro V, Farzan F, Ferrarelli F, Fitzgerald PB, Hui J, Ilmoniemi RJ, Kimiskidis VK, Kugiumtzis D, Lioumis P, Pascual-Leone A, Pellicciari MC, Rajji T, Thut G, Zomorrodi R, **Ziemann U**, Daskalakis ZJ (2019) Clinical utility and prospective of TMS-EEG. *Clinical Neurophysiology* 130:802-44

Tzaridis T, **Gepfner-Tuma I, Hirsch S**, Skardelly M, Bender B, Paulsen F, Schaub C, Weller J, Schafer N, Herrlinger U, **Tabatabai G** (2019) Regorafenib in advanced high-grade glioma: a retrospective bicentric analysis. *Neuro-Oncology* 21:954-55

Ugun-Klusek A, Theodosi TS, **Fitzgerald JC**, Burte F, Ufer C, Boocock DJ, Yu-Wai-Man P, Bedford L, Billett EE (2019) Monoamine oxidase-A promotes protective autophagy in human SH-SY5Y neuroblastoma cells through Bcl-2 phosphorylation. *Redox Biology* 20:167-81

Umarova RM, **Sperber C**, Kaller CP, Schmidt CSM, Urbach H, Kloppel S, Weiner C, **Karnath HO** (2019) Cognitive reserve impacts on disability and cognitive deficits in acute stroke. *Journal of Neurology* 266:2495-504

Uysal B, Loffler H, Rosa F, Lerche H, Schwarz N (2019) Generation of an induced pluripotent stem cell (iPSC) line (HIHDNEi003-A) from a patient with developmental and epileptic encephalopathy carrying a KCNA2 (p.Thr374Ala) mutation. *Stem Cell Research* 40:5

van den Brand JA, **Dijkstra T**, Wetzels J, Stengel B, Metzger M, Blankestijn PJ et al. (2019) Predicting kidney failure from longitudinal kidney function trajectory: A comparison of models. *PLoS ONE* 14:e0216559

van der Ende EL, Meeter LH, Poos JM, Panman JL, Jiskoot LC, Dopper EGP, Papma JM, de Jong FJ, Verberk IMW, Teunissen C, Rizopoulos D, Heller C, Convery RS, Moore KM, Bocchetta M, Neason M, Cash DM, Borroni B, Galimberti D, Sanchez-Valle R, Laforce R, Moreno F, **Synofzik M**, Graff C, Masellis M, Tartaglia MC, Rowe JB, Vandenberghe R, Finger E, Tagliavini F, de Mendonca A, Santana I, Butler C, Ducharme S, Gerhard A, Danek A, Levin J, Otto M, Frisoni GB, Cappa S, Pijnenburg YAL, Rohrer JD, van Swieten JC, Genet Frontotemporal D (2019) Serum neurofilament light chain in genetic frontotemporal dementia: a longitudinal, multicentre cohort study. *Lancet Neurology* 18:1103-11

van der Lee SJ, Conway OJ, Jansen I, Carrasquillo MM, Kleineidam L, van den Akker E, Hernandez I, van Eijk KR, Stringa N, Chen JA, Zettergren A, Andlauer TFM, Diez-Fairen M, **Simon-Sanchez J,** Lleo A, (...), Scheltens P, **Gasser T**, Chinnery PF, Hemmer B, Huisman MA, Troncoso J, Moreno F, Nohr EA, Sorensen TIA, **Heutink P**, Sanchez-Juan P, Posthuma D, Clarimon J, Christensen K, Ertekin-Taner N, Scholz SW, Ramirez A, Ruiz A, Slagboom E, van der Flier WM, Holstege H, Genetics DD, European EAD, FTD-Genomics II, Genomics IIPD, RiMod FTDRM, Netherlands Brain Bank NBB, Invest GG (2019) A nonsynonymous mutation in PLCG2 reduces the risk of Alzheimer's disease, dementia with Lewy bodies and frontotemporal dementia, and increases the likelihood of longevity. *Acta Neuropathologica* 138:237-50

Velmeshev D, Schirmer L, Jung D, Haeussler M, Perez Y, **Mayer S**, Bhaduri A, Goyal N, Rowitch DH, Kriegstein AR (2019) Single-cell genomics identifies cell type-specific molecular changes in autism. *Science* 364:685-89

Vizcarra JA, Sanchez-Ferro A, Maetzler W, Marsili L, Zavala L, Lang AE, Martinez-Martin P, Mestre TA, **Reilmann R**, Hausdorff JM, Dorsey ER, Paul SS, Dexheimer JW, Wissel BD, Fuller RLM, Bonato P, Tan AH, Bloem BR, Kopil C, Daeschler M, Bataille L, Kleiner G, Cedarbaum JM, Klucken J, Merola A, Goetz CG, Stebbins GT, Espay AJ, MDS MDSTTF, Elect Dev Ad-Hoc C (2019) The Parkinson's disease e-diary: Developing a clinical and research tool for the digital age. *Movement Disorders* 34:676-81

