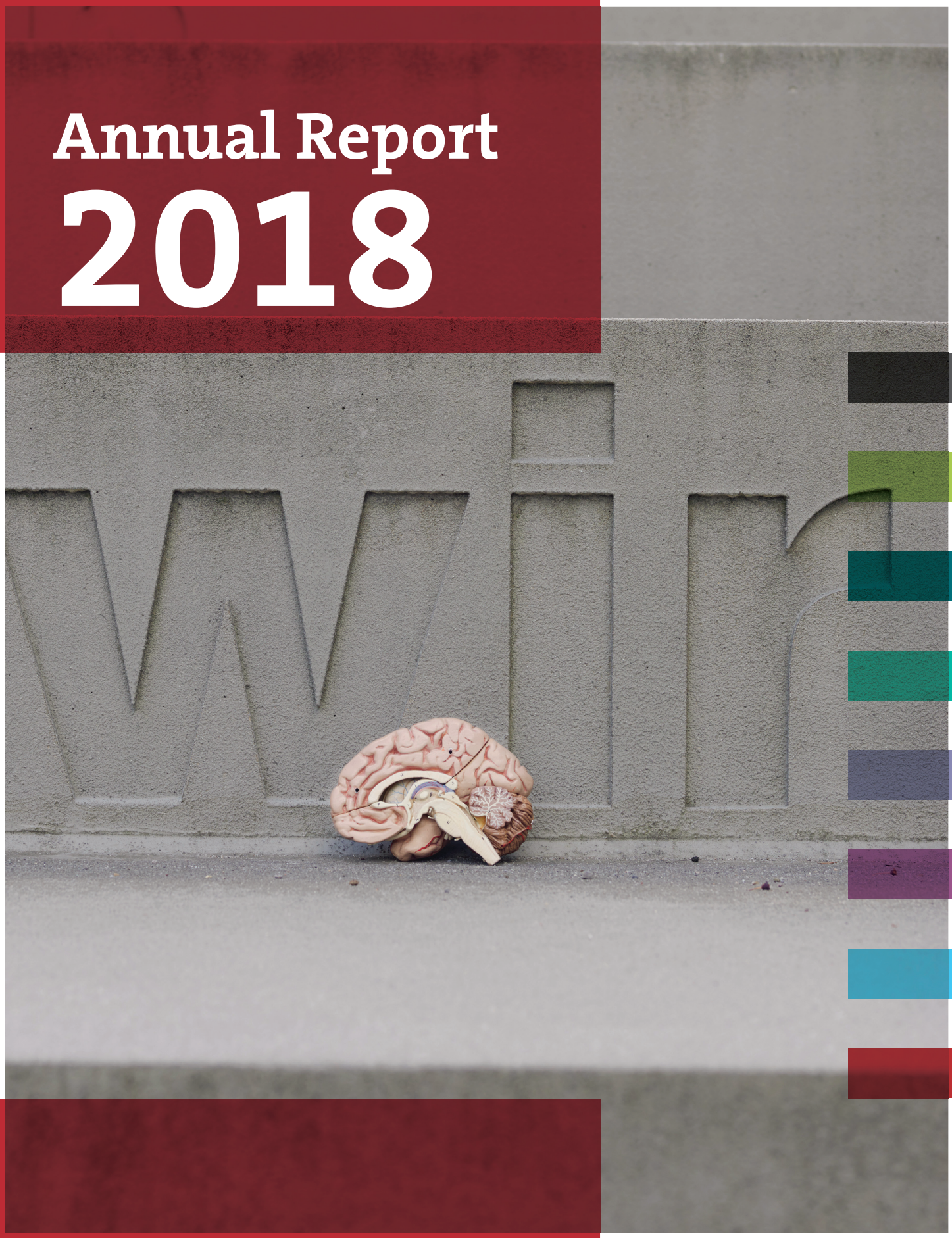
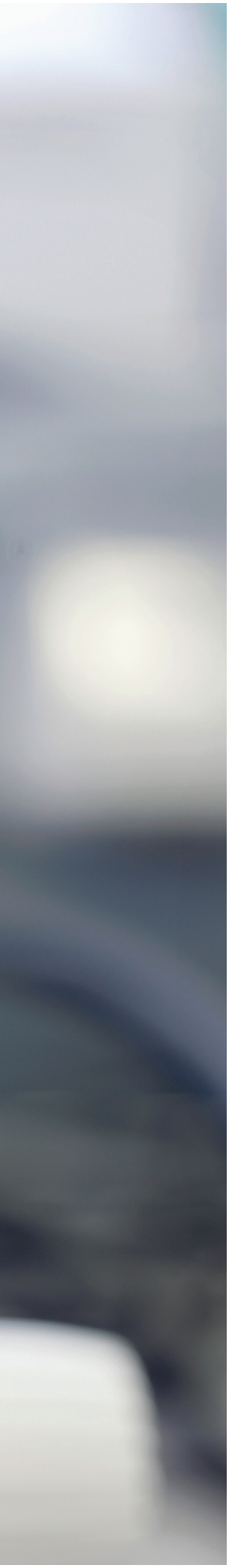
CENTER OF NEUROLOGY
TÜBINGEN

Annual Report 2018





CENTER OF NEUROLOGY TÜBINGEN

Annual Report 2018

DIRECTORS
Prof. Dr. Thomas Gasser
Prof. Dr. Mathias Jucker
Prof. Dr. Holger Lerche
Prof. Dr. Peter Thier
Prof. Dr. Ulf Ziemann

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN

Hertie-Institut
für klinische Hirnforschung

Universitätsklinikum
Tübingen

Content

Contents

The Center of Neurology in 2018

The Center for Neurology at the University of Tübingen was founded in 2001. It unites the Hertie Institute for Clinical Brain Research (HIH) and the University Hospital's Clinical Neurology Department. In research, teaching and patient care the center is dedicated to excellence in the study of the human brain and its disorders.

The Center for Neurology presently consists of five departments: Department of Neurology with Neurovascular Medicine and Neuro-Oncology (Prof. Dr. med. Ulf Ziemann), Department of Neurodegenerative Diseases (Prof. Dr. med. Thomas Gasser), the Department of Neurology and Epileptology (Prof. Dr. med. Holger Lerche), the Department of Cognitive Neurology (Prof. Dr. med. Hans-Peter Thier) and the Department of Cellular Neurology (Prof. Dr. sc. nat. Mathias Jucker). All departments provide patient care within the University Hospital, while the clinical and basic research groups are part of the Hertie Institute.

The fact that all departments of the center actively participate, albeit to a different degree, in the clinical care of patients with neurologic diseases is central to the concept of successful clinical brain research at the Hertie Institute.

This applies most obviously to clinical trials, which are conducted, for example, in the treatment of Parkinson's disease, multiple sclerosis, epilepsy and brain tumors. However, the intimate interconnection of science and patient care is of eminent importance to all areas of disease-related neuroscientific research. It forms the very center of the Hertie concept and distinguishes the Center for Neurology from other neuroscience institutions. In particular, the close interaction between basic science and patient care at the HIH and the University Hospital's Clinical Neurology Department was seen as a role model for clinical and translational research in Germany by the German Council of Science and Humanities (Wissenschaftsrat).

Mit dem im Jahre 2001 unterzeichneten Vertrag zwischen der Gemeinnützigen Hertie-Stiftung (GHS) und dem Land Baden-Württemberg, der Universität Tübingen und ihrer medizinischen Fakultät sowie dem Universitätsklinikum Tübingen wurde das „Zentrum für Neurologie" geschaffen. Damit entstand eines der größten Zentren für klinische und krankheitsorientierte Hirnforschung in Deutschland.

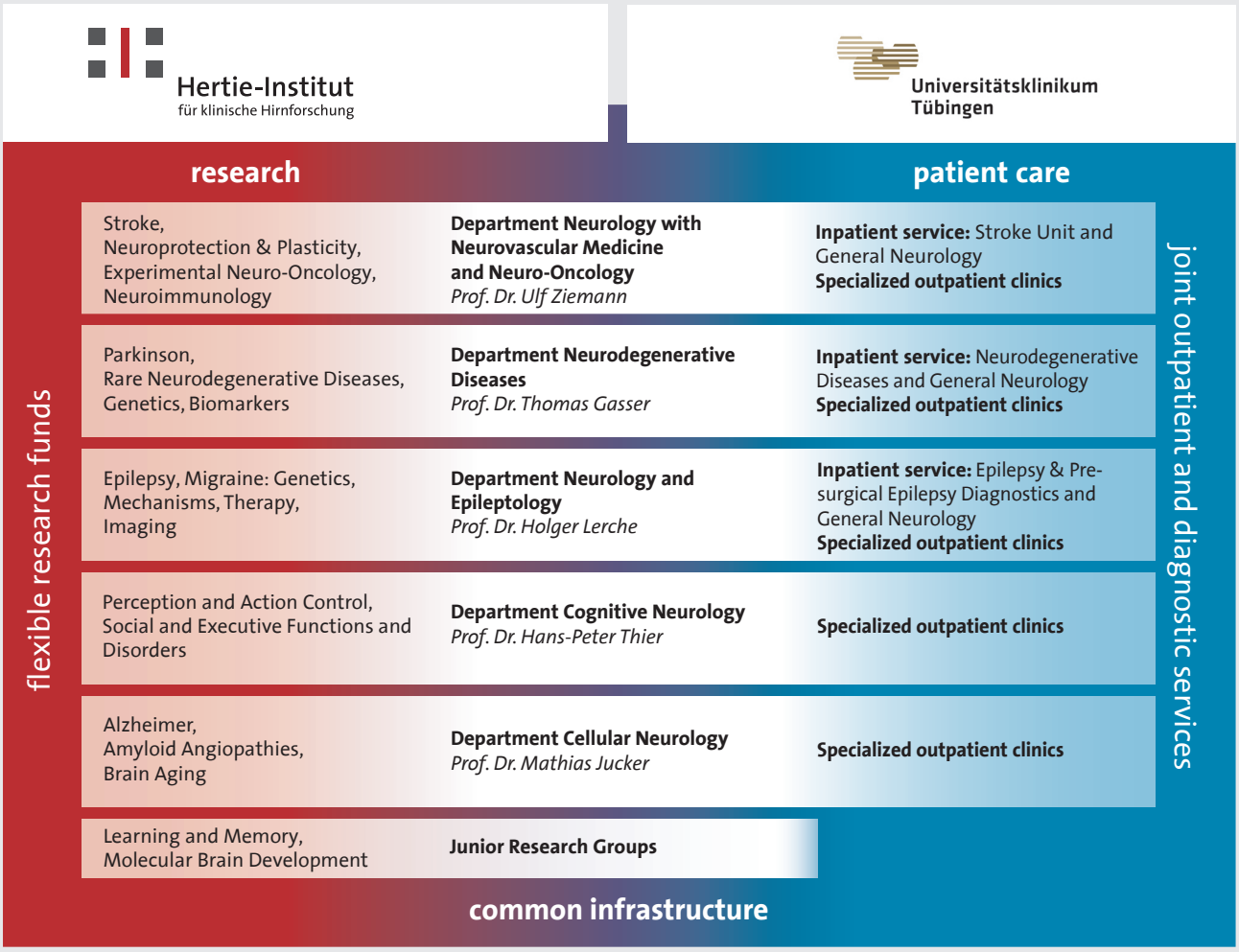
Das Zentrum besteht aus zwei eng verbundenen Institutionen, der Neurologischen Klinik und dem Hertie-Institut für klinische Hirnforschung (HIH). Die Aufgaben des Zentrums liegen sowohl in der Krankenversorgung durch die Neurologische Klinik als auch in der wissenschaftlichen Arbeit der im HIH zusammengeschlossenen Forscher. Die besonders enge Verknüpfung von Klinik und Grundlagenforschung innerhalb jeder einzelnen Abteilung und die Department-Struktur sind fundamentale Aspekte des Hertie-Konzeptes und ein Alleinstellungsmerkmal gegenüber anderen Institutionen der Hirnforschung in Deutschland. In der Department-Struktur sind die Professoren mit Leitungsfunktion akademisch und korporationsrechtlich gleichgestellt.

Das Zentrum besteht derzeit aus fünf Abteilungen: Abteilung Neurologie mit Schwerpunkt neurovaskuläre Erkrankungen und Neuroonkologie (Prof. Dr. med. Ulf Ziemann), der Abteilung Neurologie mit Schwerpunkt neurodegenerative Erkrankungen (Prof. Dr. med. Thomas Gasser), der Abteilung Neurologie mit Schwerpunkt Epileptologie (Prof. Dr. med. Holger Lerche), der Abteilung Kognitive Neurologie (Prof. Dr. med. Hans-Peter Thier) und der Abteilung für Zellbiologie Neurologischer Erkrankungen (Prof. Dr. sc. nat. Mathias Jucker). Die ersten drei Genannten sind bettenführende Abteilungen in der Neurologischen Klinik, die beiden Letztgenannten sind an der Patientenversorgung im Rahmen von Spezialambulanzen beteiligt. Die klinischen Abteilungen sind für die Versorgung von Patienten mit der gesamten Breite neurologischer Erkrankungen gemeinsam verantwortlich. Die Einheit der Neurologischen Klinik in Lehre, Ausbildung und Krankenversorgung wird dabei durch eine gemeinsame Infrastruktur (Patientenaufnahme, Behandlungspfade, Poliklinik, diagnostische Labors, Bettenmanagement, Pflegedienst gesichert. Die Neurologische Klinik besteht daher nach innen und außen weiterhin als einheitliche Struktur. In den klinischen Abteilungen werden pro Jahr rund 5.500 Patienten stationär und mehr als 15.000 Patienten ambulant behandelt.

Der Wissenschaftsrat hat das Zentrum als modellhaft für die Universitätsmedizin in Deutschland gewürdigt und insbesondere die praktizierte Verbindung von Grundlagenforschung und klinischer Praxis.

Facts & Figures

CENTER OF NEUROLOGY



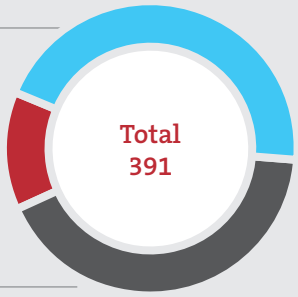
NUMBER OF STAFF IN 2018

Center of Neurology without nursing services (by headcount)

176
45% Third Party Funding

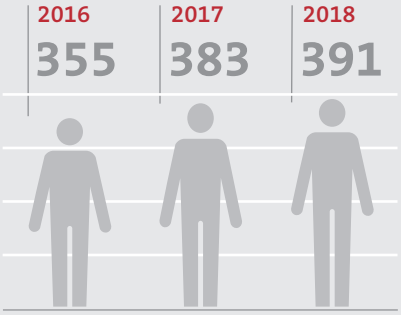
51
13 % Hertie Foundation

164
42% Medical Faculty



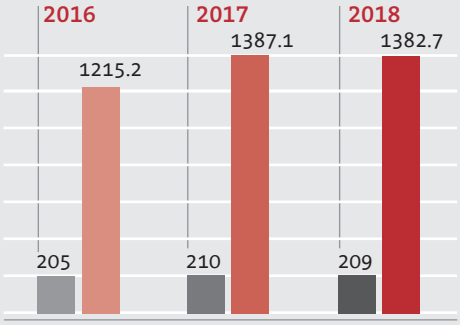
DEVELOPMENT OF STAFF

Center of Neurology (by headcount)



NUMBER OF PUBLICATIONS
IMPACT FACTORS

Center of Neurology (SCIE and SSCI / in 100 %)



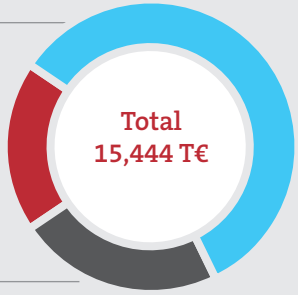
TOTAL FUNDINGS IN 2018

Center of Neurology

9,046 T€
59 % Third party funding

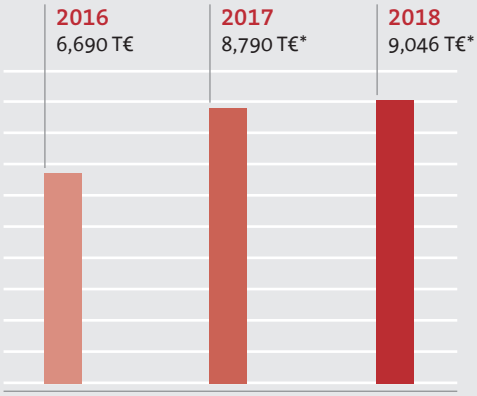
2,900 T€
19 % Hertie Foundation

3,498 T€
23 % University Hospital of Neurology & Medical Faculty



THIRD PARTY FUNDING

Center of Neurology



* includes 1 Mio € from the state of Baden-Württemberg

THIRD PARTY FUNDING IN 2018

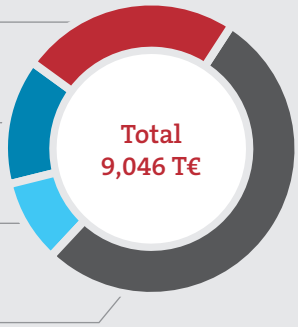
Center of Neurology

2,189 T€
DFG: 24.2 %

1,237 T€
BMBF: 13.7 %

823 T€
EU: 9.1 %

4,797 T€
Others: 53.0 %



University Hospital of Neurology

CLINICAL CARE

The University Hospital's Clinic of Neurology treats inpatients with the complete spectrum of neurologic diseases on three general wards. Patients with acute strokes are treated on a specialized certified stroke-unit, which allows 24-hour surveillance and treatment. Neurointensive-care patients are treated in a cooperative model on intensive care units of the University Hospital. A specialized video-EEG-monitoring unit allows continuous long-term recordings for patients with intractable epilepsies.

In the outpatient unit of the clinic more than 15,000 patiients (including diagnostic procedures) are examined and treated every year, most of them in specialty clinics which are directed by recognized specialists in their respective fields.

Universitätsklinikum Tübingen

PATIENTENVERSORGUNG

Die Neurologische Klinik am Universitätsklinikum Tübingen behandelt Patienten mit dem gesamten Spektrum neurologischer Erkrankungen auf drei Allgemeinstationen. Patienten mit akuten Schlaganfällen werden auf einer zertifizierten Schlaganfall-Spezialstation („Stroke-Unit") behandelt, die rund um die Uhr die erforderlichen Überwachungs- und Therapiemaßnahmen erlaubt. Neurointensiv-Patienten werden in einem kooperativen Modell auf Intensivstationen im Universitätsklinikum behandelt. Daneben gibt es eine spezielle Einheit zur kontinuierlichen Langzeit-Video-EEG-Ableitung (EEG-Monitoring) für Patienten mit schwer behandelbaren Epilepsien.

In der neurologischen Poliklinik werden jährlich über 15.000 Patienten (inkl. diagnostischer Prozeduren) ambulant betreut, die meisten davon in Spezialambulanzen, die von ausgewiesenen Experten für die jeweiligen Erkrankungen geleitet werden.

Clinical Performance Data

Close monitoring of patients at the intensive care unit.

INPATIENT CARE

The inpatient units of the University Hospital of Neurology treated more than 5,400 patients in 2018.