Vogel AP, Stoll LH, Oettinger A, Rommel N, Kraus EM, Timmann D, Scott D, Atay C, Storey E, **Schols L, Synofzik M** (2019) Speech treatment improves dysarthria in multisystemic ataxia: a rater-blinded, controlled pilot-study in ARSACS. *Journal of Neurology* 266:1260-66

Voglein J, Noachtar S, McDade E, Quaid KA, Salloway S, Ghetti B, Noble J, Berman S, Chhatwal J, Mori H, Fox N, Allegri R, Masters CL, Buckles V, Ringman JM, Rossor M, Schofield PR, Sperling R, **Jucker M**, Laske C, Paumier K, Morris JC, Bateman RJ, Levin J, Danek A (2019) Seizures as an early symptom of autosomal dominant Alzheimer's disease. *Neurobiology of Aging* 76:18-23

Voglein J, Paumier K, **Jucker M, Preische O**, McDade E, Hassenstab J, Benzinger TL, Noble JM, Berman SB, Graff-Radford NR, Ghetti B, Farlow MR, Chhatwal J, Salloway S, Xiong C, Karch CM, Cairns N, Mori H, Schofield PR, Masters CL, Goate A, Buckles V, Fox N, Rossor M, Chrem P, Allegri R, Ringman JM, Hoglinger G, Steiner H, Dieterich M, Haass C, **Laske C**, Morris JC, Bateman RJ, Danek A, Levin J (2019) Clinical, pathophysiological and genetic features of motor symptoms in autosomal dominant Alzheimer's disease. *Brain* 142:1429-40

von Bernstorff M, Rapp J, Bausenhart F, **Feierabend M**, Ipach I, Hofmann UK (2019) Estimating Braking Performance in Osteoarthritis of the Knee or Hip with a Reaction Timer. *Orthopaedic Surgery* 11:248-54

Wagner M, Osborn DPS, **Gehweiler I, Nagel M, Ulmer U**, Bakhtiari S, Amouri R, Boostani R, Hentati F, Hockley MM, **Holbling B**, Schwarzmayr T, Karimiani EG, Kernstock C, Maroofian R, Muller-Felber W, Ozkan E, Padilla-Lopez S, **Reich S, Reichbauer J**, Darvish H, Shahmohammadibeni N, Tafakhori A, Vill K, Zuchner S, Kruer MC, Winkelmann J, Jamshidi Y, **Schule R** (2019) Bi-allelic variants in RNF170 are associated with hereditary spastic paraplegia. *Nature Communications* 10:13

Weber MA, Jurkat-Rott K, **Lerche H**, Lehmann-Horn F (2019) Strength and muscle structure preserved during long-term therapy in a patient with hypokalemic periodic paralysis (Cav1.1-R1239G). *Journal of Neurology* 266**:**1623-32

Weickenmeier J, **Jucker M**, Goriely A, Kuhl E (2019) A physics-based model explains the prion-like features of neurodegeneration in Alzheimer's disease, Parkinson's disease, and amyotrophic lateral sclerosis. *Journal of the Mechanics and Physics of Solids* 124**:**264-81

Weller J, Tzaridis T, Mack F, Steinbach JP, Schlegel U, Hau P, Krex D, Grauer O, Goldbrunner R, Bahr O, Uhl M, Seidel C, **Tabatabai G**, Brehmer S, Bullinger L, Galldiks N, Schaub C, Kebir S, Stummer W, Simon M, Fimmers R, Coch C, Glas M, Herrlinger U, Schafer N (2019) Health-related quality of life and neurocognitive functioning with lomustine-temozolomide versus temozolomide in patients with newly diagnosed, MGMT-methylated glioblastoma (CeTeG/NOA-09): a randomised, multicentre, open-label, phase 3 trial. *Lancet Oncology* 20**:**1444-53

Wiesen D, Sperber C, Yourganov G, Rorden C, **Karnath HO** (2019) Using machine learning-based lesion behavior mapping to identify anatomical networks of cognitive dysfunction: Spatial neglect and attention. *Neuroimage* 201:116000

Wilke C, Pujol-Calderon F, Barro C, Stransky E, Blennow K, Michalak Z, **Deuschle C**, Jeromin A, Zetterberg H, **Schule R**, Hoglund K, Kuhle J, **Synofzik M** (2019) Correlations between serum and CSF pNfH levels in ALS, FTD and controls: a comparison of three analytical approaches. *Clinical Chemistry and Laboratory Medicine* 57**:**1556-64

Willeke KF, Tian XG, Buonocore A, Bellet J, Ramirez-Cardenas A, Hafed ZM (2019) Memory-guided microsaccades. *Nature Communications* 10

Willikens S, Wolking S (2019) A case of DRESS (drug reaction with eosinophilia and systemic symptoms) under treatment with eslicarbazepine. *Seizure-European Journal of Epilepsy* 72**:**11-12

Winter N, Dammeier N, Schaffer E, Bornemann A, **Stahl JH**, Herlan S, Schuhmann MU, **Grimm A** (2019) Nerve Ultrasonography as an Additive Tool to Clinical Examination and Electrodiagnostics in Sporadic Mononeuritis - Imaging is the Key. *Ultraschall in Der Medizin* 40**:**465-72

Wojtala J, Heber IA, Neuser P, Heller J, Kalbe E, Rehberg SP, Storch A, Linse K, Schneider C, **Graber S, Berg D**, Dams J, Balzer-Geldsetzer M, Hilker-Roggendorf R, Oberschmidt C, Baudrexel S, Witt K, Schmidt N, **Deuschl G**, Mollenhauer B, Trenkwalder C, **Liepelt-Scarfone I**, Spottke A, Roeske S, Wullner U, Wittchen HU, Riedel O, Dodel R, Schulz JB, Reetz K (2019) Cognitive decline in Parkinson's disease: the impact of the motor phenotype on cognition. *Journal of Neurology Neurosurgery and Psychiatry* 90**:**171-79

Wolfe GI KH, Aban IB, Minisman G, Kuo HC, Marx A, Strobel P, Mazia C, Oger J, Cea JG, Heckmann JM, Evoli A, Nix W, Ciafaloni E, Antonini G, Witoonpanich R, King JO, Beydoun SR, Chalk CH, Barboi AC, Amato AA, Shaibani AI, Katirji B, Lecky BRF, Buckley C, Vincent A, Dias-Tosta E, Yoshikawa H, Waddington-Cruz M, Pulley MT, Rivner MH, Kostera-Pruszczyk A, Pascuzzi RM, Jackson CE, Verschuuren J, Massey JM, Kissel JT, Werneck LC, Benatar M, Barohn RJ, Tandan R, Mozaffar T, Silvestri NJ, Conwit R, Sonett JR, Jaretzki A, 3rd, Newsom-Davis J, Cutter GR, Group MS (**Bischof F, Melms A** et al) (2019) Long-term effect of thymectomy plus prednisone versus prednisone alone in patients with non-thymomatous myasthenia gravis: 2-year extension of the MGTX randomised trial. *Lancet Neurology* 18**:**259-68

Wolking S, May P, Mei D, Moller RS, Balestrini S, Helbig KL, Altuzarra CD, Chatron N, Kaiwar C, Stohr K, Widdess-Walsh P, Mendelsohn BA, Numis A, Cilio MR, Van Paesschen W, Svendsen LL, Oates S, Hughes E, Goyal S, Brown K, Saenz MS, Dorn T, Muhle H, Pagnamenta AT, Vavoulis DV, Knight SJL, Taylor JC, Canevini MP, Darra F, Gavrilova RH, Powis Z, Tang S, **Marquetand J**, Armstrong M, McHale D, Klee EW, Kluger GJ, Lowenstein DH, Weckhuysen S, Pal DK, Helbig I, Guerrini R, Thomas RH, Rees MI, Lesca G, Sisodiya SM, **Weber YG**, Lal D, Marini C, **Lerche H, Schubert J** (2019) Clinical spectrum of STX1B-related epileptic disorders. *Neurology* 92**:**E1238-E49

Zhang J, Konsmo A, Sandberg A, Wu X, Nystrom S, **Obermuller U, Wegenast-Braun BM**, Konradsson P, Lindgren M, Hammarstrom P (2019) Phenolic Bis-styrylbenzo[c]-1,2,5-thiadiazoles as Probes for Fluorescence Microscopy Mapping of Abeta Plaque Heterogeneity. *Journal of Medicinal Chemistry* 62:2038-48

Zhigalov A, Herring JD, Herpers J, **Bergmann TO**, Jensen O (2019) Probing cortical excitability using rapid frequency tagging. *Neuroimage* 195:59-66

Ziemann U, Romani GL, Ilmoniemi RJ (2019) „ConnectToBrain" Synergy project for therapeutic closed-loop stimulation of brain network disorders. *Nervenarzt* 90:804-08

Zimmermann M, Gaenslen A, Prahl K, Srulijes K, **Hauser AK, Schulte C**, Csoti I, **Berg D, Brockmann K** (2019) Patient's perception: shorter and more severe prodromal phase in GBA-associated PD. *European Journal of Neurology* 26:694-98

Zimmermann M, Wurster I, Lerche S, Roeben B, Machetanz G, Sunkel U, von Thaler AK, Eschweiler G, Fallgatter AJ, Maetzler W, Berg D, **Brockmann K** (2019) Orthostatic hypotension as a risk factor for longitudinal deterioration of cognitive function in the elderly. *European Journal of Neurology* 27:160-7