NUMBER OF ADMISSIONS

5,422

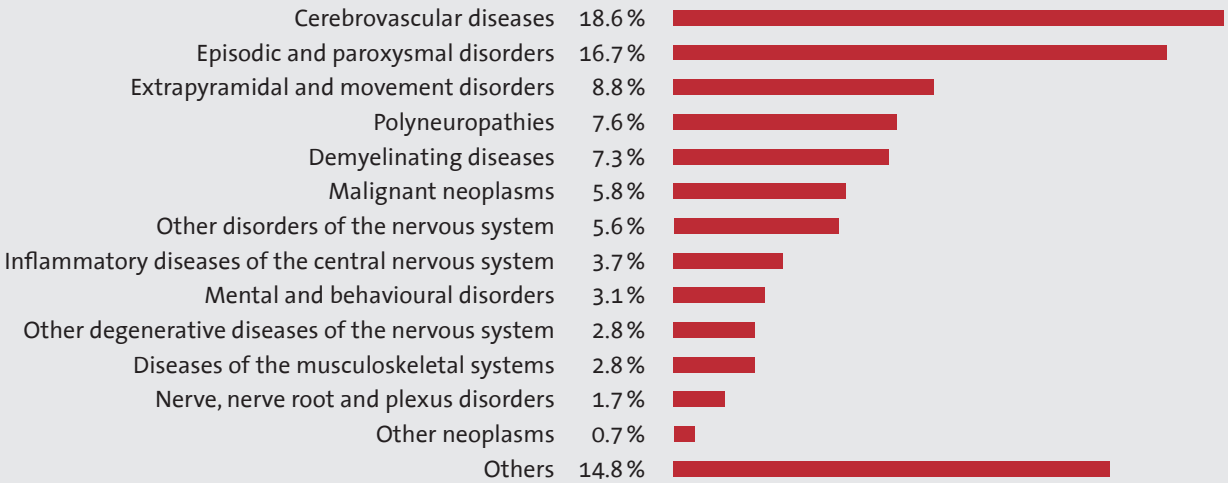
LENGTH OF STAY (IN DAYS)

4.7

CASE-MIX-INDEX

1.45

INPATIENT DIAGNOSIS GROUPS



OUTPATIENT CARE

NUMBER OF CONSULTATIONS
(including diagnostic procedures)

15,250

The Hertie Institute for Clinical Brain Research (HIH)

Hertie-Institut
für klinische Hirnforschung

Since its founding 17 years ago, the Hertie Institute has grown to more than 390 employees at all levels, from technicians to PhD students to full professors. The institute's achievements include discoveries related to the molecular, genetic and physiological basis of a number of major neurologic diseases.

The institute presently consists of five departments. They combine basic and clinical research with patient care, albeit to different degrees and with variable emphasis: three departments focusing on Stroke and Neuro-Oncology, Epileptology, and Neurodegenerative Disorders treat outpatients in specialty clinics, but also inpatients with the whole spectrum of neurological diseases, while the Departments of Cognitive Neurology and Cellular Neurology provide specialized diagnostic services and care in an outpatient setting only, focusing on neurocognitive impairments and Alzheimer's disease, respectively.

The institute is home to a total of 19 professors and 28 research groups. Twentysix belong to the aforementioned departments, two are set up as independent research groups. The independent research group of Dr. Simone Mayer has joined the HIH since September 2018, investigating molecular mechanisms of brain development.

In 2018, scientists at the Center for Neurology obtained more than 9 million Euros in third party funding and published more than 200 papers in peer-reviewed journals.

For the second time, the Hertie Institute for Clinical Brain Research (HIH) was present with an information booth at the annual meeting of the Society of Neuroscience in San Diego, USA, from November, 3 to 7, 2018. At the joint booth "Neuroscience in Germany", the HIH presented its portfolio together with other neuroscientific institutions, networks and funding organizations. In addition, the HIH presented itself at the FENS Forum for Neuroscience in Berlin, which took place from July 7 to 11, 2018. A joint information booth „Neurocentres in Germany" was launched for this purpose, presenting clusters of excellence in the neurosciences and the Einstein Center in Berlin next to the HIH and the non-profit Hertie Foundation.

The Neuroscience Campus Get Together, which was jointly set up together with its neighbors, the German Center for Neurodegenerative Diseases (DZNE) and the Werner Reichardt Center for Integrated Neuroscience (CIN) in the year 2015 and has continued since then on a yearly basis, met again with great success among scientists and staff members in 2018. On the same day, July 19, 2018, the Tübingen Neuro-Campus (TNC) has been inaugurated. The TNC is intended to interconnect Tübingen research groups and institutions in the field of neuroscience, to promote scientific cooperation and to facilitate the internationalization and recruitment of excellent scientists. Building on a long and successful tradition in the neurosciences, the TNC will secure and further develop Tübingen's position among the international leading sites.

Prof. Dr. Thomas Gasser
Prof. Dr. Mathias Jucker
Prof. Dr. Holger Lerche
Prof. Dr. Peter Thier
Prof. Dr. Ulf Ziemann

Das Hertie-Institut für klinische Hirnforschung (HIH)

17 Jahre nach seiner Gründung durch die Gemeinnützige Hertie-Stiftung, die Universität Tübingen und das Universitätsklinikum Tübingen gehört das HIH auf dem Gebiet der klinischen Hirnforschung zum Spitzenfeld europäischer Forschungseinrichtungen. Herausragende Forschungsergebnisse haben das Institut auch über die Grenzen Europas hinaus bekannt gemacht.

Das HIH besteht derzeit aus fünf Abteilungen: der Abteilung Neurologie mit Schwerpunkt neurovaskuläre Erkrankungen und Neuroonkologie (Prof. Dr. med. Ulf Ziemann), der Abteilung Neurologie mit Schwerpunkt neurodegenerative Erkrankungen (Prof. Dr. med. Thomas Gasser), der Abteilung Neurologie mit Schwerpunkt Epileptologie (Prof. Dr. med. Holger Lerche, der Abteilung Kognitive Neurologie (Prof. Dr. med. Hans-Peter Thier) und der Abteilung für Zellbiologie Neurologischer Erkrankungen (Prof. Dr. sc. nat. Mathias Jucker). Die ersten drei Genannten sind bettenführende Abteilungen in der Neurologischen Klinik, die beiden Letztgenannten sind an der Patientenversorgung im Rahmen von Spezialambulanzen beteiligt. Die klinischen Abteilungen sind für die Versorgung von Patienten mit der gesamten Breite neurologischer Erkrankungen gemeinsam verantwortlich.

In den Abteilungen sind zurzeit 19 Professoren und etwa 390 Mitarbeiter in 28 Arbeitsgruppen tätig, wovon zwei unabhängige Forschungsgruppen darstellen. Die unabhängige Forschungsgruppe von Dr. Simone Mayer verstärkt seit September 2018 das HIH. Sie untersucht die molekularen Mechanismen der Gehirnentwicklung.

Die Arbeitsschwerpunkte des HIH liegen im Bereich neurodegenerativer und entzündlicher Hirnerkrankungen, der Schlaganfallforschung, Epilepsien und der Erforschung der Grundlagen und Störungen von Wahrnehmung, Motorik und Lernen. Zu den bedeutenden Forschungserfolgen des HIH zählen die Entdeckung wichtiger genetischer und molekularer Grundlagen der Entstehung und Progression neurologischer Erkrankungen. Das HIH, ein Modellprojekt für Public Private Partnership, hat auch im Jahr 2018 rund 9 Millionen Euro an Drittmitteln eingeworben und mehr als 200 Veröffentlichungen in wissenschaftlichen Fachzeitschriften publiziert. Diese Zahlen belegen unter anderem die wissenschaftliche Leistungsfähigkeit des Zentrums. Die Gemeinnützige Hertie-Stiftung wendete bisher annähernd 60 Millionen Euro für das HIH auf und plant ihre Förderung fortzusetzen.

In den Abteilungen sind zurzeit 19 Professoren und etwa 390 Mitarbeiter in 28 Arbeitsgruppen tätig. Die Gemeinnützige Hertie-Stiftung wendete bisher annähernd 60 Millionen Euro für das HIH auf und plant ihre Förderung fortzusetzen.

Das Hertie Institut für klinische Hirnforschung (HIH) war 2018 zum zweiten Mal mit einem Informationsstand auf der Jahrestagung der Society of Neuroscience vom 3. bis 7. November 2018 in San Diego, USA, vertreten. Unter dem Titel „Neuroscience in Germany" stellte das Institut gemeinsam mit anderen neurowissenschaftlichen Einrichtungen und Verbänden, sowie Förderorganisationen seine Inhalte und Angebote vor. Darüber hinaus präsentierte sich das HIH auf dem FENS Forum for Neuroscience in Berlin, das vom 7. bis 11. Juli 2018 stattfand. Hierfür wurde der Gemeinschaftsstand „Neurocenters in Germany" ins Leben gerufen, an dem neben dem HIH und der Gemeinnützigen Hertie-Stiftung die neurowissenschaftlichen Exzellenzcluster und das Einstein-Zentrum in Berlin teilnahmen.

Das Neuroscience Campus Get Together, das gemeinsam mit seinen Nachbarn, dem Deutschen Zentrum für Neurodegenerative Erkrankungen (DZNE) und dem Werner Reichardt Centre for Integrated Neuroscience (CIN), im Jahr 2015 initiiert und seitdem jährlich fortgeführt wurde, stieß auch im Jahr 2018 auf großen Erfolg bei Wissenschaftler/innen und Mitarbeiter/innen. Am gleichen Tag, dem 19. Juli 2018, fand die feierliche Einweihung des TübingenNeuroCampus (TNC) statt. Der TNC soll neurowissenschaftliche Arbeitsgruppen und Einrichtungen am Standort Tübingen vernetzen, wissenschaftliche Kooperationen fördern und die Internationalisierung und Rekrutierung von exzellenten Wissenschaftler/innen erleichtern. Aufbauend auf der langen und erfolgreichen Tradition im Bereich der Neurowissenschaften soll dadurch die Stellung Tübingens unter den internationalen Spitzenstandorten gesichert und ausgebaut werden.

Prof. Dr. Thomas Gasser
Prof. Dr. Mathias Jucker
Prof. Dr. Holger Lerche
Prof. Dr. Peter Thier
Prof. Dr. Ulf Ziemann

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)

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

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

Gerda Weise
(Ward Manager, Ward 44)

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

WARD 42

Diana Arko
Irene Brady
Mark Canoy
Olga Degraf
Annette Eisele
Karl Andrew Gallar
Joann Gallo
Corinna Kalmbach-Ftits
Gabriele Kern-Braun
Renate Maier-Korneck
Bettina Mollenhauer
Lisa Nickel
Iris Sadowski
Sarah Schneider
Ulrike Schweizer
Gudrun Siegl
Birgit Weimar

WARD 43

Jane Buo
Johanna Eisele
Isaac Emwinghare
Karola Fröhlich
Tatjana Graz
Fatima Hammami
Werner Hansen
Sigrid Herter
Michael Heymann
Sevbenur Ibrahimova
Beate Kloster
Andrea Langmann
Annika Löweke
Kevin Lux
Alisa Mansour-Tokovic
Banu Sahin
Katrin Schindl
Anja Siegle
Katharina Wehner
Nadine Wolter

WARD 44 INTENSIVE CARE/ STROKE UNIT

Andrea Albrecht
Nina Begemann
Karin Brunner
Jane Buo
Ana-Maria Cheregi
Ebrar Döger
Adriana Digirolamo
Daniel Fuente Friend
Laura Gabriele
Tobias Göttermann
Susanne Grumann
Carmen Haag
Frank Hauber
Kathrin Haug
Marc-Sebastian Haug
Lea Heinzelmann
Yvonne Horz-Weger
Regina Johner
Sandra Kästner
Petra Kaschowitz
Lothar Kunz
Ines Lange
Christine Löffler
Giusi Marchese
Christine Moosmann
Birgit Moryson
Petra Nipprasch
Simone Ochieng
Gloria Peth
Christine Reuter
Jane Reutter
Claudia Romeikat
Thomas Rottmann
Mirjam Schafer
Simon Schippmann
Johann Schmuck
Lena Seelmann
Annette Silber
Brigitte Steinau
Tanja Striebich
Armin Teubert
Angelika Weber
Gerda Weise
Bettina Weisser
Eva Wener-Buck
Dieter Zeller
Michelle Zimmer mann
Ulrike Zimmermann

WARD 45

Luther Basa
Meike Besser
Önder Bilen
Roslyn Chin
Friedhelm Chmell
Michelle Dupke
Rebecca Fais
Maria Flohr
Jay Carl Garcia
Alice Hoffmann
Tobias Illhardt
Eva Kern
Dorothe Pacholleck
Nicole Steiner
Sina Westbomke
Stephanie Zanfardino

NURSING ASSISTANTS

Amira Kulu
Charlotte Ammer
Lea Bernhardt
Gesa Binzenbach
Antonija Ema Gujic
Lisa Herrmann
Christian Hunger
Maximilian Jaron
Stefan Benjamin Kaminsky
Anna Tamina Lang
Gabriele Layla
Emely Paul
Carolin Schmitt
Clarissa Schwarzer
Daniel Ganter
Nikolina Herceg
Susanne Oberländer
Merlin Stuber
Janine Siquoir

WARD ASSISTANTS

Nicole Braun
Simone Dettinger
Stefanie Müllerschön
Sandra Sailer

CASE/OCCUPANCY MANAGEMENT

Silvia Clement
Christine Rebenschütz
Michael Schütz-Böger
Christina Tomschitz
Isabel Utsch-Sellnow

TECHNICIANS

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

SECRETARIES

Ina Baumeister
Yvonne Brändle
Jutta Eymann
Dagmar Heller-Schmerold
Sabrina Kreiser
Isolde Marterer
Christine Riegraf
Susanne Stimmler
Diana Thomma
Doris Wieder

MEDICAL DOCUMENTATION

Horst Feuerbacher
Dr. Katharina Friebe (until 06/2018)
Melanie Liebscher
Dr. Christina Lipski (since 07/2018)
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)
Dr. Markus Kowarik
PD Dr. Markus Krumbholz
Prof. Dr. Arthur Melms (5%)
Dr. Annerose Mengel
Dr. Florian Müller-Dahlhaus (10%, until 04/2018)
Prof. Dr. Ulrike Naumann
Dr. Sven Poli, MSc
PD Dr. Mirjam Renovanz (since 10/2018)
Dr. Johannes Rieger (5%)
Dr. Dennis Schlak (50%, until 09/2018)
Prof. Dr. Dr. Ghazaleh Tabatabai
(Interdisciplinary Division of Neuro-Oncology)

SCIENTISTS/RESIDENTS

Dr. Ahmed Abdelhak (since 03/2018)
Dr. David Baur
Dr. Paolo Belardinelli
Dr. Til Ole Bergmann (5%, since 10/2018)
Dr. Corinna Blum
Elisabeth Braun (née Rexer)
Dr. Mohamed Yasser Elnaggar
Dr. Irina Gepfner-Tuma
Dr. Pedro Caldana Gordon
Dr. Parameswari Govindarajan
Florian Härtig
Prof. Dr. Ingo Hertrich
Sophie Hirsch (since 04/2018)
Dr. Marilin Koch
Noemi Maros (until 09/2018)
Daniel Merk (since 10/2018)
Dr. Margarethe Paech (50%, until 12/2018)
Dr. med. univ. Elisa Pichler (since 12/2018)
Dr. Khouloud Poli (née Nafaa)
Dr. Justyna Przystal
Dr. Hardy Richter
Dr. Christina Roggia (until 06/2018)
Dr. Christoph Ruschil
Jennifer Sartor (since 02/2018)
Dr. Natalie Schaworonkow
Patricia Schwarz (since 09/2018)
Vera Stadler
Maria-Ioanna Stefanou
Dr. Mihály Sulyok (until 09/2018)
Dr. Johannes Tünnerhoff
Dr. Brigitte Zrenner
Dr. Christoph Zrenner

TECHNICAL STAFF/ADMINISTRATION

Marcel Armbruster
Ulrike Baumann (since 08/2018)
Sabrina Baumeister (until 08/2018)
Dipl.-Ing. Rüdiger Berndt (Electronics, together with the Dept. of Cognitive Neurology)
Evelyn Dubois
Sandra Gäßler-Kegelmann, MBA
Sarah Hendel
Marion Jeric
Anna Kempf
Gabriele Kuebart
Matthias Scholl
Elke Stransky
Julia Zeller

PHD STUDENTS

Denis Canjuga (Supervisor Prof. Dr. Dr. Tabatabai)
Debora Desideri (Supervisor Prof. Dr. Ziemann)
Bingshuo Li (Supervisors Prof. Dr. Schwarz, Prof. Dr. Ziemann)
Eric McDermott (Supervisor Prof. Dr. Ziemann)
Steven Pillen (Supervisor Prof. Dr. Ziemann)
Srinath Rajaraman (Supervisor Prof. Dr. Dr. Tabatabai)
Nikhil Rankan (Supervisor Prof. Dr. Naumann)
Sonja Schötterl (Supervisor Prof. Dr. Naumann)
Yi Wang (Supervisor Prof. Dr. Ziemann, Dr. Poli)

MASTER STUDENTS

Ricarda Farsch (Supervisor Prof. Dr. Hertrich)
Vanessa Frische (Supervisor Prof. Dr. Hertrich)
Miriam Grunau (Supervisor Prof. Dr. Hertrich)
Kerstin Jendrysik (Supervisor Prof. Dr. Hertrich)
Constanze Kemmerer (Supervisor Dr. Kowarik)
Maya Velardi (Supervisor Prof. Dr. Hertrich)

MEDICAL DOCTORAL STUDENTS

Abdullah Alekuzei (Supervisor Prof. Dr. Naumann)
Hannes Becker (Supervisor Prof. Dr. Dr. Tabatabai)
Paula Bombach (Supervisors Prof. Dr. Ziemann, Dr. Kowarik)
Elina Brendle (Supervisor Prof. Dr. Dr. Tabatabai)
Elena Dangel (Supervisor Prof. Dr. Dr. Tabatabai)
Hulda Ewald (Supervisor Prof. Dr. Dr. Tabatabai)
Juliane Ebert (Supervisor Prof. Dr. Dr. Tabatabai)
Jakob Ehlers (Supervisor Prof. Dr. Naumann)
Ines Fachner (Supervisor Prof. Dr. Dr. Tabatabai)
Oliver Föhst (Supervisor Prof. Dr. Dr. Tabatabai)
Katharina Hadaschik (Supervisors Prof. Dr. Ziemann, Dr. Poli)
Mona Hirt (Supervisor Prof. Dr. Dr. Tabatabai)
Ilona Hoberg (Supervisor PD Dr. Bischof)
Yeho-Irae Kim (Supervisor Prof. Dr. Ziemann)
Julia Elisabeth Király (Supervisor Prof. Dr. Ziemann)
Franca Koenig (Supervisor Prof. Dr. Ziemann)
Natalya Korinetsko (Supervisor Prof. Dr. Dr. Tabatabai)
Martin Korn (Supervisor Prof. Dr. Dr. Tabatabai)
Krämer Hannah (Supervisor Prof. Dr. Ziemann)
Felix Lennartz (Supervisor Prof. Dr. Dr. Tabatabai)
Chen Liang (Supervisor Prof. Dr. Ziemann)
Anne Lieb (Supervisor Prof. Dr. Ziemann)
Adam Meder (Supervisor Prof. Dr. Ziemann)
Rodrigo Navarrete (Supervisor Prof. Dr. Ziemann)
Francesca Russo (Supervisor Prof. Dr. Ziemann)
Martin Schippert (Supervisor Prof. Dr. Dr. Tabatabai)
Leonie Schumacher (Supervisor Prof. Dr. Naumann)
Charlotte Spencer (Supervisor Prof. Dr. Ziemann, Dr. Poli)
Jakob Spogis (Supervisor Prof. Dr. Ziemann)
Marianna Stefanou (Supervisor Prof. Dr. Ziemann)
Miriam Thies (Supervisor Prof. Dr. Ziemann)
Xueyu Yang (Supervisor Prof. Dr. Ziemann)

PROFESSORSHIP FOR NEUROREHABILITATION

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

Clinical Studies

STROKE STUDIES

ACTION II (EudraCT: 2015-004783-11): A multicenter, double-blind, placebo-controlled, randomized, parallel-group study to evaluate the safety and efficacy of intravenous natalizumab (BG00002) on reducing infarct volume in acute ischemic stroke
Investigator: Dr. Sven Poli

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

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

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

CL1-44819-004: Randomized Efficacy and Safety Trial with Oral S 44819 after Recent Ischemic Cerebral Event
Investigator: Prof. Dr. Ulf Ziemann

ECASS-4 (EudraCT: 2012-003609-80): European cooperative acute stroke study-4 extending the time for thrombolysis in emergency neurological deficits, (ECASS-4: EXTEND).
Investigator: Dr. Sven Poli