Zucchelli S, Fedele S, Vatta P, Calligaris R, **Heutink P**, Rizzu P, Itoh M, Persichetti F, Santoro C, Kawaji H, Lassmann T, Hayashizaki Y, Carninci P, Forrest ARR, Gustincich S, Consortium F (2019) Antisense Transcription in Loci Associated to Hereditary Neurodegenerative Diseases. *Molecular Neurobiology* 56:5392-415

Zwirner K, Paulsen F, Schittenhelm J, **Gepfner-Tuma I, Tabatabai G**, Behling F, Skardelly M, Bender B, Zips D, Eckert F (2019) Integrative assessment of brain and bone invasion in meningioma patients. *Radiation Oncology* 14:9

Reviews

Armeanu-Ebinger S, Hadaschik D, Kyzirakos C, Mohr C, Battke F, Kohlbacher O, Nahnsen S, **Biskup S** (2017) Number of predicted tumour-neoantigens as biomarker for cancer immunotherapies. *Annals of Oncology* 28:12-12

Baden P, Yu C, **Deleidi M** (2019) Insights into GBA Parkinson's disease pathology and therapy with induced pluripotent stem cell model systems. *Neurobiology of Disease* 127:1-12

Bialer M, Cross H, **Hedrich UBS**, Lagae L, **Lerche H**, Loddenkemper T (2019) Novel treatment approaches and pediatric research networks in status epilepticus. *Epilepsy & Behavior* 101:8

Brockmann K, Gasser T (2019) Personalized treatment of Parkinson's disease. *Nervenarzt* 90:767-72

Darmani G, Ziemann U (2019) Pharmacophysiology of TMS-evoked EEG potentials: A mini-review. *Brain Stimulation* 12:829-31

Espay AJ, Hausdorff JM, Sanchez-Ferro A, Klucken J, Merola A, Bonato P, Paul SS, Horak FB, Vizcarra JA, Mestre TA, **Reilmann R**, Nieuwboer A, Dorsey ER, Rochester L, Bloem BR, Maetzler W, Movement Disorder Soc Task F (2019) A roadmap for implementation of patient-centered digital outcome measures in Parkinson's disease obtained using mobile health technologies. *Movement Disorders* 34:657-63

Gasser T, Lerche H, Ziemann U (2019) Personalized diagnostics and treatment in neurology Prospect and challenge. *Nervenarzt* 90:765-66

Hedrich UBS, Koch H, Becker A, **Lerche H** (2019) Epileptogenesis and consequences for treatment. *Nervenarzt* 90:773-80

Hedrich UBS, Lauxmann S, Lerche H (2019) SCN2A channelopathies: Mechanisms and models. *Epilepsia* 60:S68-S76

Heinzel S, Berg D, **Gasser T**, Chen HL, Yao C, Postuma RB, Adler CH, Bloem B, Chan P, Deuschl G, Dubois B, Goetz CG, Halliday GM, Hardy J, Lang AE, Litvan I, Marek K, Obeso J, Oertel W, Olanow CW, Poewe W, Stern M, Definition MDSTF (2019) Update of the MDS research criteria for prodromal Parkinson's disease. *Movement Disorders* 34:1464-70

Koch H, Weber YG (2019) The glucose transporter type 1 (Glut1) syndromes. *Epilepsy & Behavior* 91:90-93

Lerche H, Jurkat-Rott K, Weber MA (2019) Obituary for Prof. Dr. Dr. h.c. Dipl. Ing. Frank Lehmann-Horn. *Journal of Neurology* 266:1803-03

Mayer S, Khakipoor S, Drömer MA, Cozetto DA (2019) Single-cell RNA-Sequencing in Neuroscience. Neuroforum 25:251-8

Maljevic S, Moller RS, Reid CA, Perez-Palma E, Lal D, May P, **Lerche H** (2019) Spectrum of GABA(A) receptor variants in epilepsy. *Current Opinion in Neurology* 32:183-90

Munchau A, **Schols L**, Klein C, Graessner H (2019) Model for personalized diagnostics and treatment in neurology-German Academy for Rare Neurological Diseases. *Nervenarzt* 90:796-803

Neher JJ, Cunningham C (2019) Priming Microglia for Innate Immune Memory in the Brain. *Trends Immunol* 40:358-74

Nichols MR, St-Pierre MK, **Wendeln AC**, Makoni NJ, Gouwens LK, Garrad EC, Sohrabi M, **Neher JJ**, Tremblay ME, Combs CK (2019) Inflammatory mechanisms in neurodegeneration. *J Neurochem* 149:562-81

Rossini PM, Di Iorio R, Bentivoglio M, Bertini G, Ferreri F, Gerloff C, Ilmoniemi RJ, Miraglia F, Nitsche MA, Pestilli F, Rosanova M, Shirota Y, Tesoriero C, Ugawa Y, Vecchio F, **Ziemann U**, Hallett M (2019) Methods for analysis of brain connectivity: An IFCN-sponsored review. *Clinical Neurophysiology* 130:1833-58

Sobrido MJ, Bauer P, de Koning T, Klopstock T, Nadjar Y, Patterson MC, **Synofzik M**, Hendriksz CJ (2019) Recommendations for patient screening in ultra-rare inherited metabolic diseases: what have we learned from Niemann-Pick disease type C? *Orphanet Journal of Rare Diseases* 14:14

Stefanou MI, Krumbholz M, Ziemann U, Kowarik MC (2019) Human immunodeficiency virus and multiple sclerosis: a review of the literature. *Neurological Research and Practice* 1:24

Synofzik M, Puccio H, Mochel F, **Schols L** (2019) Autosomal Recessive Cerebellar Ataxias: Paving the Way toward Targeted Molecular Therapies. *Neuron* 101:560-83

T**abatabai G,** Weller M (2019) Challenges and future perspectives in neuro-oncology. Nervenarzt 90:594-600

Yilmaz R, Hopfner F, van Eimeren T, **Berg D** (2019) Biomarkers of Parkinson's disease: 20years later. *Journal of Neural Transmission* 126:803-13

Zwack L, **Weber Y**, Sippel C, Gunyak G (2019) Clinical Decision Support by Artificial Intelligence. *Internist* 60:S9-S9

Book Chapters

Karnath H-O, Sperber C, Wiesen D, **de Haan B** (2019) Lesion-behaviour mapping in cognitive neuroscience – A practical guide to univariate and multivariate approaches. In: Pollmann S (ed.) *Spatial Learning and Attention Guidance.* Neuromethods. New York, Humana Press, DOI: https://doi.org/10.1007/7657_2019_18

List of Student Training in 2019

(In alphabetical order)

Lectures

(Summer Term/Winter Term)

Basic Neurobiology
Prof. Dr. Philipp Kahle (coordinator and lecturer), Dr. Jonas Neher, Jun.-Prof. Dr. Dr. Michela Deleidi, Dr. Ulrike Hedrich, Dr. Sven Geisler, Prof. Dr. Ingrid Ehrlich, Dr. Julia Fitzgerald, Prof. Dr. Daniel Weiß
Curriculum Molecular Medicine

Basispropädeutik Laborforschung und Tiermodelle
Prof. Dr. Uwe Ilg
Faculty of Science (Biology)

Behavior and Cognition: Methods in Neuropsychology
PD Dr. M. Himmelbach, Dr. Christoph Sperber
Graduate Training Centre of Neuroscience

Behavior and Cognition: Neuropsychology
Prof. Dr. Dr. Hans-Otto Karnath, PD Dr. Marc Himmelbach
Graduate Training Centre of Neuroscience

Biochemistry II for Medical Students
Prof. Dr. Philipp Kahle
Faculty of Science (Biochemistry)

Biomedical Technologies in Diagnostic and Therapy
Prof. Dr. Christoph Braun
Faculty of Medicine (Biomedical Technology)

BioRobotics
Dr. Daniel Häufle
Faculty of Science (Informatics)

Cell Imaging Techniques
Dr. Henner Koch et al.
Graduate Training Centre of Neuroscience

Computational Motor Control
Dr. Winfried Ilg, Dr. Daniel Häufle
Graduate Training Centre of Neuroscience

Developmental Neurobiology
Dr. Simone Mayer
Graduate Training Centre of Neuroscience

Diagnosis of Brain Death
PD Dr. Sven Poli
Medical Faculty

Dynamics of Neural Systems
Prof. Dr. Martin Giese
Graduate Training Centre of Neuroscience

Frontiers in Neuroscientific Methods
PD Dr. Marc Himmelbach, Prof. Dr. Ziad Hafed
Graduate Training Centre of Neuroscience

Fundamentals of Sensorimotor Integration
Prof. Dr. Uwe Ilg
Graduate Training Centre of Neuroscience

Genetic and Molecular Basis of Neural Diseases I
Prof. Dr. Mathias Jucker, Prof. Dr. Thomas Gasser, Prof. Dr. Ludger Schöls, Prof. Dr. Manuela Neumann
Graduate Training Centre of Neuroscience

Genetic and Molecular Basis of Neural Diseases II
Prof. Dr. Holger Lerche, Prof. Dr. Ulrike Naumann, Dr. Henner Koch, PD Dr. Markus Krumbholz
Graduate Training Centre of Neuroscience

Genome-Editing Technologies for Gene and Stem Cell Therapy
Jun. Prof. Dr. Dr. Michela Deleidi
Graduate Training Centre of Neuroscience

Imaging Brain Dynamics with MEG
Prof. Dr. Markus Siegel
Medical Faculty (Experimental Medicine)