EuroHYP1 (EudraCT: 2012-002944-25): European multi-center, randomised, phase III clinical trial of therapeutic hypothermia plus best medical treatment versus best medical treatment alone for acute ischaemic stroke.
Investigator: Dr. Sven Poli

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

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

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

RESPECT CVT: A clinical trial comparing efficacy and safety of dabigatran etexilate with warfarin in patients with cerebral venous and dural sinus
Investigator: Dr. Sven Poli

RESPECT ESUS: Randomized, double-blind Evaluation in secondary Stroke Prevention comparing the Efficacy and safety of the oral Thrombin inhibitor dabigatran etexilate (110 mg or 150 mg, oral b.i.d.) versus acetylsalicylic acid (100 mg oral q.d.) in patients with Embolic Stroke of Undetermined Source
Investigator: 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: Dr. Sven Poli

Risikostratifizierung von Schlaganfallpatienten durch Analyse der autonomen Funktion (AKF-Programm)
Investigators: Prof. Dr. Christine Meyer-Zürn, Prof. Dr. Jennifer Diedler

SITSopen: An open, prospective, international, multicentre, controlled study of safety and efficacy of thrombectomy in acute occlusive stroke following initiation with intravenous thrombolysis with alteplase in accordance with accepted guidelines, compared to intravenous thrombolysis only
Investigators: Dr. Sven Poli, Prof. Dr. Ulrike Ernemann

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

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

CASTING (EudraCT-Nr. 2015-005597-38): A study of Ocrelizumab in participants with Relapsing Remitting Multiple Sclerosis (RRMS) who have had a suboptimal response to an adequate course of Disease-Modifying Treatment (DMT)
Investigator: Prof. Dr. Ulf Ziemann

CD-IA-MEDI-551-1155 – Medi-551 (EudraCT Nr: 2014-000253-36): A double-masked, placebo-controlled study with open-label period to evaluate the efficacy and eafety of MEDI-551 in adult subjects with neuromyelitis optica and neuromyelitis optica spectrum disorder
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: Dr. Markus Kowarik

Competence Network MS – Concerted Action on Biomarker for Individualized Multiple Sclerosis Therapy in Germany (Control MS): Prospective cohort study in patients with clinically isolated syndrome (CIS) and early-stage multiple sclerosis
Investigator: Prof. Dr. Ulf Ziemann

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: 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

Dimethyl fumarate: Influence of Dimethyl fumarate (DMF) on fMRI markers of cortical resting state network connectivity in relapsing remitting multiple sclerosis (RRMS)
Investigator: Prof. Dr. Ulf Ziemann

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: PD Dr. Markus Krumbholz

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: PD Dr. Markus Krumbholz

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: Dr. Markus Kowarik

Clinical Studies

NEUROIMMUNOLOGY STUDIES

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: Dr. Markus Krumbholz

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 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

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

Perception of speech at normal and ultra-fast syllable rates – functional neuroplasticity in blind subjects and its relation to the normal speech processing network (DFG HE 1573/6-2)
Project leader: Prof. Dr. Ingo Hertrich
Funding institution: German Research Foundation (DFG)

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

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

Funktionelle und therapeutische Bedeutung einer Behandlung des Glioblastoms mit Mistellektinen
Project leader: Prof. Dr. Ulrike Naumann
Funding institution: Software AG

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)

Wie beeinflussen Gliomzellen den Differenzierungsstatus von Perizyten tumor-assoziierter Gefäße und damit angiogene Prozesse? Spielen EMT-Faktoren dabei eine Rolle?
Project leader: Prof. Dr. Ulrike Naumann

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: Dr. Sven Poli
Funding institution: European Commission

Interdisciplinary translational Neuro-Oncology from molecular alterations to patient stratification and therapy
Project leader: Prof. Dr. Dr. Ghazaleh Tabatabai
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)

Influence of Dimethylfumarate (DMF) on fMRI markers of cortical resting state network connectivity in relapsing remitting multiple sclerosis (RRMS)
Project leader: Prof. Dr. Ulf Ziemann
Funding institution: Biogen Idec GmbH

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

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

Induction of brain plasticity with closed-loop EEG-triggered transcranial magnetic stimulation
Project leaders: Dr. Christoph Zrenner
Funding institution: Medical Faculty University Tübingen, *f*ortüne Program

NEW GRANTS

Assessment of YB-1-dependent oncolytic adenovirus-based explorative study of Emerging Blood Biomarkers in Progressive Multiple Sclerosis (EmBioProMS)
Project leader: Dr. Ahmed Abdelhak
Funding Institution: Deutsche Multiple Sklerose Gesellschaft (DMSG)

The role of B cells in patients with gliomas: B-cell-associated immuno surveillance in the CNS?
Project leader: 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: Dr. Markus Kowarik
Funding Institution: Merck GmbH

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

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

Automatic PredICtion of Edema after Stroke (APICES)
Project leader: 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: Dr. Sven Poli
Funding institution: Daiichi Sankyo

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

Third-Party Funding

NEW GRANTS

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

Combined inhibition of PD1 and CTLA4 in CNS metastases from malignant melanoma: a multicenter phase 2 investigator-initiated clinical trial
Project leaders: Prof. Dr. Claus Garbe, Prof. Dr. Dr. Ghazaleh Tabatabai
Funding institution: Bristol-Myers Squibbs

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)

Closed-Loop Softwaresystem zur Neurorehabilitation nach Schlaganfall durch EEG/EMG-Hirnzustandsgesteuertes „Virtual Reality" Therapieparadigma (REHALITY)
Project leaders: Prof. Dr. Ulf Ziemann, Dr. Christoph Zrenner
Funding Institution: Federal Ministry of Education and Research (BMBF)

Therapeutic Effectiveness of Brain-Oscillation Synchronized TMS in Depression (BOSSFRONT-2)
Project leader: Dr. Brigitte Zrenner
Funding Institution: Medical Faculty University Tübingen, Clinical Trial Program

Awards

Prof. Dr. Dr. Ghazaleh Tabatabai
Listing "Top physician 2018" (Focus, Hirntumore)

Prof. Dr. Ulf Ziemann
Listing "Top Physicians 2018" (Guter Rat)

Medical Theses

(Completed in 2018)

Hanna Faber
Cooperative noninvasive brain stimulation to induce long-term motor plasticity
Supervisor: Prof. Dr. Ulf Ziemann

Philipp Nakov
The role of the C-C motif chemokine ligand 7, C-C motif chemokine ligand 11 and interleukin-9 in T helper type 9 cell mediated neuronal damage
Supervisor: PD Dr. Felix Bischof

PhD Theses

(Completed in 2018)

Ghazaleh Darmani
Pharmaco-TMS-EEG as a new tool to characterize human cortical excitability and connectivity
Supervisor: Prof. Dr. Ulf Ziemann

Srinath Rajaraman
Oncolytic measles virus in combination with conventional therapies in experimental glioma: characterizing the induction of treatment-induced molecular and immunological signatures for personalized therapeutic strategies
Supervisor: Prof. Dr. Dr. Ghazaleh Tabatabai

Master Theses

(Completed in 2018)

Ricarda Farsch
Das Phänomen der „semantischen Sättigung“ und seine Ausprägungen bei Normalpersonen und schizophrenen Personen
Supervisor: Prof. Dr. Ingo Hertrich

Vanessa Frische
Anglizismen in der deutschen Werbesprache – ein absolutes „No-go“? Entwicklung, Wirkung, Verständnis und Akzeptanz
Supervisor: Prof. Dr. Ingo Hertrich

Miriam Grunau
Zweitspracherwerb per App: Vokabeln lernen mit visueller Animation und motorischer Interaktion
Supervisor: Prof. Dr. Ingo Hertrich

Kerstin Jendrysik
The Role of the Right Hemisphere in Idiom Processing
Supervisor: Prof. Dr. Ingo Hertrich

Constanze Kemmerer
Flow Cytometric Analysis of B cell Subsets in Multiple Sclerosis Patients under Disease Modifying Treatments
Supervisor: Dr. Markus Kowarik

Stephanie Klein
Characterizing the role of CAMTA1 in gliomagenesis
Supervisor: Prof. Dr. Dr. Ghazaleh Tabatabai

Bachelor Theses

(Completed in 2018)

Daniel Netz
The Evolution Of Grammatical Gender - From Nostratic To Indo-European
Supervisor: Prof. Dr. Ingo Hertrich

Rainer Roth
Arbitrariness, Systematicity and Iconicity and their impact on Language Learning and Evolution
Supervisor: Prof. Dr. Ingo Hertrich

Tabea Walz
Primary Progressive Aphasia - Symptoms and Treatments
Supervisor: Prof. Dr. Ingo Hertrich

Conferences & Workshops

Winter School NOA
University Hospital Tübingen on behalf of the NOA/DKG, Stuttgart, 6 December 2018
Scientific coordinator: Prof. Dr. Dr. Ghazaleh Tabatabai

Guest Researchers

Dr. Anastasia Shulga, BioMag Laboratory, HUS Medical Imaging Center, University of Helsinki and Helsinki University Hospital, Helsinki, 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
(50%; other 50% Department of Neurology with Neurovascular Medicine and Neuro-Oncology)
Prof. Dr. Yvonne Weber

SCIENTISTS/RESIDENTS

Dr. Eva Auffenberg (until 08/2018)
Murtadha Alshabaan
Felicitas Becker
Dr. Christian Boßelmann
Dr. Katharina Friebe
Dr. Samira Hamzehian
Dr. Ulrike Hedrich
Dr. Yiwen Li Hegner
Julian Hofmeister (10/2018)
Josua Kegele
Dr. Silke Klamer
Kevin Klett (until 10/2018)
Dr. Henner Koch
Dr. Stephan Lauxmann
Dr. Christina Lipski (until 06/2018)
Dr. Yuanyuan Liu
Tijana Ljubikj
Florian Lutz until 10/2018)
Dr. Pascal Martin
Dr. Justus Marquetand
Dr. Joohyun Park
Filip Rosa
Dr. Julian Schubert until 02/2018)
Dr. Victoria Schubert
Dr. Niklas Schwarz
Jan-Hendrik Stahl
Dr. Sabine Thewes
Debora Vittore-Welliong
Dr. Nathalie Winter
Dr. Sophia Willikens
Dr. Stefan Wolking
Dr. Thomas Wuttke

TECHNICAL STAFF/ ADMINISTRATION

Yvonne Brändle
Ana Fulgencio-Maisch
Sabrina Kreiser
Merle Harrer
Christian Hengsbach
Heidrun Löffler
Sarah Rau

MD/PHD STUDENTS

Erva Bayraktar
Adham Elshahabi
Haosi Huang
Mahmoud Koko
Robert Lauerer
Philipp-Justus Lührs
Raviteja Kotikalapudi
Johanna Krüger
Nicole Kusch
Nicolas Layer
Anjela Meyer
Harshad Pannikkaveettil Ashraf
Filip Rosa
Simone Seiffert
Hannah Schwarz
Theresa Simperl
Christina Stier
Niklas Vogel
Pu Yan

INTERNSHIPS

Marei Brose
Supervisor: Dr. Stephan Lauxmann

Jana Kuhn
Supervisor: Johanna Krüger

Eva Kunzelmann
Supervisors: Dr. Henner Koch, Dr. Stephan Lauxmann

Sarah Merz
Supervisor: Mahmoud Koko

Lorena Savini
Supervisor: Dr. Stephan Lauxmann

Anna Schwämmle
Supervisor: Johanna Krüger

Kornelijus Stanaitis
Supervisors: Dr. Ulrike Hedrich, Dr. Henner Koch

Dingwen Su
Supervisor: Betül Uysal

Clinical Studies

ZEDEBAC: A multicenter, open-label and non-interventional study to investigate Eslicarbazepinacetat in focal epilepsies
Investigator: Prof. Dr. Yvonne Weber

VALUE / SP0982: A double-blind, randomized, placebo-controlled, parallel-group, multicenter study to evaluate the efficacy and safety of lacosamide as adunctive therapy for uncontrolled primary generalized tonic-clonic seizures in subjects with IGE
Investigator: Prof. Dr. Yvonne Weber

VIBES / EP0045: A noninterventional study of Vimpat (lacosamide) added to one baseline antiepileptic drug therapy in patients with brain tumor-related epilepsy
Investigator: Prof. Dr. Yvonne Weber

A multicenter, single-arm, open-label, post-marketing safety study to evaluate the risk of seizure among subjects with metastatic castration-resistant prostate cancer treated with enzalutamide who are at potential increased risk of seizure.
Investigator: Prof. Dr. Yvonne Weber

PredCh – Efficacy and safety of oral prednisone as add-on therapy in prophylactic treatment of episodic cluster headache: a randomized, placebo controlled parallel study
Investigator: Prof. Dr. Tobias Freilinger

REGAIN / I5Q-MC-CGAI – a phase 3, randomized, double-blind, placebo-controlled study of LY2951742 in patients with chronic migraine
Investigator: Prof. Dr. Tobias Freilinger

EVOLVE-2 / I5Q-MC-CGAH – a phase 3, randomized, double-blind, placebo-controlled study of LY2951742 in patients with episodic migraine
Investigator: Prof. Dr. Tobias Freilinger

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.
Investigator: Prof. Dr. Tobias Freilinger

HeMiLa – Prophylactic treatment of hemiplegic migraine with lamotrigine
Investigator: Prof. Dr. Tobias Freilinger

UX007G-CL301 – a phase 3, randomized, double-blind, placebo-controlled, crossover study to assess the efficacy and safety of UX007 in the treatment of movement disorders associated with Glucose Transporter Type 1 Deficiency Syndrome (Glut1 DS).
Investigator: Prof. Dr. Yvonne Weber

EP0104 / Non-interventional Study – effectiveness of initiating brivaracetam add-on therapy in patients with epilepsy requiring a change in antiepileptic drug regimen: a retrospective data collection
Investigator: Prof. Dr. Holger Lerche

VOTE / EP0076 – Patient preferences in epilepsy monotherapy – 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.
Investigator: Prof. Dr. Yvonne Weber

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

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)

UPSS – Pattern Analysis bei Neuropathien
Investigators: Prof. Dr. Alexander Grimm, Dr. Nathalie Winter

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

Third-Party Funding

ONGOING GRANTS

Pathophysiology of familial hemiplegic migraine: Examination of a newly developed transgenic SCNC1A mouse model
Project leader: Prof. Dr. Tobias Freilinger
Funding institution: German Research Foundation (DFG) (FR 3324/2-1)

Pathophysiology of non-classical epileptic encephalopathies (EE)
Project leader: Prof. Dr. Yvonne Weber
Funding institution: German Research Foundation (DFG) (WE 4896/3-1)

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: Prof. Dr. Tobias Freilinger
Funding institutions: Centre for Rare Diseases, Tübingen; AKF (Angewandte Klinische Forschung), University of Tübingen

Exploring the function of the central control of breathing in mice with sodium-channel mutationscausing epilepsy, implications for sudden unexpected death in patients with epilepsy (SUDEP)
[Die zentrale Kontrolle der Atmung in Mäusen mit Natriumkanalmutationen, die Epilepsien verursachen und die Implikation für den plötzlichen unerwarteten Tod bei Epilepsie]
Project leader: Dr. Henner Koch
Funding institution: German Research Foundation (DFG) (KO 4877/2-1)

Structural Highfieldd-MRI-Imaging in Epilepsy
Project participant: Dr. Pascal Martin
Funding institution: University of Tübingen (Pate)

Generation of a human disease model for epilepsy caused by a sodium channel mutation
Project participant: Dr. Niklas Schwarz
Funding institution: University of Tübingen (Pate)

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) (FO 750/5-1)

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

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) (FO 750/7-1)

Entwicklung von Computermodellen zur Vorhersage der Auswirkungen von Ionenkanalmutationen auf neuronales Verhalten
Project participant: Dr. Stephan Lauxmann
Funding institution: University of Tübingen (Pate)

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

Third-Party Funding

ONGOING GRANTS

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

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

NEW 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

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

Awards

Prof. Dr. Alexander Grimm
1. Wissenschaftspreis der DEGUM

Dr. Niklas Schwarz
Forschungspreis des Landes Baden-Württemberg - Ersatz- und Ergänzungsmethoden zum Tierversuch

MD Theses

(Completed in 2018)

Haosi Huang
Functional studies of mutations in SCN2A gene associated with early-onset epilepsy
Supervisor: Prof. Dr. Holger Lerche

Master Theses

(Completed in 2018)

Märt Rannap
Functional characterisation of mutations associated with epilepsy in the human voltage-gated sodium channel NaV1.6
Supervisor: Dr. Yuanyuan Liu

Kirsten Torge
Effects of 4-Aminopyridine on wildtype and mutant KV1.2 channels
Supervisor: Dr. Ulrike Hedrich

Conferences & Workshops

Patiententag Epilepsie
Tübingen, 12 July 2018
Scientific coordinators: Dr. Michael Alber, Dr. Stephan Lauxmann

Tübinger Therapiefortbildung Neurologie
Tübingen, 14 July 2018
Scientific coordinators: Prof. Dr. Holger Lerche, Dr. Stefan Wolking

Young Neurologists Summer School 2018
Tübingen, 30 July - 3 August 2018
Scientific coordinators: Prof. Dr. Holger Lerche, Dr. Justus Marquetand, Dr. Christian Boßelmann

Epilepsy Genetics
Symposium at the Annual Meeting of the German Society of Epilepsy (DGfE)
Fürth, 13-16 June 2018
Scientific coordinators: Prof. Dr. Yvonne Weber, PD Sarah von Spiczak (University of Kiel)

Seizure Detection Systems
Symposium at the Annual Meeting of the German Society for Neurology (DGN)
Berlin, 30 October - 3 November 2018
Scientific coordinator: Prof. Dr. Yvonne Weber

Kickoff Meeting der Forschergruppe FOR2715
Tübingen, 7 December 2018
Scientific coordinators: Prof. Dr. Holger Lerche, Dr. Henner Koch, Dr. Ulrike Hedrich

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

Prof. Dr. Daniela Berg
Dr. Dr. Saskia Biskup
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
Prof. Dr. Rejko Krüger
PD Dr. Inga Liepelt-Scarfone
PD Dr. Rebecca Schüle
Dr. Javier Simón-Sánchez (jointly with DZNE; until 06/2018)
Prof. Dr. Matthis Synofzik
PD Dr. Daniel Weiß

SCIENTISTS/RESIDENTS/PHD STUDENTS

Burcu Atasu (until 08/2018)
Sara Becker
Dr. Friedemann Bender
Dominik Blum
Idil Cebi
Silvia De Cicco
Mohamad Dehestani
Morad Elshehabi
Dr. Monika Fruhmann-Berger (until 03/2018)
Dr. Natalja Funk
Jorge Garcia Morato
Dr. Sven Geisler
Anamika Giri (until 02/2018)
Dr. Friederike Hans
Dr. Stefan Hauser
Dr. Stefanie Hayer
Dr. Holger Hengel
Philip Höflinger
Dr. Dina Ivanyuk
Dr. Jennifer Just
Dr. Christoph Kessler
Stefanie Krüger
Dr. Stefanie Lerche
Hui Liu
Dr. Ebba Lohmann
Dr. Gerrit Machetanz
Maike Nagel

Zhen Peng
Dr. Tim Rattay
Erik Riesch
Dr. Benjamin Roeben
Dr. Lorenzo Roncoroni
Dr. Carola Rotermund
Dr. Anna Schöllmann
Dr. Marlieke Scholten
Claudia Schulte
Stefanie Schuster
Lisa Schwarz
Patrizia Sulzer
Ulrike Sünkel
Catherine Thömmes
Zuzanna Tkaczynska
Dr. Dr. Andreas Traschütz
Ulrike Ulmer
Dr. Adam Vogel
Dr. Sarah Wiethoff
Dr. Carlo Wilke
Dr. Isabel Wurster
Dr. Lena Zeltner
Dr. Milan Zimmermann

TECHNICAL STAFF/ ADMINISTRATION

Maren Albers (until 03/2018)
Marcel Armbruster
Christian Deuschle
Katrin Dillmann
Christian Erhardt
Dr. Jutta Eymann
Dr. Bettina Faust
Elke Feil
Ann-Kathrin Hauser
Tanja Heger
Heiderose Heiss
Ella Hilt
Susanna Hoffmann
Marina Karakhanyan
Mirjam Knöll
Isolde Marterer
Petra Mech
Katja Michaelis
Doreen Müller
Susanne Nussbaum
Dr. Angelika Oehmig
Dr. Vasiliki Panagiotakopoulou
Miriam Peleman
Selina Reich
Jennifer Reichbauer
Benjamin Riebenbauer
Elisabeth von Schalkwyk
Yvonne Schelling
Susanne Stimmler
Elke Stransky
Dr. Anna-Katharina vonThaler
Doris Wieder
Ina Wolfstädter
Cong Yu
Maria Zarani
Nicole Zweig

MEDICAL DOCTORAL STUDENTS

Selda Akbas
Grammato Amexi-Olibia
Merit Bade
Raphael Barbe
Carolin Bellut
Kristina Bettecken
Aline Beyle
Andreas Boldt
Jan-Hinrich Busch
Gabriela Carvajal
Meltem Ciliz
Monique Dehnert
Steffen Dengler
Lisanne Dormann
Daniela Egic
Karl Friedrich Ermisch
Ellen Fehlert
Zofia Fleszar
Amina Flinsbach
Jasmin Fritzen
Florian Funer
Sarah Gascon-Busquet
Ina Gehweiler
Julia Göddel-Sand
Judith Greiner
Katharina Greulich
Leonie Guggolz
Kilian Gunkel
Alexandra Gutfreund
Elena Hager
Jochen Hallwachs
Linda Härtner
Melanie Heilbronn
Eva-Maria Heine
Kim-Susann Hennefarth
Hanna Hentrich
Max Hollweck
Svenja Hucker
Daniel Holz
Sofie Kämereit
Malte Kampmeyer

Clinical and Scientific Staff

MEDICAL DOCTORAL STUDENTS

Irenee Kanyiki
Kristina Kaufhold
Sarah Klatt
Teresa Klos
Annika Koch
Leonie Köhler
Eva Kraus
Sandra Lachenmaier
Lena Löffler
Katrin Maier
Julian Meinhardt
Sascha Otterbein
Sylvia Pflederer
Kathrin Prahl
Sarah Renno
Lea Rietschel
Pavel Saraykin
Jennifer Sartor
Patricia Schöpfer
David Scheibner
Hans Justus Siegrist
Johannes Sprengel
Jana Stäbler
Lena Stetz
Stefan Streich
Inga Caroline Thielker
Marlene Topka
Maximilian Völker
Melanie Wayand
Sofie Weiss
Katarzyna Wojcik
Nicolas Zang
Laura Zaunbrecher

MASTER & BACHELOR STUDENTS

Carina Arnold
Marissa Bentele
Sofie Englisch
Marie Gauder
Hanna Glasebach
Elena Heuten
Huong Giang Hoang
Benedikt Hölbling
Hannah Lönnecker
Marius Kolodziej
Kim Krieg
Leonie Kurz
Max Mattheuer
Rusheka Maxwell
Madeline Nagel
Lara Sophie Rieder
Srinethe Saravanan
David Skrabak
Fabienne Waga

TRAINEES

Sara Grüner

BUNDESFREIWILLIGEN-DIENSTLEISTERINNEN

Jonathan Göth (until 08/2018)
Meike Keller
Pascal Marx (until 08/2018)
Marie Wiesemann

Clinical Studies

Ergotherapie bei Essentiellem Tremor (ET):
a monocenter single blind study to evaluate the symptomatic effect of ergotherapy on ET
Investigators: Dr. Isabel Wurster, Prof. Dr. Daniela Berg

Training PD: a monocenter center study assessing the clinical and neuroimaging effect of various trainings (physiotherapy, brain games, exergaming) in PD.
Investigators: Dr. Eva Schäffer, Dr. Benjamin Roeben, Prof. Dr. Daniela Berg

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

DEMPARK / LANDSCAPE: Multicenter longitudinal observational study on dementia in Parkinson's disease.
Investigators: PD Dr. Inga Liepelt-Scarfone, Sara Becker, Prof. Dr. Daniela Berg

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-Studies: within this German-wide project, Tübingen is involved in several studies 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

A94-52120-165: A national, multicenter, non-interventional, prospective, longitudinal study of treatment with botulinum toxin A injections in previously treated or untreated patients with cervical dystonia (Dysport®).
Investigators: Dr. Tobias Wächter, Dr. Ebba Lohmann, Prof. Dr. Thomas Gasser

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

Clinical Studies

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

Study B7601011: "A 15-week, phase 2, double blind, randomized, placebo controlled, flexible dose study to investigate the efficacy, safety and tolerability of PF-06649751 in subjects with early stage Parkinson's disease"
Investigators: Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Thomas Gasser

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

TrainParC: Cognitive training for treatment of cognitive dysfunctions and prevention of cognitive decline in patients with Parkinson's diesease and Mild Cognitive Impairment (PD-MCI): behavioral effects, prediction of response and underlying mechanisms
Investigator: PD Dr. Inga Liepelt-Scarfone

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

Y-79-52120-166: An international observational prospective study on long-term response to botulinum toxin type a (BoNT-A) injections in subjects suffering from idiopathic cervical dystonia (CD) – pharmaco-economic impact (INTEREST IN CD2)
Investigators: Dr. Katerina Freitag, Prof. Dr. Thomas Gasser

Multicenter evaluation of the effect of botulinum toxin therapy on quality of life: A multicenter, non-interventional, prospective study to investigate the effect of botulinum toxin therapy on quality of life in previously not treated patients with various neurological diseases
Investigators: Dr. Katerina Freitag, Prof. Dr. Thomas Gasser

EarlyStim – 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. Rejko Krüger, PD 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: PD Dr. Daniel Weiß

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

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

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

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

Statin Treatment of Oxysterol Pathology in SPG5 (STOP SPG5)
Investigators: PD Dr. Rebecca Schüle, Dr. Tim Rattay, Prof. Dr. Ludger Schöls

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, Prof. Dr. Matthis Synofzik, Dr. Dr. Sarah Wiethoff, Dr. Carlo Wilke

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

MOVE' n UP: Video game-based coordinative training for children with advanced degenerative ataxia
Investigators: Prof. Dr. Matthis Synofzik, Dr. Winfried Ilg

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

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

Third-Party Funding

ONGOING GRANTS

Landscape
Project leader: PD Dr. Inga Liepelt-Scarfone, Prof. Dr. Daniela Berg
Funding institution: Federal Ministry of Education and Research (BMBF)

Joint Research Project "Identification of prediction and progression biomarkers in the earliest stages of Parkinson's disease (Neuro-D13B)"
Project leaders: Prof. Dr. Daniela Berg, Prof. Dr. Walter Maetzler, Prof. Dr. Olaf Riess (UKT)
Funding institutions: Federal Ministry of Education and Research (BMBF), UCB Pharma GmbH

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

Effects of various training activities on symptoms and adaptive brain plasticity in patients with idiopathic PD
Project leader: Prof. Dr. Daniela Berg
Funding institution: AKF (Applied Clinical Research) program, University of Tübingen

Valiadation study on the MDS clinical criteria of Parkinson's disease
Project leader: Prof. Dr. Daniela Berg
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

PPMI – Amendment 10
Project leader: Dr. Kathrin Brockmann
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

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

TrainParC: Cognitive training for treatment of cognitive dysfunctions and prevention of cognitive decline in patients with Parkinson's disease and Mild Cognitive Impairment (PD-MCI): behavioral effects, prediction of response and underlying mechanisms
Project leader: PD Dr. Inga Liepelt-Scarfone
Funding institution: ParkinsonFonds Deutschland gGmbH

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

Study B7601011: A 15-week, phase 2, double blind, randomized, placebo controlled, flexible dose study to investigate the efficacy, safety and tolerability of PF-06649751 in subjects with early stage Parkinson's disease
Project leaders: Prof. Dr. Thomas Gasser, Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone
Funding institution: Pfizer 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)

Tumorigenesis in LRRK2 associated Parkinson's disease
Project leaders: Prof. Rachel Saunders-Pullman, Dr. Saskia Biskup
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Monocyte monitoring in LRRK2 associated Parkinson's disease
Project leaders: Prof. Dr. Thomas Gasser, Dr. Dr. Saskia Biskup
Funding institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

The Edmond J. Safra Fellowship in Movement Disorders 2016
Project leader: Prof. Dr. Thomas Gasser
Funding Institution: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Genetic basis of dystonia in Turkish families
Project leaders: Prof. Dr. Thomas Gasser, Dr. Ebba Lohmann
Funding institution: German Research Foundation (DFG)

Mitochondrial endophenotypes of PD (Mito-PD)
Project leaders: Prof. Dr. Thomas Gasser (coordinator), Prof. Dr. Rejko Krüger, Dr. Kathrin Brockmann
Funding institution: Federal Ministry of Education and Research (BMBF)

Unraveling the Missing Heritability of Rare Neurodegenerative Diseases and Movement Disorders in German and Tunisian Populations (TUNGERGENE)
Project leader: Prof. Dr. Thomas Gasser
Funding institution: Federal Ministry of Education and Research (BMBF)

Multimodal imaging of rare synucleinopathies (MultISyn)
Project leader: Prof. Dr. Thomas Gasser (coordinator)
Funding institution: EU

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

Towards a unifying theory of Parkinson's disease: Investigation of the biochemical and genetic role of Rab GTPases
Project leader: Prof. Dr. Thomas Gasser
Funding institution: Centers of Excellence Network (CoEN)

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)

Third-Party Funding

ONGOING GRANTS

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

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

The importance of DJ-1 for the regulation of mitochondrial dynamics and autophagie in murine and human neuronal modles of Parkinson's disease
Project leaders: Prof. Dr. Thomas Gasser, Prof. Dr. Rejko Krüger
Funding institution: German Research Foundation (DFG)

Mitochondria in neurodegeneration and ageing – translating impaired mitochondrial dynamics to novel therapeutic strategies
Project leaders: Prof. Dr. Rejko Krüger, Prof. Dr. Philipp Kahle
Funding Institution: German Center for Neurodegenerative Diseases (DZNE)

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

Combined interleaved stimulation of STN and SNr for mobility impairment related to freezing of gait:
A randomized controlled clinical trial
Project leaders: PD 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: PD Dr. Daniel Weiß
Funding Institution: Abott

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

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

Development of a screening tool for the treatment of chronic migraine with botulinum toxin
Project leader: Dr. Tobias Wächter
Funding institution: Pharm-Allergan

Genetic disorders in Arab societies of Israel and the Palestinian authorities
Project leader: Prof. Dr. Ludger Schöls
Funding institution: German Research Foundation (DFG)

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

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

Integrated European Project on Omics Research of Rare Neuromuscular and Neurodegenerative Diseases (NEUROMICS): Diagnosis and therapy project of Rare Neuromuscular and Neurodegenerative Diseases
Project leaders: Prof. Dr. Ludger Schöls, Prof. Dr. Olaf Rieß (UKT)
Funding institution: EU

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

27 hydroxy-sterol toxicity in the pathophysiology of SPG5
Project leaders: Prof. Dr. Ludger Schöls, PD Dr. Rebecca Schüle
Funding institution: HSP Support Group; Germany e.V.

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

European 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

Statin Treatment of Oxysterol Pathology in SPG5 (STOP SPG5)
Project leaders: PD Dr. Rebecca Schüle, Prof. Dr. Ludger Schöls
Funding institution: Eva-Luise und Horst Köhler Stiftung

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 Friedreich ataxia
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: Centre for Rare Diseases, 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

A randomised delayed entry trial of intensive home-based speech therapy in ARSACS – Detecting PreAtaxia: A mixed challenge strategy to identify ataxia at its preclinical stage
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: Fondation de l'Ataxie Charlevoix, Saguenay

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

Implementation of registry- and biobank-based patient and expert network for early-onset ataxias
Project leader: Prof. Dr. Matthis Synofzik
Funding institution: Actelion Pharmaceuticals

Solving the unsolved: Next generation genomics of early-onset ataxia (NextGenATAX)
Project leader: Prof. Dr. Matthis Synofzik
Funding Institution: Else Kröner Fresenius Stiftung

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

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: Michael J. Fox Foundation for Parkinson's Research (MJFF)

Third-Party Funding

NEW GRANTS

Fellowship 2018
Project leader: Prof. Dr. Thomas Gasser
Funding institution: Deutsche Parkinson Vereinigung

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
Project leader: Prof. Dr. Thomas Gasser
Funding institution: Federal Ministry of Education and Research (BMBF)

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

iMed: A Comprehensive Evaluation of Diagnostic and Prognostic Biomarkers in Diabetes Progression and Neurodegeneration
Project leader: Prof. Dr. Thomas Gasser
Funding institution: German Center for Neurodegenerative Diseases (DZNE)

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)

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

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

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

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

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

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

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

Kognitive Stimulation bei Patienten mit Parkinson-Demenz: Wirksamkeit, Prädiktoren des Trainingserfolgs und gesundheitsökonomische Evaluation
Project leader: PD Dr. Inga Liepelt-Scarfone
Funding institution: Universität zu Köln

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)

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

Dr. Julia Fitzgerald and Dr. Carola Rotermund
Gender Equality Prize of The Medical Faculty 2018, University of Tübingen

Dr. Sarah Wiethoff
Attempto Prize, University of Tübingen

Conferences & Workshops

5. Tübinger - Stuttgarter Parkinson Tag
Leinfelden-Echterdingen, 22 September 2018
Scientific coordinators: Dr. Kathrin Brockmann, PD Dr. Inga Liepelt-Scarfone, Dr. Heinz Herbst (Neuronetz Stuttgart)

PREPARE Annual Meeting
Montreal, 30-31 October 2018
Scientific coordinator: Prof. Dr. Matthis Synofzik

MD Theses

(Completed in 2018)

Ellen Fehlert
Evaluation der genetischen Marker APOE ε4, MAPT, SNCA und LRRK2 sowie der Osteopontin-Plasmakonzentration als Demenz-Prädiktoren bei Morbus Parkinson in einem Kollektiv der DEMPARK-Studie
Supervisors: Prof. Dr. Daniela Berg, Prof. Dr. Walter Mätzler, PD Dr. Inga Liepelt-Scarfone

Eva-Maria Heine
Das RLS in der älteren Bevölkerung - Auswertung der Daten der TREND-Studie in Bezug auf RLS und dessen Zusammenhang zu TCS-Befunden und Prodromalmarkern für Morbus Parkinson
Supervisor: Prof. Dr. Daniela Berg

Dr. Lena Kuhn
Mutationsscreening und Assoziationsstudien im SLC9A6 Gen als Kandidatengen für corticobasale Degeneration
Supervisor: Prof. Dr. Rejko Krüger

Martin Linzner
Transkranielle Sonographie bei Risikopatienten für die Parkinson-Erkrankung
Supervisor: Prof. Dr. Daniela Berg

Dr. Anna Schöllmann
Modulation neuromuskulärer Synchronisation und kortikaler Aktivität durch transkranielle Gleichstromstimulation bei Patienten mit idiopathischem Parkinsonsyndrom
Supervisor: PD Dr. Daniel Weiß

Master Theses

(Completed in 2018)

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

Benedikt Hölbling
Modelling Hereditary Spastic Paraplegia using CRISPR/Cas9 edited mammalian cells and yeast complementation assays
Supervisor: PD Dr. Rebecca Schüle

Maike Nagel
Gene correction in an induced pluripotent stem cell model of Hereditary Spastic Paraplegia Type 46 using CRISPR/CAS9 technology
Supervisor: PD Dr. Rebecca Schüle

Srinethe Saravanan
CRISPR-Cas9 mediated knockout of CHIP protein in iPSCs and induction of cotritcal neurons
Supervisor: Prof. Dr. Ludger Schöls

Anna Schaedler
Dopamine Metabolism in a Neuronal PINK1 Model of Parkinson's Disease
Supervisor: Dr. Julia Fitzgerald

Fabienne Waga
Computerized cognitive test profile of 94 patients with and without Amyloid-ß 1-42 burden
Supervisor: PD Dr. Inga Liepelt-Scarfone

Bachelor Theses

(Completed in 2018)

Sofie Englisch
Proteinbiochemische Analyse der GTPase Aktivität von LRRK2
Supervisor: PD Dr. Christian Johannes Gloeckner

Hanna Glasebach
TDP-43 ubiquitinylation is independent of stress granule formation upon osmotic stress
Supervisor: Prof. Dr. Philipp Kahle

Marius Kolodziej (Coburg University)
Lipid binding of LRRK2 and possible effects on its GTPase activity
Supervisor: PD Dr. Christian Johannes Gloeckner

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
Dr. Arindam Bhattacharjee
Dr. Amarender Reddy Bogadhi
Nadja Büchler (until 09/2018)
Dr. Antimo Buonocore
Dr. Shubhodeep Chakrabarti
Dr. Andrea Christensen
Dr. Bianca de Haan (until 01/2018)
Dr. Peter Dicke
Dr. Tjeerd Dijkstra
Dr. Winfried Ilg
Dr. Fatemeh Khademi
Jasmin Klopfer
Dr. Jindrich Kodl
PD Dr. Axel Lindner (until 10/2018)
Albert Mukovskiy
Dr. Christine Pedroarena
Dr. Jörn Pomper
Dr. Dr. Silvia Spadacenta
Konstantin Willeke

PHD DOCTORAL STUDENTS

Joachim Bellet
Ian Chong
Amin Dadashi
Martina Feierabend
Marius Görner
Kalpana Gupta
Mohammad Hovaidi Ardestani
Bingshuo Li
Tatiana Malevich
Haian Mao
Akshay Markanday
Eric James McDermott (until 01/2018)
Simone Mölbert
Sophia Nestmann
Maysam Oladazimi
Christina Pley
Nikhil Prabhu
Hamidreza Ramezanpour
Julia Riede
Hannah Rosenzopf
Manuel Roth
Alessandro Salatiello
Mohammad Shams Ahmar
Ramona Siebert
May Li Silva Prieto
Christoph Sperber
Oleg Spivak
Michael Stettler
Katrin Stollenmaier
Nick Taubert
Xiaoguang Tian (until 02/2018)
Shengjun Wen
Daniel Wiesen

MEDICAL DOCTORAL STUDENTS

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

MASTER STUDENTS/ TEACHERS' & PROJECT THESES

Matthias Philipp Baumann
Anna-Karina Fichtner
Adrian Claudio Friese
Svenja Hemmers
Philipp Herbs
Julia Kiefer
Nicole Knodel
Jennifer Metzger
Annika Muth
Tobias Nadler
Chryso Papachrysostomou
Laura Pelzer
Nitin Saini
Pascal Schubert
Joana Stäb
Franziska Uhl
Nora Vidotto

TECHNICAL STAFF/ ADMINISTRATION

Mirjana Angelovska
Ina Baumeister
Rüdiger Berndt
Dr. Friedemann Bunjes
Ute Großhennig
Dagmar Heller-Schmerold
Masih Shafiei
Julianne Skinner (until 10/2018)
Björn Müller
Jonathan Oesterle (until 03/2018)
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

Selective attention and perceptual awareness: Testing the competitive interaction hypothesis
(HA 5839/4-1)
Project leader: Dr. Bianca de Haan,
Funding institution: German Research Foundation (DFG)

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

Third-Party Funding

ONGOING GRANTS

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)

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)

MOOC Methods in clinical research
(F.7312016)
Project participants: PD Dr. Marc Himmelbach, Snezana Maljevic, Prof. Dr. Thomas Gasser
Funding Institution: Medical Faculty Tübingen (PROFIL plus)

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

Selective attention and perceptual awareness: Testing the competitive interaction hypothesis
(KA 1258/20-1)
Project leaders: Prof. Dr. Dr. Hans-Otto Karnath, Dr. Bianca de Haan
Funding institution: German Research Foundation (DFG)

The neural correlates of apraxia and the role of feedback in apraxic errors – doctoral scholarship Christoph Sperber
Project leader: Prof. Dr. Dr. Hans-Otto Karnath
Funding institution: Friedrich Naumann Foundation