Introduction to Clinical Neurology
Dr. Annerose Mengel, Prof. Dr. Tobias Freilinger, Prof. Dr. Daniel Weiß, PD Dr. Markus Krumbholz, Dr. Kathrin Brockmann
Medical Faculty

Laboratory Techniques
Dr. Daniel Häufle
Medical Faculty (Medical Technology)

Lecture General Neurology
Prof. Dr. Thomas Gasser, Prof. Dr. Holger Lerche, Prof. Dr. Ulf Ziemann, Prof. Dr. Hans-Otto Karnath, Prof. Dr. Alexander Grimm
Medical Faculty

Lecture series for doctoral candidates: Ion Channels and Epilepsy
Prof. Dr. Holger Lerche
Graduate Training Centre of Neuroscience

Lecture Series on the Fundamentals of Neurobiology – Part I + II
Dr. Henner Koch
Graduate Training Centre of Neuroscience

LSC Wissenschaftlichkeit – Säulenpropädeutik Grundlagenwissenschaften
PD Dr. Marc Himmelbach, Prof. Dr. Uwe Ilg
Medical Faculty

Machine Learning
Dr. Tjeerd Dijkstra
Graduate Training Centre of Neuroscience

Machine Learning II
Prof. Dr. Martin Giese, Dr. Tjeerd Dijkstra
Graduate Training Centre of Neuroscience

Massenspektrometrie in Diagnostik und Therapiemonitoring
Prof. Dr. Marius Ueffing (Institute for Ophthalmic Research), Dr. Janina Dalvise (Institute for Ophtalmic Research) PD Dr. Christian Johannes Gloeckner
Medical Faculty

Medical Physics
Prof. Dr. Christoph Braun
Medical Faculty (Molecular Medicine)

Mitochondrial metabolism
Dr. Julia Fitzgerald
Current Topics in Cellular Metabolism, University of Tübingen

Molecular and Cellular Basis of Learning and Memory
Prof. Dr. Ingrid Ehrlich (coordinator Andrea Burgalossi)
Graduate Training Centre of Neuroscience

Motor Systems
Prof. Dr. Hans-Peter Thier
Graduate Training Centre of Neuroscience

Motor Systems NIPS
Prof. Dr. Cornelius Schwarz
Graduate Training Centre of Neuroscience

Multimodal Therapy of Parkinson's Disease for Pharmacists
PD Dr. Rebecca Schüle
Faculty of Science

Neurochemistry and Neurotransmitters
Prof. Dr. Philipp Kahle
Graduate Training Centre of Neuroscience

Neurogenesis, Excitability, Plasticity and Neurostimulation
Dr. Christoph Zrenner
Medical Technology – Human Biology IV

Neurogeriatrics (QB7)
Prof. Dr. Matthis Synofzik
Medical Faculty

Neuroglia
Dr. Jonas Neher, Dr. Maria Kukley
Graduate Training Centre of Neuroscience

Neurointensive Care
Prof. Dr. Jennifer Diedler, Dr. Johannes Platz, Dr. Annerose Mengel
Medical Faculty

Neurological Emergencies (QBB)
PD Dr. Sven Poli
Medical Faculty

Neurophysiology
Prof. Dr. Cornelius Schwarz, Dr. Christine Pedroarena
Graduate Training Centre of Neuroscience

Perception, Cognition & Behavior
PD Dr. Marc Himmelbach, Prof. Dr. Ziad Hafed, Prof. Dr. Andreas Bartels
Graduate Training Centre of Neuroscience

Lectures

(Summer Term/Winter Term)

Physiological and Physical Basis of Functional Brain Imaging
Prof. Dr. Christoph Braun, Prof. Dr. Andreas Bartels
Graduate Training Centre of Neuroscience

Primary Headache Syndromes and Neuropathic Pain
Prof. Dr. Tobias Freilinger
Medical Faculty

QB4 Infections & Immunology
PD Dr. Markus Krumbholz et al.
Medical Faculty

Rare neurological diseases: Interdisciplinary Medicine and Translational Research
Prof. Dr. Ludger Schöls
Medical Faculty

Ringvorlesung Wissenschaflichkeit (Neuroscience)
Prof. Dr. Mathias Jucker
Medical Faculty

Sensory Systems I: Visual System
Prof. Dr. Ziad Hafed
Graduate Training Centre of Neuroscience

Sensory Systems II: Auditory and remaining
Prof. Dr. Christoph Braun, Prof. Dr. Anthony Gummer, Prof. Dr. Horst Herbert, Prof. Dr. Francois Paguet-Durand, Prof. Dr. Lukas Tüttiger
Graduate Training Centre of Neuroscience

Theoretical Methods for Computational Neuroscience I & II
Prof. Dr. Martin Giese
Graduate Training Centre of Neuroscience