Defizite der räumlichen Orientierung nach posterioren cerebralen Infarkten – doctoral scholarship Jacob Clausen
Project leader: Prof. Dr. Dr. Hans-Otto Karnath
Funding institution: Sigmund-Kiener Foundation

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)

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

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)

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)

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

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

Awards

Leonid Fedorov
Attempto Award 2018, University of Tübingen

Prof. Dr. Ziad Hafed, Chih-Yang Chen
"VERY GOOD" recommendation by F1000Prime for Chen et al., Nature Communications, 2018

Conferences & Workshops

Primate Neurobiology Conference 2018
Tübingen, 13-14 March 2018
Organization: Prof. Dr. Hans-Peter Thier, Dagmar Heller-Schmerold

M3 — Monkey Methods Meeting 2018
Workshop, Tübingen, 12 March 2018
Organization: Prof. Dr. Hans-Peter Thier, Dagmar Heller-Schmerold

Graduate Training in Primate Neurobiology
Workshop, Tübingen, 15-16 March 2018
Organization: Prof. Dr. Hans Scherberger (extern), Dagmar Heller-Schmerold

PhD Theses

(Completed in 2018)

Leonid Fedorov
Physiologically-inspired neural model for the encoding of action semantics
Supervisor: Prof. Dr. Martin Giese

Melanie Höller-Wallscheid
How the brains of young and old human adults cope with increased working memory demands
Supervisors: Prof. Dr. Hans-Peter Thier, PD Dr. Axel Lindner

Albert Mukovsiy
Biologically-inspired learning-based movement synthesis in computer graphics and robotics
Supervisor: Prof. Dr. Martin Giese

Xiaoguang Tian
A theoretical investigation of the links between microsaccades and attention
Supervisor: Prof. Dr. Ziad Hafed

MD Theses

(Completed in 2018)

Kira Marquardt
Über die anatomische und funktionelle Trennung der Blickrichtungsverfolgung und der Gesichtserkennung beim Menschen
Supervisor: Prof. Dr. Hans-Peter Thier

Master Theses

(Completed in 2018)

Nima Ghorbani
Generative human motion modeling
Supervisor: Prof. Dr. Martin Giese

Mario Gnädig
Online Bewegungsanalyse bei Parkinson
Supervisor: Dr. Winfried Ilg

Svenja Hemmers
Eye-Hand-Coordination during upper limb pointing movements in patients with cerebellar
Supervisors: Dr. Winfried Ilg, Dr. Daniel Häufle

Alexander Huk
Human motor control of biomechanical arm models – literature review and modeling
Supervisor: Dr. Daniel Häufle

Nicole Knodel
Finger sequence activation in the deep superior colliculus
Supervisor: PD Dr. Marc Himmelbach

Annika Muth
Erfassung von visuell-räumlichem Neglect in konventioneller und digitalisierter Form
Supervisor: Prof. Dr. Dr. Hans-Otto Karnath

Tobias Nadler
Bewegungskontrolle eines bioinspirierten Einarmroboters
Supervisor: Dr. Daniel Häufle

Chryso Papachrysostomou
Predicting the relation of joint-angle, muscle activity and contact force of tendons in the carpal tunnel by computer simulation
Supervisor: Dr. Daniel Häufle

Johannes Siegel
Simulation of human muscle energy expenditure
Supervisor: Dr. Daniel Häufle

Bachelor Theses

(Completed in 2018)

Hanna Dohmen
Cognitive evaluation of unknown tools – effects of experimental designs
Supervisor: PD Dr. Marc Himmelbach

Julia Kiefer
Position von bewegten und unbewegten Objekten – ein Wahrnehmungsexperiment
Supervisor: Prof. Dr. Uwe Ilg

Pascal Schubert
Latenzen von Blickbewegungen
Supervisor: Prof. Dr. Uwe Ilg

Joana Stäb
Korrelation zwischen Videospielen und einfachen mathematischen Fähigkeiten
Supervisor: Prof. Dr. Uwe Ilg

Franziska Uhl
Vergleich von Richtungsfehlern, Pro- und Antisakkaden als Reaktion auf isoluminante Reize unterschiedlicher Wellenlänge
Supervisor: Prof. Dr. Uwe Ilg

Lena Urbancyk
Pupillographie der Stressreaktionen von Action-Video-Game-Spielern
Supervisor: Prof. Dr. Uwe Ilg

Department of Cellular Neurology

Clinical and Scientific Staff

HEAD OF THE DEPARTMENT

Prof. Dr. Mathias Jucker

GROUP LEADERS

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

SCIENTISTS/RESIDENTS

Anja Apel
Mehtap Bacioglu (until 04/2018)
Melanie Barth
Natalie Beschorner
Karoline Degenhardt (until 06/2018)
Timo Eninger
Lisa Häsler
Stephan Käser
Dr. Deborah Kronenberg-Versteeg
Ping Liu
Dr. Jörg Odenthal
Jay Rasmussen (until 03/2018)
Christine Rother
Alejandro Ruiz Riquelme
Dr. Angelos Skodras
Dr. Matthias Staufenbiel
Lisa Steinbrecher
Dr. Gaye Tanriöver
Ruth Uhlmann (née Dröge)
Jessica Wagner
Dr. Bettina Wegenast-Braun
Ann-Christin Wendeln (until 09/2018)

TECHNICAL STAFF/ ADMINISTRATION

Rawaa Al Shaana
Anika Bühler
Bernadette Graus
Marius Lambert
Maren Lösch (until 03/2018)
Ulrike Obermüller
Gisela Rose
Katleen Wild

CLINICAL STAFF

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

MASTER STUDENTS

Emily-Melisa Ullrich-Gavilanes
Rusheka Maxwell

Clinical Studies

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
Investigators: Prof. Dr. Christoph Laske, Oliver Preische, Dr. Anja Zeller, Dr. Stephan Müller, Laura Herde, Dilan Celik

A Double-blind, Placebo-controlled, Relapse Prevention Study of Pimavanserin for the Treatment of Hallucinations and Delusions Associated With Dementia-related Psychosis
Investigators: Prof. Dr. Christoph Laske, Dr. Marvin Metzner, Cindy Boden

DIAN Dominantly Inherited Alzheimer Network:
The goal of DIAN is to study brain changes and biomarker changes in people who carry an Alzheimer's disease mutation to determine how the disease process develops before any symptoms are detected.
Investigators: Prof. Dr. Mathias Jucker, Prof. Dr. Christoph Laske, Oliver Preische, Dr. Susanne Gräber-Sultan, Elke Kuder-Buletta

DELCODE (DZNE – Longitudinal Cognitive Impairment and Dementia Study): The aim of the study is to characterize the neuronal network mechanisms of cognitive adaption and decompensation
Investigators: Prof. Dr. Christoph Laske, Dr. Martina Buchmann, Christian Mychajliw, Petra Hinderer

LipiDiDiet Trail: Complimentary treatment of patients with mild cognitive impairment with a balanced nutrition drink (Souvenaid®). A randomized double-blind comparative study of 24 months including a 12-months extension study
Investigators: Prof. Dr. Christoph Laske, Dr. Martina Buchmann, Elke Vuckovic, Gertrud Schneider-Nyakotei

A Randomized, Two-Period, Double-blind, Placebo-controlled and Open-label, Multicenter Extension Study to Determine the Long-Term Safety and Tolerability of JNJ-54861911 in Subjects in the Early Alzheimer`s Disease Spectrum
Investigators: Prof. Dr. Christoph Laske, Oliver Preische, Dr. Stephan Müller, Elke Kuder-Buletta

A 24-month, Multicenter, Randomized, Double-blind, Placebo-controlled, Parallel-group, Efficacy, Safety, Tolerability, Biomarker, and Pharmacokinetic Study of AZD3293 in Early Alzheimer`s Disease (The AMARANTH Study)
Investigators: Prof. Dr. Christoph Laske, Oliver Preische, Dr. Stephan Müller, Dr. Christian Mychajliw, Elke Vukovic, Dilan Celik

Third-Party Funding

ONGOING GRANTS

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

Promotionsstipendium
Project leader: Ann-Christin Wendeln
Funding institution: Studienstiftung des deutschen Volkes

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)

JPND – TARGETs: Targeting the propagation of pathogenic protein assemblies in neurodegenerative disease (01ED1502)
Project leader: Prof. Dr. Mathias Jucker
Funding institution: BMBF: EU Joint Programme – Neurodegenerative Disease Research (JPND)

Effects of transient peripheral immune stimulation on AD pathology
Project leader: Dr. Jonas Neher
Funding institution: The Paul G. Allen Family Foundation

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)

The role of medin, the most common human amyloid, in the pathology of Alzheimer's disease (NE 1951/2-2)
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)

NEW GRANTS

Strukturelle Grundlage biologisch aktiver Abeta-Konformere
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

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 leader: Linda Oberle/Dr. Jonas Neher
Funding institution: IZKF Promotionskolleg

PhD Theses

(Completed in 2018)

Karoline Degenhardt
Modulation of cerebral ß-amyloidosis by myeloid cells
Supervisors: Dr. Jonas Neher, Prof. Dr. Mathias Jucker

Jay Rasmussen
ß-amyloid in Alzheimer's disease initiation and phenotypic diversity
Supervisor: Prof. Dr. Mathias Jucker

Ann-Christin Wendeln
Innate immune memory in the brain shapes neurological disease hallmarks
Supervisors: Dr. Jonas Neher, Prof. Dr. Mathias Jucker

Master Theses

(Completed in 2018)

Emily-Melisa Ullrich-Gavilanes
Pharmacokinetics of antibodies that recognize Aß assemblies
Supervisors: Prof. Dr. Mathias Jucker, Dr. Jonas Neher

Rusheka Maxwell
Mapping of Epitopes of the Milk Fat Globule –Epidermal Growth Factor- Factor 8 protein
Supervisors: Prof. Dr. Philipp Kahle, Dr. Jonas Neher

Awards

Dr. Angelos Skodras
Hertie Paper of the Year Award

Ann-Christin Wendeln
Attempto Award, University of Tübingen

Prof. Dr. Mathias Jucker
Teaching Award Graduate School of Molecular and Cellular Neuroscience 2018

Conferences & Workshops

3rd DIAN Family Meeting in Germany
Würzburg, 12-13 October 2018
Coordinator: Prof. Dr. Mathias Jucker

Independent Research Groups

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 (from 10/2018)

TECHNICAL STAFF/ADMINISTRATION

Andrea Gall

PHD DOCTORAL STUDENTS

Melina Matthiesen (until 3/2018)

MASTER STUDENTS

Martin Zeller (from 04/2018)

INTERNSHIPS

Johannes Ungermann
Biology, Unversity of Tübingen
(Supervisor: Prof. Dr. Ingrid Ehrlich)

Marlly Achury
Graduate Training Centre of Neuroscience, Tübingen
(Supervisor: Prof. Dr. Ingrid Ehrlich)

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)

Molecular Brain Development

Clinical and Scientific Staff

HEAD OF THE RESEARCH GROUP

Dr. Simone Mayer

SCIENTISTS/RESIDENTS

Dr. Shokoufeh Khakipoor

TECHNICAL STAFF/ADMINISTRATION

Elisabeth Gustafsson

Publications and Student Training in 2018

List of Publications in 2018

(In alphabetical order)

Peer Reviewed Articles

Abou-Khalil B, Auce P, Avbersek A, Bahlo M, Balding DJ, Bast T, Baum L, Becker AJ, **Becker F**, Berghuis B, Berkovic SF, Boysen KE, Bradfield JP, Brody LC, Buono RJ, Campbell E, Cascino GD, Catarino CB, Cavalleri GL, Cherny SS, Chinthapalli K, Coffey AJ, Compston A, Coppola A, Cossette P, Craig JJ, de Haan G-J, De Jonghe P, de Kovel CGF, Delanty N, Depondt C, Devinsky O, Dlugos DJ, Doherty CP, Elger CE, Eriksson JG, Ferraro TN, Feucht M, Francis B, Franke A, French JA, Freytag S, Gaus V, Geller EB, Gieger C, Glauser T, Glynn S, Goldstein DB, Gui H, Guo Y, Haas KF, Hakonarson H, Hallmann K, Haut S, Heinzen EL, Helbig I, **Hengsbach C**, Hjalgrim H, Iacomino M, Ingason A, Jamnadas-Khoda J, Johnson MR, Kalviainen R, Kantanen A-M, Kasperaviciute D, Trenite DK-N, Kirsch HE, Knowlton RC, Koeleman BPC, Krause R, Krenn M, Kunz WS, Kuzniecky R, Kwan P, Lal D, Lau Y-L, Lehesjoki A-E, **Lerche H**, Leu C, Lieb W, Lindhout D, Lo WD, Lopes-Cendes I, Lowenstein DH, Malovini A, Marson AG, Mayer T, McCormack M, Mills JL, Mirza N, Moerzinger M, Moller RS, Molloy AM, Muhle H, Newton M, Ng P-W, Noethen MM, Nuernberg P, O'Brien TJ, Oliver KL, Palotie A, Pangilinan F, Peter S, Petrovski S, Poduri A, Privitera M, Radtke R, **Rau S**, Reif PS, Reinthaler EM, Rosenow F, Sander JW, Sander T, Scattergood T, Schachter SC, Schankin CJ, Scheffer IE, Schmitz B, Schoch S, Sham PC, Shih JJ, Sills GJ, Sisodiya SM, Slattery L, Smith A, Smith DF, Smith MC, Smith PE, Sonsma ACM, Speed D, Sperling MR, Steinhoff BJ, Stephani U, Stevelink R, Strauch K, Striano P, Stroink H, Surges R, Tan KM, Thio LL, Thomas GN, Todaro M, Tozzi R, Vari MS, Vining EPG, Visscher F, von Spiczak S, Walley NM, **Weber YG**, Wei Z, Weisenberg J, Whelan CD, Widdess-Walsh P, Wolff M, **Wolking S**, Yang W, Zara F, Zimprich F, Int League Against Epilepsy C (2018) Genome-wide mega-analysis identifies 16 loci and highlights diverse biological mechanisms in the common epilepsies. *Nature Communications* 9:5269

Aldape K, Amin SB, Ashley DM, Barnholtz-Sloan JS, Bates AJ, Beroukhim R, Bock C, Brat DJ, Claus EB, Costello JF, de Groot JF, Finocchiaro G, French PJ, Gan HK, Griffith B, Herold-Mende CC, Horbinski C, Iavarone A, Kalkanis SN, Karabatsou K, Kim H, Kouwenhoven MCM, McDonald KL, Miletic H, Nam DH, Ng HK, Niclou SP, Noushmehr H, Ormond DR, Poisson LM, Reifenberger G, Roncaroli F, Sa JK, Smitt P, Smits M, Souza CF, **Tabatabai G**, Van Meir EG, Verhaak RGW, Watts C, Wesseling P, Woehrer A, Yung WKA, Jungk C, Hau AC, van Dyck E, Westerman BA, Yin JL, Abiola O, Zeps N, Grimmond S, Buckland M, Khasraw M, Sulman EP, Muscat AM, Stead L, Consortium G (2018) Glioma through the looking GLASS: molecular evolution of diffuse gliomas and the Glioma Longitudinal Analysis Consortium. *Neuro-Oncology* 20:873-84

Anttila V, Bulik-Sullivan B, Finucane HK, Walters RK, Bras J, Duncan L, Escott-Price V, Falcone GJ, Gormley P, Malik R, Patsopoulos NA, Ripke S, Wei Z, Yu D, Lee PH, Turley P, (...) , Noethen MM, Rossor M, Lupton MK, Hoffmann P, Kornhuber J, Lawlor B, McQuillin A, Al-Chalabi A, Bis JC, Ruiz A, Boada M, Seshadri S, Beiser A, Rice K, van der Lee SJ, De Jager PL, Geschwind DH, Riemenschneider M, Riedel-Heller S, Rotter JI, Ransmayr G, Hyman BT, Cruchaga C, Alegret M, Winsvold B, Palta P, Farh K-H, Cuenca-Leon E, Furlotte N, Kurth T, Ligthart L, Terwindt GM, **Freilinger T**, Ran C, Gordon SD, Borck G, Adams HHH, Lehtimaki T, Wedenoja J, Buring JE, Schuerks M, Hrafnsdottir M, Hottenga J-J, Penninx B, Artto V, Kaunisto M, Vepsalainen S, Martin NG, Montgomery GW, Kurki MI, Hamalainen E, Huang H, Huang J, Sandor C, Webber C, Muller-Myhsok B, Schreiber S, Salomaa V, Loehrer E, Goebel H, Macaya A, Pozo-Rosich P, Hansen T, Werge T, Kaprio J, Metspalu A, Kubisch C, Ferrari MD, Belin AC, van den Maagdenberg AMJM, Zwart J-A, Boomsma D, Eriksson N, Olesen J, Chasman DI, Nyholt DR, Avbersek A, Baum L, Berkovic S, Bradfield J, Buono R, Catarino CB, Cossette P, De Jonghe P, Depondt C, Dlugos D, Ferraro TN, French J, Hjalgrim H, Jamnadas-Khoda J, Kalviainen R, Kunz WS, **Lerche H**, Leu C, Lindhout D, Lo W, Lowenstein D, McCormack M, Moller RS, Molloy A, Ng P-W, Oliver K, Privitera M, Radtke R, Ruppert A-K, Sander T, Schachter S, Schankin C, Scheffer I, Schoch S, Sisodiya SM, Smith P, Sperling M, Striano P, Surges R, Thomas GN, Visscher F, Whelan CD, Zara F, Heinzen EL, Marson A, **Becker F**, Stroink H, Zimprich F, **Gasser T**, Gibbs R, **Heutink P**, Martinez M, Morris HR, Sharma M, Ryten M, (...), Corvin A, Neale BM, Brainstorm C (2018) Analysis of shared heritability in common disorders of the brain. *Science* 360:eeap8757

Araque Caballero MA, Suarez-Calvet M, Duering M, Franzmeier N, Benzinger T, Fagan AM, Bateman RJ, Jack CR, Levin J, Dichgans M, **Jucker M,** Karch C, Masters CL, Morris JC, Weiner M, Rossor M, Fox NC, Lee JH, Salloway S, Danek A, Goate A, Yakushev I, Hassenstab J, Schofield PR, Haass C, Ewers M (2018) White matter diffusion alterations precede symptom onset in autosomal dominant Alzheimer's disease. *Brain* 141:3065-80

Arnold C, Schulte C, Moscovich M, **Sunkel U, Zaunbrecher L**, Metzger F, **Gasser T**, Eschweiler GW, **Hauser AK, Berg D, Maetzler W** (2018) Cholinergic Pathway SNPs and Postural Control in 477 Older Adults. *Frontiers in Aging Neuroscience* 10:8

Atasu B, Hanagasi H, Bilgic B, Pak M, Erginel-Unaltuna N, **Hauser AK**, Guven G, **Simon-Sanchez J, Heutink P, Gasser T, Lohmann E** (2018) HPCA Confirmed as a Genetic Cause of DYT2-Like Dystonia Phenotype. *Movement Disorders* 33:1354-58

Auffenberg E, Bender F, **Freilinger T** (2018) Hemicrania Continua Associated with Classic Scintillating Scotoma. *Case Reports in Neurology* 10:83-87

Balzer-Geldsetzer M, Klotsche J, Dodel R, Riedel O, **Consortium L** (2018) Quality of life in a German cohort of Parkinson's patients assessed with three different measures. *Journal of Neurology* 265:2713-22

Baradaran-Heravi Y, Dillen L, Nguyen HP, Van Mossevelde S, Baets J, De Jonghe P, Engelborghs S, De Deyn PP, Vandenbulcke M, Vandenberghe R, Van Damme P, Cras P, Salmon E, **Synofzik M, Heutink P**, Wilke C, **Simon-Sanchez J**, Rojas-Garcia R, Turon-Sans J, Lleo A, Illan-Gala I, Clarimon J, Borroni B, Padovani A, Pastor P, Diez-Fairen M, Aguilar M, Gelpi E, Sanchez-Valle R, Borrego-Ecija S, Matej R, Parobkova E, Nacmias B, Sorbi S, Bagnoli S, de Mendonca A, Ferreira C, Fraidakis MJ, Diehl-Schmid J, Alexopoulos P, Almeida MR, Santana I, Van Broeckhoven C, van der Zee J, Consortium B, Consortium EE (2018) No supportive evidence for TIA1 gene mutations in a European cohort of ALS-FTD spectrum patients. *Neurobiology of Aging* 69:3

Behling F, Honegger J, Skardelly M, **Gepfner-Tuma I, Tabatabai G**, Tatagiba M, Schittenhelm J (2018) High Expression of Somatostatin Receptors 2A, 3, and 5 in Corticotroph Pituitary Adenoma. *International Journal of Endocrinology*, 10.1155/2018/1763735

Berg D, Adler CH, Bloem BR, Chan P, **Gasser T**, Goetz CG, Halliday G, Lang AE, Lewis S, Li Y, **Liepelt-Scarfone I**, Litvan I, Marek K, Maetzler C, Mi TM, Obeso J, Oertel W, Olanow CW, Poewe W, Rios-Romenets S, Schaffer E, Seppi K, Heim B, Slow E, Stern M, Bledsoe IO, Deuschl G, Postuma RB (2018) Movement disorder society criteria for clinically established early Parkinson's disease. *Movement Disorders* 33:1643-46

Bergmann TO, Born J (2018) Phase-Amplitude Coupling: A General Mechanism for Memory Processing and Synaptic Plasticity? *Neuron* 97:10-13

Bernhard FP, Sartor J, Bettecken K, Hobert MA, Arnold C, Weber YG, Poli S, Margraf NG, Schlenstedt C, Hansen C, **Maetzler W** (2018) Wearables for gait and balance assessment in the neurological ward - study design and first results of a prospective cross-sectional feasibility study with 384 inpatients. *BMC Neurology* 18:114

Beyle A, Glonnegger H, Cerff B, Graber S, Berg D, Liepelt-Scarfone I (2018) The Multiple Object Test as a performance- based tool to assess the decline of ADL function in Parkinson's disease. *PLoS One* 13:e0200900

Blauwendraat C, **Wilke C, Simon-Sanchez J**, Jansen IE, Reifschneider A, Capell A, Haass C, Castillo-Lizardo M**, Biskup S, Maetzler W**, Rizzu P, **Heutink P, Synofzik M** (2018) The wide genetic landscape of clinical frontotemporal dementia: systematic combined sequencing of 121 consecutive subjects. *Genetics in Medicine* 20:240-49

Bloechle J, Huber JF, Klein E, Bahnmueller J, **Rennig J**, Moeller K, Huber S (2018) Spatial Arrangement and Set Size Influence the Coding of Non-symbolic Quantities in the Intraparietal Sulcus. *Frontiers in Human Neuroscience* 12:20

Bloechle J, Huber S, Klein E, Bahnmueller J, Moeller K, **Rennig J** (2018) Neuro-cognitive mechanisms of global Gestalt perception in visual quantification. *Neuroimage* 181:359-69

Blum D, la Fougere C, **Pilotto A,** Maetzler W, **Berg D**, Reimold M, **Liepelt-Scarfone I** (2018) Hypermetabolism in the cerebellum and brainstem and cortical hypometabolism are independently associated with cognitive impairment in Parkinson's disease. *European Journal of Nuclear Medicine and Molecular Imaging* 45:2387-95

Bobbili DR, Lal D, May P, Reinthaler EM, Jabbari K, Thiele H, Nothnagel M, Jurkowski W, Feucht M, Nuernberg P, **Lerche H**, Zimprich F, Krause R, Neubauer BA, Reinthaler EM, Zimprich F, Feucht M, Steinboeck H, Neophytou B, Geldner J, Gruber-Sedlmayr U, Haberlandt E, Ronen GM, Altmueller J, Lal D, Nrnberg P, Sander T, Thiele H, Krause R, May P, Balling R, **Lerche H**, Neubauer BA, Consortium EC (2018) Exome-wide analysis of mutational burden in patients with typical and atypical Rolandic epilepsy. *European Journal of Human Genetics* 26**:**258-64

Boot E, Butcher NJ, Udow S, Marras C, Mok KY, Kaneko S, Barrett MJ, Prontera P, Berman BD, Masellis M, Dufournet B, Nguyen K, Charles P, Mutez E, Danaila T, Jacquette A, Colin O, Drapier S, Borg M, Fiksinski AM, Vergaelen E, Swillen A, Vogels A, Plate A, Perandones C, **Gasser T**, Clerinx K, Bourdain F, Mills K, Williams NM, Wood NW, Booij J, Lang AE, Bassett AS, Int Res Grp 22q DSAP (2018) Typical features of Parkinson disease and diagnostic challenges with microdeletion 22q11.2. *Neurology* 90**:**E2059-E67

Borm CDJM, Krismer F, Wenning GK, Seppi K, Poewe W, Pellecchia MT, Barone P, Johnsen EL, Ostergaard K, Gurevich T, Djaldetti R, Sambati L, Cortelli P, Petrovic I, Kostic VS, Brozova H, Ruzicka E, Marti MJ, Tolosa E, Canesi M, Post B, Nonnekes J, Bloem BR, **European MSASG** (2018) Axial motor clues to identify atypical parkinsonism: A multicentre European cohort study. *Parkinsonism & Related Disorders* 56**:**33-40

Braak H, Del Tredici-Braak K, **Gasser T** (2018) Special issue „Parkinson‘s disease“. *Cell and Tissue Research* 373**:**1-7

Brendle C, Hempel JM, Schittenhelm J, Skardelly M, **Tabatabai G**, Bender B, Ernemann U, Klose U (2018) Glioma Grading and Determination of IDH Mutation Status and ATRX loss by DCE and ASL Perfusion. *Clinical Neuroradiology* 28**:**421-28

Brownjohn PW, Smith J, Solanki R, **Lohmann E**, Houlden H, Hardy J, Dietmann S, Livesey FJ (2018) Functional Studies of Missense TREM2 Mutations in Human Stem Cell-Derived Microglia. *Stem Cell Reports* 10**:**1294-307

Chakrabarti S, Schwarz C (2018) Cortical modulation of sensory flow during active touch in the rat whisker system. *Nature Communications* 9**:**12

Chen CY, Hafed ZM (2018) Orientation and Contrast Tuning Properties and Temporal Flicker Fusion Characteristics of Primate Superior Colliculus Neurons. *Frontiers in Neural Circuits* 12

Chen CY, Sonnenberg L, Weller S, Witschel T, **Hafed ZM** (2018) Spatial frequency sensitivity in macaque midbrain. *Nature Communications* 9

Chen TJ, Kula B, Nagy B, Barzan R, **Gall A, Ehrlich I**, Kukley M (2018) In Vivo Regulation of Oligodendrocyte Precursor Cell Proliferation and Differentiation by the AMPA-Receptor Subunit GluA2. *Cell Rep* 25**:**852-61 e7

Chiovetto E, Curio C, Endres D, **Giese M** (2018) Perceptual integration of kinematic components in the recognition of emotional facial expressions. *Journal of Vision* 18

Chiovetto E, Huber ME, Sternad D, **Giese MA** (2018) Low-dimensional organization of angular momentum during walking on a narrow beam. *Scientific Reports* 8

Ciliz M, Sartor J, Lindig T, **Pilotto A**, Schaffer E, Weiss M, Scheltens P, **Becker S, Hobert MA, Berg D, Liepelt-Scarfone I, Maetzler W** (2018) Brain-Area Specific White Matter Hyperintensities: Associations to Falls in Parkinson‘s Disease. *Journal of Parkinsons Disease* 8**:**455-62

Compagnoni GM, Kleiner G, Samarani M, Aureli M, Faustini G, Bellucci A, Ronchi D, Bordoni A, Garbellini M, Salani S, Fortunato F, Frattini E, Abati E, Bergamini C, Fato R, Tabano S, Miozzo M, Serratto G, Passafaro M, **Deleidi M**, Silipigni R, Nizzardo M, Bresolin N, Comi GP, Corti S, Quinzii CM, Di Fonzo A (2018) Mitochondrial Dysregulation and Impaired Autophagy in iPSC-Derived Dopaminergic Neurons of Multiple System Atrophy. *Stem Cell Reports* 11**:**1185-98

de Haan B, Karnath HO (2018) A hitchhiker‘s guide to lesion-behaviour mapping. *Neuropsychologia* 115**:**5-16

de la Rosa S, Fademrecht L, Bulthoff HH, **Giese MA**, Curio C (2018) Two Ways to Facial Expression Recognition? Motor and Visual Information Have Different Effects on Facial Expression Recognition. *Psychological Science* 29**:**1257-69

Desideri D, Zrenner C, Gordon PC, Ziemann U, Belardinelli P (2018) Nil effects of mu-rhythm phase-dependent burst-rTMS on cortical excitability in humans: A resting-state EEG and TMS-EEG study. *PLoS One* 13**:**e0208747

Diallo A, Jacobi H, Cook A, Labrum R, Durr A, Brice A, Charles P, Marelli C, Mariotti C, Nanetti L, Panzeri M, Rakowicz M, Sobanska A, Sulek A, Schmitz-Hubsch T, **Schols L**, **Hengel H**, Melegh B, Filla A, Antenora A, Infante J, Berciano J, van de Warrenburg BP, Timmann D, Boesch S, Pandolfo M, Schulz JB, Bauer P, Giunti P, Kang JS, Klockgether T, du Montcel ST (2018) Survival in patients with spinocerebellar ataxia types 1, 2, 3, and 6 (EUROSCA): a longitudinal cohort study. *Lancet Neurology* 17**:**327-34

Dietrich S, Hertrich I, Muller-Dahlhaus F, Ackermann H, Belardinelli P, Desideri D, Seibold VC, **Ziemann U** (2018) Reduced Performance During a Sentence Repetition Task by Continuous Theta-Burst Magnetic Stimulation of the Pre-supplementary Motor Area. *Frontiers in Neuroscience* 12:361

Doppler K, **Brockmann K**, Sedghi A, **Wurster I,** Volkmann J, Oertel WH, Sommer C (2018) Dermal Phospho-Alpha-Synuclein Deposition in Patients With Parkinson‘s Disease and Mutation of the Glucocerebrosidase Gene. *Frontiers in Neurology* 9**:**5

Dos Santos MCT, Barreto-Sanz MA, Correia BRS, Bell R, Widnall C, Perez LT, Berteau C, **Schulte C**, Scheller D, **Berg D, Maetzler W**, Galante PAF, Nogueira da Costa A (2018) miRNA-based signatures in cerebrospinal fluid as potential diagnostic tools for early stage Parkinson’s disease. Oncotarget 9:17455-65

Dos Santos MCT, Scheller D, Schulte C, Mesa IR, Colman P, Bujac SR, Bell R, Berteau C, Perez LT, Lachmann I, **Berg D, Maetzler W**, da Costa AN (2018) Evaluation of cerebrospinal fluid proteins as potential biomarkers for early stage Parkinson‘s disease diagnosis. *PLoS One* 13**:**17

Drepper C, Geissler J, Pastura G, Yilmaz R, **Berg D**, Romanos M, Gerlach M (2018) Transcranial sonography in psychiatry as a potential tool in diagnosis and research. *World Journal of Biological Psychiatry* 19**:**484-96

Dubey M, Brouwers E, Hamilton EMC, Stiedl O, Bugiani M, **Koch H**, Kole MHP, Boschert U, Wykes RC, Mansvelder HD, van der Knaap MS, Min R (2018) Seizures and disturbed brain potassium dynamics in the leukodystrophy megalencephalic leukoencephalopathy with subcortical cysts. *Annals of Neurology* 83**:**636-49

Ebner M, Birschmann I, Peter A, **Hartig F, Spencer C**, Kuhn J, Rupp A, Blumenstock G, Zuern CS, **Ziemann U, Poli S** (2018) Limitations of Specific Coagulation Tests for Direct Oral Anticoagulants: A Critical Analysis. *Journal of the American Heart Association* 7**:**

Eidhof I, Baets J, Kamsteeg EJ, Deconinck T, van Ninhuijs L, Martin JJ, **Schule R**, Zuchner S, De Jonghe P, Schenck A, van de Warrenburg BP (2018) GDAP2 mutations implicate susceptibility to cellular stress in a new form of cerebellar ataxia. *Brain* 141**:**2592-604

Ekmark-Lewen S, Lindstrom V, Gumucio A, Ihse E, Behere A, **Kahle PJ**, Nordstrom E, Eriksson M, Erlandsson A, Bergstrom J, Ingelsson M (2018) Early fine motor impairment and behavioral dysfunction in (Thy-1)-h A30P alpha-synuclein mice. *Brain and Behavior* 8**:**14

Elsayed LEO, Mohammed IN, Hamed AAA, Elseed MA, Salih MAM, Yahia A, Siddig RA, Amin M, **Koko M**, Elbashir MI, Ibrahim ME, Brice A, Ahmed AE, Stevanin G (2018) Case report of a novel homozygous splice site mutation in PLA2G6 gene causing infantile neuroaxonal dystrophy in a Sudanese family. *BMC Medical Genetics* 19**:**72

Fan Y, Howden AJM, Sarhan AR, Lis P, Ito G, Martinez TN, **Brockmann K, Gasser T**, Alessi DR, Sammler EM (2018) Interrogating Parkinson‘s disease LRRK2 kinase pathway activity by assessing Rab10 phosphorylation in human neutrophils. *Biochemical Journal* 475**:**23-44

Fedorov LA, Chang DS, **Giese MA,** Bulthoff HH, de la Rosa S (2018) Adaptation aftereffects reveal representations for encoding of contingent social actions. *Proc Natl Acad Sci U S A* 115**:**7515-20

Fedorov LA, Dijkstra TMH, Giese MA (2018) Lighting-from-above prior in biological motion perception. *Scientific Reports* 8**:**1507

Figarella K, Uzcategui NL, Mogk S, **Wild K**, Fallier-Becker P, **Neher JJ**, Duszenko M (2018) Morphological changes, nitric oxide production, and phagocytosis are triggered in vitro in microglia by bloodstream forms of Trypanosoma brucei. *Scientific Reports* 8:15002

Fitzgerald JC, Zimprich A, Bobbili DR, Sharma M, May P, **Kruger R** (2018) Reply: No evidence for rare TRAP1 mutations influencing the risk of idiopathic Parkinson's disease. *Brain* 141:3

Franzmeier N, Duzel E, Jessen F, Buerger K, Levin J, Duering M, Dichgans M, Haass C, Suarez-Calvet M, Fagan AM, Paumier K, Benzinger T, Masters CL, Morris JC, Perneczky R, Janowitz D, Catak C, Wolfsgruber S, Wagner M, Teipel S, Kilimann I, Ramirez A, Rossor M, **Jucker M**, Chhatwal J, Spottke A, Boecker H, Brosseron F, Falkai P, Fliessbach K, Heneka MT, **Laske C**, Nestor P, Peters O, Fuentes M, Menne F, Priller J, Spruth EJ, Franke C, Schneider A, Kofler B, Westerteicher C, Speck O, Wiltfang J, Bartels C, Araque Caballero MA, Metzger C, Bittner D, Weiner M, Lee JH, Salloway S, Danek A, Goate A, Schofield PR, Bateman RJ, Ewers M (2018) Left frontal hub connectivity delays cognitive impairment in autosomal-dominant and sporadic Alzheimer's disease. *Brain* 141:1186-200

Gagnon C, Lessard I, Brais B, Cote I, Lavoie C, **Synofzik M**, Mathieu J (2018) Validity and Reliability of Outcome Measures Assessing Dexterity, Coordination, and Upper Limb Strength in Autosomal Recessive Spastic Ataxia of Charlevoix-Saguenay. *Archives of Physical Medicine and Rehabilitation* 99:1747-54

Gerdjikov TV, Bergner CG, Schwarz C (2018) Global Tactile Coding in Rat Barrel Cortex in the Absence of Local Cues. *Cerebral Cortex* 28:2015-27

Gordon PC, Desideri D, Belardinelli P, Zrenner C, Ziemann U (2018) Comparison of cortical EEG responses to realistic sham versus real TMS of human motor cortex. *Brain Stimulation* 11:1322-30

Gordon PC, Zrenner C, Desideri D, Belardinelli P, Zrenner B, Brunoni AR, **Ziemann U** (2018) Modulation of cortical responses by transcranial direct current stimulation of dorsolateral prefrontal cortex: A resting-state EEG and TMS-EEG study. *Brain Stimulation* 11:1024-32

Gormley P, Kurki MI, Hiekkala ME, Veerapen K, Happola P, Mitchell AA, Lal D, Palta P, Surakka I, Kaunisto MA, Hamalainen E, Vepsalainen S, Havanka H, Harno H, Ilmavirta M, Nissila M, Sako E, Sumelahti M-L, Liukkonen J, Sillanpaa M, Metsahonkala L, Koskinen S, Lehtimaki T, Raitakari O, Mannikko M, Ran C, Belin AC, Jousilahti P, Anttila V, Salomaa V, Artto V, Farkkila M, Runz H, Daly MJ, Neale BM, Ripatti S, Kallela M, Wessman M, Palotie A, me Res T, **Int Headache Genetics C** (2018) Common Variant Burden Contributes to the Familial Aggregation of Migraine in 1,589 Families. *Neuron* 98:743-53

Grimm A, Axer H, Heiling B, **Winter N** (2018) Nerve ultrasound normal values - Readjustment of the ultrasound pattern sum score UPSS. *Clinical Neurophysiology* 129:1403-09

Grunert SC, Schlatter SM, Schmitt RN, Gemperle-Britschgi C, Mrazova L, Balci MC, **Bischof F**, Coker M, Das AM, Demirkol M, de Vries M, Gokcay G, Haberle J, Ucar SK, Lotz-Havla AS, Lucke T, Roland D, Rutsch F, Santer R, Schlune A, Staufner C, Schwab KO, Mitchell GA, Sass JO (2017) 3-Hydroxy-3-methylglutaryl-coenzyme A lyase deficiency: Clinical presentation and outcome in a series of 37 patients. *Molecular Genetics and Metabolism* 121:206-15

Guggenberger R, Kraus D, Naros G, Leao MT, **Ziemann U**, Gharabaghi A (2018) Extended enhancement of corticospinal connectivity with concurrent cortical and peripheral stimulation controlled by sensorimotor desynchronization. *Brain Stimulation* 11:1331-35

Gunther M, **Haeufle DFB**, Schmitt S (2018) The basic mechanical structure of the skeletal muscle machinery: One model for linking microscopic and macroscopic scales. *Journal of Theoretical Biology* 456:137-67

Habibollahi Saatlou F, Rogasch NC, McNair NA, Biabani M, **Pillen SD**, Marshall TR, **Bergmann TO** (2018) MAGIC: An open-source MATLAB toolbox for external control of transcranial magnetic stimulation devices. *Brain Stimul* 11:1189-91

Haertig F, Ross M, **Dammeier NM**, Fedtke N, Heiling B, Axer H, Decard BF, **Auffenberg E, Koch M, Rattay TW, Krumbholz M**, Bornemann A, **Lerche H, Winter N, Grimm A** (2018) Nerve Ultrasound Predicts Treatment Response in Chronic Inflammatory Demyelinating Polyradiculoneuropathy-a Prospective Follow-Up. *Neurotherapeutics* 15:439-51

Haertner L, Elshehabi M, Zaunbrecher L, Pham MH, Maetzler C, van Uem JMT, Hobert MA, Hucker S, Nussbaum S, Berg D, Liepelt-Scarfone I, Maetzler W (2018) Effect of Fear of Falling on Turning Performance in Parkinson's Disease in the Lab and at Home. *Frontiers in Aging Neuroscience* 10:8

Haeufle DFB, Schmortte B, Geyer H, Muller R, Schmitt S (2018) The Benefit of Combining Neuronal Feedback and Feed-Forward Control for Robustness in Step Down Perturbations of Simulated Human Walking Depends on the Muscle Function. *Frontiers in Computational Neuroscience* 12:9

Hafed ZM (2018) Superior Colliculus: A Vision for Orienting. *Current Biology* 28:R1111-R13