Ultraschall in der Neurologie
Prof. Dr. Alexander Grimm
Medical Faculty

Seminars and Courses

(Summer Term/Winter Term)

Addressing Current Questions in Research on Sensorimotor Coordination
Prof. Dr. Hans-Peter Thier
Medical Faculty

Animal Physiology Practical for Students of Bioinformatics (BSc)
Prof. Dr. Uwe Ilg
Faculty of Science (Biology)

Basics in Gene Therapy
Prof. Dr. Ulrike Naumann
Medical Faculty

Bedside Teaching: Neurological Examination for Advanced Students
Prof. Dr. Ludger Schöls, PD Dr. Rebecca Schüle, Prof. Dr. Matthis Synofzik
Medical Faculty

Bedside Training: Neurological Diagnostics
Prof. Dr. Yvonne Weber, Gabriela Zaiser, Nathalie Vetter, Yvonne Schütze, Prof. Dr. Alexander Grimm, Dr. Benjamin Röben, Dr. Tobias Lindig
Medical Faculty

Bedside Training: Neurology and Epileptology
Prof. Dr. Yvonne Weber, Dr. Sabine Rona, Prof. Dr. Holger Lerche, Dr. Stephan Lauxmann, Monika Fudali, Dr. Josua Kegele
Medical Faculty

BioRobotics
Dr. Daniel Häufle
Faculty of Science (Informatics)

Block Practical Electrophysiology
Prof. Dr. Cornelius Schwarz
Graduate Training Centre of Neuroscience

Chronic Pain Syndromes – Bedside Teaching (QB14)
Prof. Dr. Tobias Freilinger, PD Dr. Markus Krumbholz et al.
Medical Faculty

Clinical Pathological Case Conference (CPC)
Prof. Dr. Manuela Neumann (Dept. of Neuropathology, UKT), Prof. Dr. Matthis Synofzik
Medical Faculty

Clinic, diagnosis and therapy of inflammatory diseases of the nervous system
PD Dr. Felix Bischof
Medical Faculty

Current Problems in Neuropsychology
Prof. Dr. Dr. Hans-Otto Karnath
Medical Faculty

Diagnosis and Intervention of Activity of Daily Living Function
PD Dr. Inga Liepelt-Scarfone
Faculty of Science (Psychology)

Dynamics of Neural Systems (exercises)
Prof. Dr. Martin Giese, Dr. Albert Mukovskiy, Mohammad Hovaidi Ardestani
Graduate Training Centre of Neuroscience

Geriatric-neurological-psychiatric Case Conference
Prof. Dr. Gerhard W. Eschweiler (UKT), Prof. Dr. Matthis Synofzik, Prof. Dr. Daniel Weiß, Dr. Günther Schnauder (UKT)
Medical Faculty

Gibt es zwei verschiedene Sprachen? Bedeutung und Wirkung - the outer and the inner world in brain and language
Prof. Dr. Ingo Hertrich
General Linguistics (Philosophical Faculty) and Cognitive Science (Faculty of Science)

Hands-on rare neurological diseases: Hospitation in ZSE clinics
Prof. Dr. Ludger Schöls
Medical Faculty

HER Seminar Series
Dr. Julia Fitzgerald
Tübingen Neuroscience Campus

Hertie Lunch Seminar
Prof. Dr. Uwe Ilg
Medical Faculty

i-KLiC
Prof. Bornemann, PD Dr. Markus Krumbholz, PD Dr. Markus Kowarik, PD Dr. Sven Poli et al.
Medical Faculty

In-Depth Module in MEd Studies Biology
Prof. Dr. Uwe Ilg
Faculty of Science (Biology)

INNOVATE: Interdisciplinary Neuro-Oncology from Molecular Mechanisms to Patient Stratification and Therapy
Prof. Dr. Dr. Ghazaleh Tabatabai
Medical Faculty, Graduate Training Centre of Neuroscience

Introduction to Transcranial Brain Stimulation
Dr. Til Ole Bergmann
Medical Faculty

Journal Club
Dr. Dr. Saskia Biskup, Dr. Julia Fitzgerald
Graduate School of Cellular and Molecular Neuroscience

Journal Club Computational Motor Control
Dr. Daniel Häufle
Graduate Training Centre of Neuroscience

Journal Club IZKF Promotionskolleg
Prof. Dr. Ulrike Naumann, Dr. Tanja Riess (Medical Faculty), Prof. Dr. Karin Schilbach (UKT)
Medical Faculty Neuroscience

Seminars and Courses

(Summer Term/Winter Term)

LSC Wissenschaftlichkeit – Projekt "Funktion des ventralen präfrontalen Kortex in der Bewertung der Funktionalität von Werkzeugen"
PD Dr. Marc Himmelbach
Medical Faculty

LSC Wissenschaftlichkeit – Projekt "Kongruenz funktioneller Netzwerke in resting-state und task-basierter funktioneller MRT"
PD Dr. Marc Himmelbach
Medical Faculty