Hamer HM, Pfaefflin M, Baier H, Boesebeck F, Franz M, Holtkamp M, Kurlemann G, May T, Mayer T, Metzner M, Steinhoff BJ, Stodieck S, Straub H-B, **Weber YG**, Brandt C (2018) Characteristics and healthcare situation of adult patients with tuberous sclerosis complex in German epilepsy centers. *Epilepsy & Behavior* 82:64-67

Hanci I, Kamm C, **Scholten M, Roncoroni LP, Weber Y, Kruger R**, Plewnia C, Gharabaghi A, **Weiss D** (2018) Long-Term Effect of GPi-DBS in a Patient With Generalized Dystonia Due to GLUT1 Deficiency Syndrome. *Frontiers in Neurology* 9:381

Hans F, Eckert M, von Zweydorf F, Gloeckner CJ, **Kahle PJ** (2018) Identification and characterization of ubiquitinylation sites in TAR DNA-binding protein of 43 kDa (TDP-43). *Journal of Biological Chemistry* 293:16083-99

Harmuth T, Prell-Schicker C, Weber JJ, Gellerich F, Funke C, Driessen S, Magg JCD, **Krebiehl G**, Wolburg H, **Hayer SN,** Hauser S, **Kruger R, Schols L**, Riess O, Hubener-Schmid J (2018) Mitochondrial Morphology, Function and Homeostasis Are Impaired by Expression of an N-terminal Calpain Cleavage Fragment of Ataxin-3. *Frontiers in Molecular Neuroscience* 11:18

Hayer SN, Krey I, Barro C, Rossler F, Kortvelyessy P, Lemke JR, Kuhle J, **Schols L** (2018) NfL is a biomarker for adult-onset leukoencephalopathy with axonal spheroids and pigmented glia. *Neurology* 91:755-57

Hayer SN, Schelling Y, **Hoeflinger P, Hauser S, Schols L** (2018) Generation of an induced pluripotent stem cell line from a patient with adult-onset leukoencephalopathy with axonal spheroids and pigmented glia (ALSP): HIHCNi003-A. *Stem Cell Research* 30:206-09

Hayer SN, Schelling Y, Huebener-Schmid J, Weber JJ, **Hauser S, Schols L** (2018) Generation of an induced pluripotent stem cell line from a patient with spinocerebellar ataxia type 3 (SCA3): HIHCNi002-A. *Stem Cell Research* 30:171-74

Heiling B, Waschke A, Ceanga M, **Grimm A**, Witte OW, Axer H (2018) Not your average Saturday night palsy-High resolution nerve ultrasound resolves rare cause of wrist drop. *Clinical Neurology and Neurosurgery* 172:160-61

Heinzel S, **Berg D**, Binder S, Ebersbach G, Hickstein L, Herbst H, Lorrain M, Wellach I, **Maetzler W**, Petersen G, Schmedt N, Volkmann J, Woitalla D, Amelung V (2018) Do We Need to Rethink the Epidemiology and Healthcare Utilization of Parkinson's Disease in Germany? *Frontiers in Neurology* 9:9

Heinzel S, Kasten M, Behnke S, Vollstedt EJ, Klein C, Hagenah J, Pausch C, Heilmann R, **Brockmann K, Suenkel U,** Yilmaz R, **Liepelt-Scarfone I**, Walter U, **Berg D** (2018) Age- and Sex-Related Heterogeneity in Prodromal Parkinson's Disease. *Movement Disorders* 33:1025-27

Helbig KL, Lauerer RJ, **Bahr JC**, Souza IA, Myers CT, **Uysal B, Schwarz N**, Gandini MA, Huang S, Keren B, Mignot C, Afenjar A, de Villemeur TB, Heron D, Nava C, Valence S, Buratti J, Fagerberg CR, Soerensen KP, Kibaek M, Kamsteeg E-J, Koolen DA, Gunning B, Schelhaas HJ, Kruer MC, Fox J, Bakhtiari S, Jarrar R, Padilla-Lopez S, Lindstrom K, Jin SC, Zeng X, Bilguvar K, Papavasileiou A, Xin Q, Zhu C, Boysen K, Vairo F, Lanpher BC, Klee EW, Tillema J-M, Payne ET, Cousin MA, Kruisselbrink TM, Wick MJ, Baker J, Haan E, Smith N, Corbett MA, MacLennan AH, Gecz J, Biskup S, Goldmann E, Rodan LH, Kichula E, Segal E, Jackson KE, Asamoah A, Dimmock D, McCarrier J, Botto LD, Filloux F, Tvrdik T, Cascino GD, Klingerman S, Neumann C, Wang R, Jacobsen JC, Nolan MA, Snell RG, Lehnert K, Sadleir LG, Anderlid B-M, Kvarnung M, Guerrini R, Friez MJ, Lyons MJ, Leonhard J, Kringlen G, Casas K, El Achkar CM, Smith LA, Rotenberg A, Poduri A, Sanchis-Juan A, Carss KJ, Rankin J, Zeman A, Raymond FL, Blyth M, Kerr B, Ruiz K, Urquhart J, Hughes I, Banka S, **Hedrich UBS**, Scheffer IE, Helbig I, Zamponi GW, **Lerche H**, Mefford HC, Deciphering Dev Disorders S (2018) De Novo Pathogenic Variants in CACNA1E Cause Developmental and Epileptic Encephalopathy with Contractures, Macrocephaly, and Dyskinesias. *American Journal of Human Genetics* 103**:**666-78

Hempel JM, Schittenhelm J, Bisdas S, Brendle C, Bender B, Bier G, Skardelly M, **Tabatabai G**, Castaneda Vega S, Ernemann U, Klose U (2018) In vivo assessment of tumor heterogeneity in WHO 2016 glioma grades using diffusion kurtosis imaging: Diagnostic performance and improvement of feasibility in routine clinical practice. *J Neuroradiol* 45**:**32-40

Hempel JM, Schittenhelm J, Brendle C, Bender B, Bier G, Skardelly M, **Tabatabai G**, Castaneda Vega S, Ernemann U, Klose U (2018) Effect of Perfusion on Diffusion Kurtosis Imaging Estimates for In Vivo Assessment of Integrated 2016 WHO Glioma Grades : A Cross-Sectional Observational Study. *Clin Neuroradiol* 28**:**481-91

Hempel JM, Schittenhelm J, Klose U, Bender B, Bier G, Skardelly M, **Tabatabai G**, Castaneda Vega S, Ernemann U, Brendle C (2018) In Vivo Molecular Profiling of Human Glioma : Cross-Sectional Observational Study Using Dynamic Susceptibility Contrast Magnetic Resonance Perfusion Imaging. *Clin Neuroradiol*, 10.1007/s00062-018-0676-2

Hengel H, Keimer R, Deigendesch W, Riess A, Marzouqa H, Zaidan J, Bauer P, **Schols L** (2018) GPT2 mutations cause developmental encephalopathy with microcephaly and features of complicated hereditary spastic paraplegia. *Clinical Genetics* 94**:**356-61

Hertrich I, Dietrich S, Ackermann H (2018) Cortical phase locking to accelerated speech in blind and sighted listeners prior to and after training. *Brain and Language* 185**:**19-29

Hewett K, Sanders DB, Grove RA, Broderick CL, Rudo TJ, Bassiri A, Zvartau-Hind M, Bril V, Grp BELS (**Bischof F** et al) (2018) Randomized study of adjunctive belimumab in participants with generalized myasthenia gravis. *Neurology* 90**:**E1425-E34

Heyne H, Singh T, Stamberger H, Jamra RA, Caglayan H, Craiu D, Jonghe PD, Guerrini R, Helbig K, Koeleman B, Kosmicki J, Linnankivi T, May P, Muhle H, Moller R, Neubauer B, Palotie A, Pendziwiat M, Striano P, Tang S, Wu S, Poduri A, **Weber Y**, Weckhuysen S, Sisodiya S, Daly M, Helbig I, Lal D, Lemke J, Consortium ER (2018) De Novo Variants In Neurodevelopmental Disorders With Epilepsy. *Epilepsia* 59**:**S213-S14

Hinterecker T, Pretto P, de Winkel KN, **Karnath HO**, Bulthoff HH, Meilinger T (2018) Body-relative horizontal-vertical anisotropy in human representations of traveled distances. *Experimental Brain Research* 236**:**2811-27

Hipp G, Vaillant M, Diederich NJ, Roomp K, Satagopam VP, Banda P, Sandt E, Mommaerts K, Schmitz SK, Longhino L, Schweicher A, Hanff AM, Nicolai B, Kolber P, Reiter D, Pavelka L, Binck S, Pauly C, Geffers L, Betsou F, Gantenbein M, Klucken J, **Gasser T**, Hu MT, Balling R, Kruger R, Consortium N-P (2018) The Luxembourg Parkinson's Study: A Comprehensive Approach for Stratification and Early Diagnosis. *Frontiers in Aging Neuroscience* 10**:**14

Hohmann MR, Fomina T, Jayaram V, Emde T, Just J, **Synofzik M**, Scholkopf B, **Schols L**, Grosse-Wentrup M (2018) Case series: Slowing alpha rhythm in late-stage ALS patients. *Clinical Neurophysiology* 129**:**406-08

Jabbari K, Bobbili DR, Lal D, Reinthaler EM, Schubert J, **Wolking S**, Sinha V, Motameny S, Thiele H, Kawalia A, Altmueller J, Toliat MR, Kraaij R, van Rooij J, Uitterlinden AG, Ikram MA, Zara F, Lehesjoki A-E, Krause R, Zimprich F, Sander T, Neubauer BA, May P, **Lerche H**, Nuernberg P, Euro ECC (2018) Rare gene deletions in genetic generalized and Rolandic epilepsies. *PLoS One* 13:e0202022

Jacobi H, du Montcel ST, Bauer P, Giunti P, Cook A, Labrum R, Parkinson MH, Durr A, Brice A, Charles P, Marelli C, Mariotti C, Nanetti L, Sarro L, Rakowicz M, Sulek A, Sobanska 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, Szymanski S, Boesch S, Nachbauer W, Kang JS, Pandolfo M, Schulz JB, Melac AT, Diallo A, Klockgether T (2018) Long-term evolution of patient-reported outcome measures in spinocerebellar ataxias. *Journal of Neurology* 265:2040-51

Johannesen KM, Gardella E, Linnankivi T, Courage C, de Saint Martin A, Lehesjoki A-E, Mignot C, Afenjar A, Lesca G, Abi-Warde M-T, Chelly J, Piton A, Merritt JL, II, Rodan LH, Tan W-H, Bird LM, Nespeca M, Gleeson JG, Yoo Y, Choi M, Chae J-H, Czapansky-Beilman D, Reichert SC, Pendziwiat M, Verhoeven JS, Schelhaas HJ, Devinsky O, Christensen J, Specchio N, Trivisano M, **Weber YG**, Nava C, Keren B, Doummar D, Schaefer E, Hopkins S, Dubbs H, Shaw JE, Pisani L, Myers CT, Tang S, Tang S, Pal DK, Millichap JJ, Carvill GL, Helbig KL, Mecarelli O, Striano P, Helbig I, Rubboli G, Mefford HC, Moller RS (2018) Defining the phenotypic spectrum of SLC6A1 mutations. *Epilepsia* 59:389-402

Jores T, Lawatscheck J, Beke V, Franz-Wachtel M, Yunoki K, **Fitzgerald JC**, Macek B, Endo T, Kalbacher H, Buchner J, Rapaport D (2018) Cytosolic Hsp70 and Hsp40 chaperones enable the biogenesis of mitochondrial beta-barrel proteins. *Journal of Cell Biology* 217:3091-108

Junker M, Endres D, Sun ZP, Dicke PW, Giese M, Thier P (2018) Learning from the past: A reverberation of past errors in the cerebellar climbing fiber signal. *PLoS Biology* 16:24

Kapitany-Foveny M, Richman MJ, Demetrovics Z, **Sulyok M** (2018) Do you let me symptomatize? The potential role of cultural values in cross-national variability of mental disorders' prevalence. *International Journal of Social Psychiatry* 64:756-66

Kappos L, Bar-Or A, Cree BAC, Fox RJ, Giovannoni G, Gold R, Vermersch P, Arnold DL, Arnould S, Scherz T, Wolf C, Wallstrom E, Dahlke F, Investigators EC (**Bischof F, Ziemann U** et al) (2018) Siponimod versus placebo in secondary progressive multiple sclerosis (EXPAND): a double-blind, randomised, phase 3 study. *Lancet* 391:1263-73

Karnath HO, Sperber C, Rorden C (2018) Mapping human brain lesions and their functional consequences. *Neuroimage* 165:180-89

Kessler C, Atasu B, Hanagasi H, Simon-Sanchez J, **Hauser AK**, Pak M, Bilgic B, Erginel-Unaltuna N, Gurvit H, **Gasser T, Lohmann E** (2018) Role of LRRK2 and SNCA in autosomal dominant Parkinson's disease in Turkey. *Parkinsonism & Related Disorders* 48:34-39

Kessler T, Sahm F, Sadik A, Stichel D, Hertenstein A, Reifenberger G, Zacher A, Sabel M, **Tabatabai G**, Steinbach J, Sure U, Krex D, Grosu AL, Bewerunge-Hudler M, Jones D, Pfister SM, Weller M, Opitz C, Bendszus M, von Deimling A, Platten M, Wick W (2018) Molecular differences in IDH wildtype glioblastoma according to MGMT promoter methylation. *Neuro Oncol* 20:367-79

Kia DA, Sabir MS, Ahmed S, Trinh J, Bandres-Ciga S, International Parkinson's Disease Genomics C (**Gasser T** et al) (2018) LRP10 in alpha-synucleinopathies. *The Lancet Neurology* 17:1032

Killeen T, **Elshehabi M**, Filli L, **Hobert MA**, Hansen C, **Rieger D, Brockmann K**, Nussbaum S, Zorner B, Bolliger M, Curt A, **Berg D, Maetzler W** (2018) Arm swing asymmetry in overground walking. *Scientific Reports* 8:10

Klamer S, Ethofer T, Torner F, **Sahib AK, Elshahabi A, Marquetand J, Martin P, Lerche H**, Erb M, **Focke NK** (2018) Unravelling the brain networks driving spike-wave discharges in genetic generalized epilepsy-common patterns and individual differences. *Epilepsia open* 3:485-94

Kleiter I, Gahlen A, Borisow N, Fischer K, Wernecke KD, Hellwig K, Pache F, Ruprecht K, Havla J, Kumpfel T, Aktas O, Hartung HP, Ringelstein M, Geis C, Kleinschnitz C, Berthele A, Hemmer B, Angstwurm K, Stellmann JP, Schuster S, Stangel M, Lauda F, Tumani H, Mayer C, **Krumbholz M, Zeltner L, Ziemann U**, Linker R, Schwab M, Marziniak M, Bergh FT, Hofstadt-van Oy U, Neuhaus O, Zettl UK, Faiss J, Wildemann B, Paul F, Jarius S, Trebst C, Stu NNO (2018) Apheresis therapies for NMOSD attacks A retrospective study of 207 therapeutic interventions. *Neurology-Neuroimmunology & Neuroinflammation* 5:e504

Knaus A, Pantel JT, Pendziwiat M, Hajjir N, Zhao M, Hsieh T-C, Schubach M, Gurovich Y, Fleischer N, Jaeger M, Koehler S, Muhle H, Korff C, Moller RS, Bayat A, Calvas P, Chassaing N, Warren H, Skinner S, Louie R, Evers C, Bohn M, Christen H-J, van den Born M, Obersztyn E, Charzewska A, Endziniene M, Kortuem F, Brown N, Robinson PN, Schelhaas HJ, **Weber Y**, Helbig I, Mundlos S, Horn D, Krawitz PM (2018) Characterization of glycosylphosphatidylinositol biosynthesis defects by clinical features, flow cytometry, and automated image analysis. *Genome Medicine* 10**:**3

Koertvelyessy P, Pruess H, Thurner L, **Maetzler W, Vittore-Welliong D**, Schultze-Amberger J, Heinze H-J, Reinhold D, Leypoldt F, Schreiber S, Bittner D (2018) Biomarkers of Neurodegeneration in Autoimmune-Mediated Encephalitis. *Frontiers in Neurology* 9**:**668

Koko M, Abdallah MOE, Amin M, Ibrahim M (2018) Challenges imposed by minor reference alleles on the identification and reporting of clinical variants from exome data. *BMC Genomics* 19**:**46

Kotikalapudi R, Martin P, Marquetand J, Lindig T, Bender B, **Focke NK** (2018) Systematic Assessment of Multispectral Voxel-Based Morphometry in Previously MRI-Negative Focal Epilepsy. *American Journal of Neuroradiology* 39**:**2014-21

Kraus D, Naros G, Guggenberger R, Leao MT, **Ziemann U**, Gharabaghi A (2018) Recruitment of Additional Corticospinal Pathways in the Human Brain with State-Dependent Paired Associative Stimulation. *Journal of Neuroscience* 38**:**1396-407

Kraus EM, Rommel N, Stoll LH, Oettinger A, **Vogel AP, Synofzik M** (2018) Validation and Psychometric Properties of the German Version of the SWAL-QOL. *Dysphagia* 33**:**431-40

Kuhne M, Eschelbach M, Aghaeifar A, von Pflugk L, Thielscher A, **Himmelbach M**, Scheffler K, van der Smagt P, Peer A (2018) An MR-Compatible Haptic Interface With Seven Degrees of Freedom. *Ieee-Asme Transactions on Mechatronics* 23**:**624-35

Lauxmann S, Verbeek NE, **Liu Y**, Zaichuk M, Mueller S, Lemke JR, van Kempen MJA, **Lerche H, Hedrich UBS** (2018) Relationship of electrophysiological dysfunction and clinical severity in SCN2A-related epilepsies. *Human Mutation* 39**:**1942-56

Lederer S, **Dijkstra TMH**, Heskes T (2018) Additive Dose Response Models: Explicit Formulation and the Loewe Additivity Consistency Condition. *Frontiers in Pharmacology* 9

Lerche S, Brockmann K (2018) REM sleep behaviour disorder (RBD): risk for Parkinsonism and executive dysfunction in elderly. *Oncotarget* 9**:**36732-33

Lerche S, Gutfreund A, Brockmann K, Hobert MA, Wurster I, Sunkel U, Eschweiler GW, Metzger FG, **Maetzler W, Berg D** (2018) Effect of physical activity on cognitive flexibility, depression and RBD in healthy elderly. *Clinical Neurology and Neurosurgery* 165**:**88-93

Lerche S, Liepelt-Scarfone I, Wurster I, Schulte C, Schaffer E, Roben B, Machetanz G, Zimmermann M, Akbas S, Hauser AK, Gasser T, Maetzler W, Berg D, Brockmann K (2018) Polygenic Load: Earlier Disease Onset but Similar Longitudinal Progression in Parkinson's Disease. *Movement Disorders* 33**:**1349-53

Lerche S, Machetanz G, Roeben B, Wurster I, Zimmermann M, von Thaler AK, Liepelt-Scarfone I, Eschweiler GW, Fallgatter A, Metzger F, Maetzler W, Berg D, **Brockmann K** (2018) Deterioration of executive dysfunction in elderly with REM sleep behavior disorder (RBD). *Neurobiology of Aging* 70**:**242-46

Lessard I, Brais B, Cote I, Lavoie C, **Synofzik M**, Mathieu J, Gagnon C (2018) Assessing mobility and balance in Autosomal Recessive Spastic Ataxia of Charlevoix-Saguenay population: Validity and reliability of four outcome measures. *Journal of the Neurological Sciences* 390:4-9

Lhommee E, Wojtecki L, Czernecki V, Witt K, Maier F, Tonder L, Timmermann L, Halbig TD, Pineau F, Durif F, Witjas T, Pinsker M, Mehdorn M, Sixel-Doring F, Kupsch A, **Kruger R**, Elben S, Chabardes S, Thobois S, Brefel-Courbon C, Ory-Magne F, Regis JM, Maltete D, Sauvaget A, Rau J, Schnitzler A, Schupbach M, Schade-Brittinger C, Deuschl G, Houeto JL, Krack P, Grp ES (2018) Behavioural outcomes of subthalamic stimulation and medical therapy versus medical therapy alone for Parkinson's disease with early motor complications (EARLYSTIM trial): secondary analysis of an open-label randomised trial. *Lancet Neurology* 17:223-31