Machine Learning I & II (exercises)
Prof. Dr. Martin Giese, Dr. Tjeerd Dijkstra
Graduate Training Centre of Neuroscience

Methodological Frontiers in the Cognitive Neurosciences
PD Dr. Marc Himmelbach et al.
Graduate Training Centre of Neuroscience

Molecular Neurooncology and Neuro-Immunology
Prof. Dr. Ulrike Naumann, PD Dr. Markus Kowarik
Medical Faculty

Neurobiological Monday Seminar
Prof. Dr. Uwe Ilg
Medical Faculty

Neurohistology and -morphology
Block course of the Department of Cellular Neuology
Prof. Dr. Mathias Jucker
Graduate Training Centre of Neuroscience

Neurocolloquium
Prof. Dr. Hans-Peter Thier
Graduate Training Centre of Neuroscience /
Medical Faculty

Neurological Differential Diagnosis and Interactive Clinical Case Discussions
Prof. Dr. Tobias Freilinger
Medical Faculty

Neurological Examination Course
Prof. Dr. Thomas Gasser, Prof. Dr. Holger Lerche, Prof. Dr. Ulf Ziemann and staff
Medical Faculty

Neurological Palliative Care (QB13)
Dr. Vanessa Heinrich, PD Dr. Markus Kowarik, PD Dr. Markus Krumbholz, Dr. Annerose Mengel et al.
Medical Faculty

Neurological Seminar
Prof. Dr. Ludger Schöls, Prof. Dr. Daniel Weiß, PD Dr. Rebecca Schüle, Prof. Dr. Matthis Synofzik, PD Dr. Niels Focke, Prof. Dr. Tobias Freilinger, Dr. Florian Müller-Dahlhaus, PD Dr. Markus Krumbholz, Dr. Sven Poli, Prof. Dr. Dr. Ghazaleh Tabatabai, Dr. Ebba Lohmann, Dr. Kathrin Brockmann, Dr. Annerose Mengel
Medical Faculty

Neurophysiology Seminars and De-Briefing of Practical Course
Dr. Ulrike Hedrich, Dr. Henner Koch (coordinator: Prof. Dr. Olga Garaschuk)
Medical Faculty

Oncolytic Viruses as Cancer Therapeutic Drugs
Prof. Dr. Ulrike Naumann
Medical Faculty

OSCE
PD Dr. Markus Krumbholz et al.
Medical Faculty

Practical Neurobiology
Prof. Dr. Ziad Hafed
Faculty of Science (Biology)

Retreat IZKF Promotionskolleg
Prof. Dr. Ulrike Naumann, , Dr. Tanja Riess (Medical Faculty), Prof. Dr. Karin Schilbach (UKT)
Medical Faculty Neuroscience

Scientific Colloquium Neurology ("Wednesday Colloquium")
Prof. Dr. Matthis Synofzik
Medical Faculty

Sprache und Automatisierung - the Linguistic Cerebellum
Prof. Dr. Ingo Hertrich
General Linguistics (Philosophical Faculty) and Cognitive Science (Faculty of Science)

Technical Didactics: Neuroscience in the Classroom
Prof. Dr. Uwe Ilg
Faculty of Science (Biology)

The Neurobiology of the Cerebellum
Prof. Dr. Hans-Peter Thier
Medical Faculty

Therapy Seminar of the Neurological Clinic
Prof. Dr. Holger Lerche, Prof. Dr. Ulf Ziemann, Prof. Dr. Thomas Gasser, PD Dr. Rebecca Schüle, Prof. Dr. Matthis Synofzik, Prof. Dr. Hans-Peter Thier, Prof. Dr. Dr. Ghazaleh Tabatabai, Dr. Kathrin Brockmann
Medical Faculty

Tübinger Lernportfolio Medizin
Dr. Ebba Lohmann
Medical Faculty

TüRex project: Lymphozyten nach Antigenkontakt - Methoden zur Fixierung aktivierter Immunzellen
PD Dr. Markus Krumbholz
Medical Faculty

TüRex project: Motor Learning — a pilot study
Prof. Dr. Uwe Ilg
Medical Faculty

TüRex project: Precision and reaction time of saccadic eye movements
Prof. Dr. Uwe Ilg
Medical Faculty

TüRex project: TDP-43 ubiquitinylation and stress granule formation
Prof. Dr. Philipp Kahle
Medical Faculty

Videoseminar Movement Disorders
Prof. Dr. Ludger Schöls, PD Dr. Rebecca Schüle, Prof. Dr. Matthis Synofzik
Medical Faculty

Wa-wa-warum stottern wir manchmal? - The biological mechanisms of dysfluencies
Prof. Dr. Ingo Hertrich
General Linguistics (Philosophical Faculty) and Cognitive Science (Faculty of Science)

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