Li Hegner Y, Marquetand J, Elshahabi A, Klamer S, Lerche H, Braun C, **Focke NK** (2018) Increased Functional MEG Connectivity as a Hallmark of MRI-Negative Focal and Generalized Epilepsy. *Brain Topography* 31:863-74

Li M, Maljevic S, Phillips AM, Petrovski S, Hildebrand MS, Burgess R, Mount T, Zara F, Striano P, Schubert J, Thiele H, Nuernberg P, Wong M, Weisenberg JL, Thio LL, **Lerche H**, Scheffer IE, Berkovic SF, Petrou S, Reid CA (2018) Gain-of-function HCN2 variants in genetic epilepsy. *Human Mutation* 39:202-09

Lindig T, **Kotikalapudi R**, Schweikardt D, **Martin P**, Bender F, Klose U, Ernemann U, **Focke NK**, Bender B (2018) Evaluation of multimodal segmentation based on 3D T1-, T2-and FLAIR-weighted images - the difficulty of choosing. *Neuroimage* 170:210-21

Lopez-Larraz E, Figueiredo TC, Insausti-Delgado A, **Ziemann U**, Birbaumer N, Ramos-Murguialday A (2018) Event-related desynchronization during movement attempt and execution in severely paralyzed stroke patients: An artifact removal relevance analysis. *Neuroimage-Clinical* 20:972-86

Loureiro JR, Himmelbach M, Ethofer T, Pohmann R, **Martin P**, Bause J, Grodd W, Scheffler K, Hagberg GE (2018) In-vivo quantitative structural imaging of the human midbrain and the superior colliculus at 9.4T. *Neuroimage* 177:117-28

Mader L, Blank AE, Capper D, **Jansong J**, Baumgarten P, Wirsik NM, Zachskorn C, Ehlers J, Seifert M, Klink B, Liebner S, Niclou S, **Naumann U**, Harter PN, Mittelbronn M (2018) Pericytes/vessel-associated mural cells (VAMCs) are the major source of key epithelial-mesenchymal transition (EMT) factors SLUG and TWIST in human glioma. *Oncotarget* 9:24041-53

Markanday A, Messner J, Thier P (2018) A loss of a velocity-duration trade-off impairs movement precision in patients with cerebellar degeneration. *European Journal of Neuroscience* 48:1976-89

Marquetand J, Lerche H (2018) Special imaging in particular genetically determined epilepsies. *Zeitschrift für Epileptologie* 31:148-51

Marrone L, **Bus C, Schondorf D, Fitzgerald JC, Kubler M, Schmid B**, Reinhardt P, Reinhardt L, **Deleidi M**, Levin T, Meixner A, Klink B, Glatza M, Gloeckner CJ, **Gasser T**, Sterneckert J (2018) Generation of iPSCs carrying a common LRRK2 risk allele for in vitro modeling of idiopathic Parkinson's disease. *PLoS One* 13:24

Martin P, Schmidt K, Reimold M, Bender B, **Focke NK** (2018) Multimodal imaging. How do we solve the puzzle? *Zeitschrift für Epileptologie* 31:128-33

May P, Girard S, **Harrer M**, Bobbili DR, Schubert J, **Wolking S, Becker F**, Lachance-Touchette P, Meloche C, Gravel M, Niturad CE, Knaus J, De Kovel C, Toliat M, Polvi A, Iacomino M, Guerrero-Lopez R, Baulac S, Marini C, Thiele H, Altmueller J, Jabbari K, Ruppert A-K, Jurkowski W, Lal D, Rusconi R, Cestele S, Terragni B, Coombs ID, Reid CA, Striano P, Caglayan H, Siren A, Everett K, Moller RS, Hjalgrim H, Muhle H, Helbig I, Kunz WS, **Weber YG**, Weckhuysen S, De Jonghe P, Sisodiya SM, Nabbout R, Franceschetti S, Coppola A, Vari MS, Trenite DK-N, Baykan B, Ozbek U, Bebek N, Klein KM, Rosenow F, Nguyen DK, Dubeau F, Carmant L, Lortie A, Desbiens R, Clement J-F, Cieuta-Walti C, Sills GJ, Auce P, Francis B, Johnson MR, Marson AG, Berghuis B, Sander JW, Avbersek A, McCormack M, Cavalleri GL, Delanty N, Depondt C, (...), Schorge S, Petrou S, Mantegazza M, Sander T, LeGuern E, Serratosa JM, Koeleman BPC, Palotie A, Lehesjoki A-E, Nothnagel M, Nuernberg P, Maljevic S, Zara F, Cossette P, Krause R, **Lerche H**, Epicure C, Euro ECC, Epi PGXC (2018) Rare coding variants in genes encoding GABA(A) receptors in genetic generalised epilepsies: an exome-based case-control study. *Lancet Neurology* 17:699-708

McCormack M, Gui H, Ingason A, Speed D, Wright GEB, Zhang EJ, Secolin R, Yasuda C, Kwok M, **Wolking S, Becker F, Rau S**, Avbersek A, Heggeli K, Leu C, Depondt C, Sills GJ, Marson AG, Auce P, Brodie MJ, Francis B, Johnson MR, Koeleman BPC, Striano P, Coppola A, Zara F, Kunz WS, Sander JW, **Lerche H**, Klein KM, Weckhuysen S, Krenn M, Gudmundsson LJ, Stefansson K, Krause R, Shear N, Ross CJD, Delanty N, Pirmohamed M, Carleton BC, Cendes F, Lopes-Cendes I, Liao W-p, O'Brien TJ, Sisodiya SM, Cherny S, Kwan P, Baum L, Cavalleri GL, Consortium E, Canadian Pharmacogenomics N, for the Epi PGXC, Int League Epilepsy C (2018) Genetic variation in CFH predicts phenytoin-induced maculopapular exanthema in European-descent patients. *Neurology* 90**:**e332-e341

McDade E, Wang G, Gordon BA, Hassenstab J, Benzinger TLS, Buckles V, Fagan AM, Holtzman DM, Cairns NJ, Goate AM, Marcus DS, Morris JC, Paumier K, Xiong C, Allegri R, Berman SB, Klunk W, Noble J, Ringman J, Ghetti B, Farlow M, Sperling RA, Chhatwal J, Salloway S, Graff-Radford NR, Schofield PR, Masters C, Rossor MN, Fox NC, Levin J, **Jucker M**, Bateman RJ, Dominantly Inherited Alzheimer N (2018) Longitudinal cognitive and biomarker changes in dominantly inherited Alzheimer disease. *Neurology* 91**:**e1295-e306

McDonnell MN, **Zipser C, Darmani G, Ziemann U, Muller-Dahlhaus F** (2018) The effects of a single dose of fluoxetine on practice-dependent plasticity. *Clinical Neurophysiology* 129**:**1349-56

Meeter LH, Steketee R, Salkovic D, Vos M, Grossman M, McMillan C, Boxer AL, Rojas-Martinez J, Pijnenburg YA, Sanchez-Valle R, Diehl-Schmid J, Santillo AF, Borroni B, Galimberti D, Rohrer J, **Synofzik M**, Mendonca A, Vandenberghe R, Benussi L, Niessen W, Kaat LD, Teunissen C, Bron E, van Den Berg E, van Swieten JC (2018) Cerebrospinal fluid neurofilament light chain illustrates that semantic dementia is a distinctive neurodegenerative disease. *European Journal of Neurology* 25**:**381-82

Minnerop M, Kurzwelly D, **Rattay TW,** Timmann D, **Hengel H, Synofzik M**, Stendel C, Horvath R, **Schule R**, Ramirez A (2018) Reply: POLR3A variants in hereditary spastic paraplegia and ataxia. *Brain* 141**:**4

Mock J, Huber S, Bloechle J, Dietrich JF, Bahnmueller J, **Rennig J**, Klein E, Moeller K (2018) Magnitude processing of symbolic and non-symbolic proportions: an fMRI study. *Behavioral and Brain Functions* 14

Molbert SC, Thaler A, Mohler BJ, Streuber S, Romero J, Black MJ, Zipfel S, **Karnath HO**, Giel KE (2018) Assessing body image in anorexia nervosa using biometric self-avatars in virtual reality: Attitudinal components rather than visual body size estimation are distorted. *Psychological Medicine* 48**:**642-53

Moreau C, Duce JA, Rascol O, Devedjian JC, **Berg D**, Dexter D, Cabantchik ZI, Bush AI, Devos D, Grp F-IS (2018) Iron as a therapeutic target for Parkinson's disease. *Movement Disorders* 33**:**568-74

Mueller SH, Farber A, Pruss H, Melzer N, Golombeck KS, Kumpfel T, Thaler F, Elisak M, Lewerenz J, Kaufmann M, Suhs KW, Ringelstein M, Kellinghaus C, Bien CG, Kraft A, Zettl UK, Ehrlich S, Handreka R, Rostasy K, Bergh FT, Faiss JH, Lieb W, Franke A, Kuhlenbaumer G, Wandinger KP, Leypoldt F, German Network Res Autoimmune E (**Bischof F, Krumbholz M** et al) (2018) Genetic predisposition in anti-LGI1 and anti-NMDA receptor encephalitis. *Annals of Neurology* 83**:**863-69

Muller S, Preische O, Sohrabi HR, **Graber S, Jucker M**, Ringman JM, Martins RN, McDade E, Schofield PR, Ghetti B, Rossor M, Fox NN, Graff-Radford NR, Levin J, Danek A, Voglein J, Salloway S, Xiong C, Benzinger T, Buckles V, Masters CL, Sperling R, Bateman RJ, Morris JC, **Laske C**, Dominantly Inherited Alzheimer N (2018) Relationship between physical activity, cognition, and Alzheimer pathology in autosomal dominant Alzheimer's disease. *Alzheimers Dement* 14**:**1427-37

Munte TF, Ye Z, Marco-Pallares J, Kramer UM, **Schule R, Schols L**, Rojo-Fite N, Camara E, Cunillera T, Cucurell D, Rodriguez-Fornells A (2018) Dopamine and intertemporal choice in humans. *Zeitschrift Fur Neuropsychologie* 29**:**81-88

Naros G, Grimm F, **Weiss D**, Gharabaghi A (2018) Directional Communication During Movement Execution Interferes With Tremor in Parkinson's Disease. *Movement Disorders* 33**:**251-61

Newton T, Allison R, Edgar JR, Lumb JH, Rodger CE, Manna PT, Rizo T, Kohl Z, Nygren AOH, Arning L, **Schule R**, Depienne C, Goldberg L, Frahm C, Stevanin G, Durr A, **Schols L**, Winner B, Beetz C, Reid E (2018) Mechanistic basis of an epistatic interaction reducing age at onset in hereditary spastic paraplegia. *Brain* 141:1286-99

Niethard N, Ngo HV, **Ehrlich I**, Born J (2018) Cortical circuit activity underlying sleep slow oscillations and spindles. *Proc Natl Acad Sci U S A* 115:E9220-E29

Oh YS, Kwon DY, Kim JS, Park MH, **Berg D** (2018) Transcranial sonographic findings may predict prognosis of gastroprokinetic drug-induced parkinsonism. *Parkinsonism & Related Disorders* 46:36-40

Oladazimi M, Brendel W, **Schwarz C** (2018) Biomechanical Texture Coding in Rat Whiskers. *Scientific Reports* 8:12

Pham MH, Warmerdam E, **Elshehabi M**, Schlenstedt C, Bergeest LM, Heller M, **Haertner L**, Ferreira JJ, **Berg D**, Schmidt G, Hansen C, **Maetzler W** (2018) Validation of a Lower Back „Wearable"-Based Sit-to-Stand and Stand-to-Sit Algorithm for Patients With Parkinson's Disease and Older Adults in a Home-Like Environment. *Frontiers in Neurology* 9:11

Pilacinski A*, Wallscheid M, Lindner A* (2018) Human posterior parietal and dorsal premotor cortex encode the visual properties of an upcoming action. *PLoS One* 13:20 **Authors contributed equally*

Porpora M, Sauchella S, Rinaldi L, Delle Donne R, Sepe M, Torres-Quesada O, Intartaglia D, Garbi C, Insabato L, Santoriello M, Bachmann VA, **Synofzik M**, Lindner HH, Conte I, Stefan E, Feliciello A (2018) Counterregulation of cAMP-directed kinase activities controls ciliogenesis. *Nature Communications* 9:13

Pottier C, Rampersaud E, Baker M, Wu G, Wuu J, McCauley JL, Zuchner S, **Schule R**, Bermudez C, Hussain S, Cooley A, Wallace M, Zhang JH, Taylor JP, Benatar M, Rademakers R (2018) Identification of compound heterozygous variants in OPTN in an ALS-FTD patient from the CReATe consortium: a case report. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration* 19:469-71

Pottier C, Zhou XL, Perkerson RB, Baker M, Jenkins GD, Serie DJ, Ghidoni R, Benussi L, Binetti G, de Munain AL, Zulaica M, Moreno F, Le Ber I, Pasquier F, Hannequin D, Sanchez-Valle R, Antonell A, Llado A, Parsons TM, Finch NA, Finger EC, Lippa CF, Huey ED, Neumann M, **Heutink P, Synofzik M**, **Wilke C**, Rissman RA, Slawek J, Sitek E, Johannsen P, Nielsen JE, Ren YX, van Blitterswijk M, DeJesus-Hernandez M, Christopher E, Murray ME, Bieniek KF, Evers BM, Ferrari C, Rollinson S, Richardson A, Scarpini E, Fumagalli GG, Padovani A, Hardy J, Momeni P, Ferrari R, Frangipane F, Maletta R, Anfossi M, Gallo M, Petrucelli L, Suh E, Lopez OL, Wong TH, van Rooij JGJ, Seelaar H, Mead S, Caselli RJ, Reiman EM, Sabbagh MN, Kjolby M, Nykjaer A, Karydas AM, Boxer AL, Grinberg LT, Grafman J, Spina S, Oblak A, Mesulam MM, Weintraub S, Geula C, Hodges JR, Piguet O, Brooks WS, Irwin DJ, Trojanowski JQ, Lee EB, Josephs KA, Parisi JE, Ertekin-Taner N, Knopman DS, Nacmias B, Piaceri I, Bagnoli S, Sorbi S, Gearing M, Glass J, Beach TG, Black SE, Masellis M, Rogaeva E, Vonsattel JP, Honig LS, Kofler J, Bruni AC, Snowden J, Mann D, Pickering-Brown S, Diehl-Schmid J, Winkelmann J, Galimberti D, Graff C, Oijerstedt L, Troakes C, Al-Sarraj S, Cruchaga C, Cairns NJ, Rohrer JD, Halliday GM, Kwok JB, van Swieten JC, White CL, Ghetti B, Murell JR, Mackenzie IRA, Hsiung GYR, Borroni B, Rossi G, Tagliavini F, Wszolek ZK, Petersen RC, Bigio EH, Grossman M, Van Deerlin VM, Seeley WW, Miller BL, Graff-Radford NR, Boeve BF, Dickson DW, Biernacka JM, Rademakers R (2018) Potential genetic modifiers of disease risk and age at onset in patients with frontotemporal lobar degeneration and GRN mutations: a genome-wide association study. *Lancet Neurology* 17:548-58

Rasmussen J, Krasemann S, Altmeppen H, Schwarz P, **Schelle J**, Aguzzi A, Glatzel M, **Jucker M** (2018) Infectious prions do not induce Abeta deposition in an in vivo seeding model. *Acta Neuropathol* 135:965-67

Rattay TW, Just J, Roeben B, Hengel H, Schuele R, Synofzik M, Soehn AS, **Winter N, Dammeier N, Schoels L, Grimm A** (2018) Nerve ultrasound characterizes AMN polyneuropathy as inhomogeneous and focal hypertrophic. *Orphanet Journal of Rare Diseases* 13:194

Reetz K, Dogan I, Hohenfeld C, Didszun C, Giunti P, Mariotti C, Durr A, Boesch S, Klopstock T, Garrid F, **Schols L**, Giordano I, Burk K, Pandolfo M, Schulz JB, Grp ES (2018) Nonataxia symptoms in Friedreich Ataxia Report from the Registry of the European Friedreich's Ataxia Consortium for Translational Studies (EFACTS). *Neurology* 91:E917-E30

Rennig J, Cornelsen S, Wilhelm H, **Himmelbach M, Karnath HO** (2018) Preserved Expert Object Recognition in a Case of Visual Hemiagnosia. *Journal of Cognitive Neuroscience* 30:131-43

Rennig J, Karnath HO, Cornelsen S, Wilhelm H, **Himmelbach M** (2018) Hemifield coding in ventral object-sensitive areas - Evidence from visual hemiagnosia. *Cortex* 98:149-62

Roeben B, Schule R, Ruf S, Bender B, Alhaddad B, Benkert T, Meitinger T, **Reich S**, Bohringer J, Langhans CD, Vaz FM, Wortmann SB, Marquardt T, Haack TB, Krageloh-Mann I, **Schols L, Synofzik M** (2018) SERAC1 deficiency causes complicated HSP: evidence from a novel splice mutation in a large family. *Journal of Medical Genetics* 55:39-47

Rorden C, Li DY, **Karnath HO** (2018) Biased temporal order judgments in chronic neglect influenced by trunk position. *Cortex* 99:273-80

Rosenbohm A, Liu MS, Nagel G, Peter RS, Cui B, Li XG, Kassubek J, Rothenbacher D, Lule D, Cui LY, Ludolph AC, Grp ALSRS (**Synofzik M** et al) (2018) Phenotypic differences of amyotrophic lateral sclerosis (ALS) in China and Germany. *Journal of Neurology* 265:774-82

Rosenbohm A, Nagel G, Peter RS, Brehme T, Koenig W, Dupuis L, Rothenbacher D, Ludolph AC, Grp ALSRS (**Synofzik M** et al) (2018) Association of Serum Retinol-Binding Protein 4 Concentration With Risk for and Prognosis of Amyotrophic Lateral Sclerosis. *Jama Neurology* 75:600-07

Roth C, Ferbert A, Huegens-Penzel M, Siekmann R, **Freilinger T** (2018) Multimodal imaging findings during severe attacks of familial hemiplegic migraine type 2. *Journal of the Neurological Sciences* 392:22-27

Rydning SL, Dudesek A, Rimmele F, Funke C, Kruger S, **Biskup S**, Vigeland MD, Hjorthaug HS, Sejersted Y, Tallaksen C, Selmer KK, Kamm C (2018) A novel heterozygous variant in ERLIN2 causes autosomal dominant pure hereditary spastic paraplegia. *European Journal of Neurology* 25:943-e71

Sagie S, Lerman-Sagie T, Maljevic S, Yosovich K, Detert K, Chung S-K, Rees MI, **Lerche H**, Lev D (2018) Expanding the phenotype of TRAK1 mutations: hyperekplexia and refractory status epilepticus. *Brain* 141:e55

Sahib AK, Erb M, **Marquetand J, Martin P, Elshahabi A, Klamer S**, Vulliemoz S, Scheffler K, Ethofer T, **Focke NK** (2018) Evaluating the impact of fast-fMRI on dynamic functional connectivity in an event-based paradigm. *PLoS One* 13:e0190480

Schafer N, Proescholdt M, Steinbach JP, Weyerbrock A, Hau P, Grauer O, Goldbrunner R, Friedrich F, Rohde V, Ringel F, Schlegel U, Sabel M, Ronellenfitsch MW, Uhl M, Grau S, Hanel M, Schnell O, Krex D, Vajkoczy P, **Tabatabai G**, Mack F, Schaub C, Tzaridis T, Niessen M, Kebir S, Leutgeb B, Urbach H, Belka C, Stummer W, Glas M, Herrlinger U (2018) Quality of life in the GLARIUS trial randomizing bevacizumab/irinotecan versus temozolomide in newly diagnosed, MGMT-nonmethylated glioblastoma. *Neuro Oncol* 20:975-85

Schafer S, Behling F, Skardelly M, **Koch M**, Ott I, Paulsen F, **Tabatabai G**, Schittenhelm J (2018) Low FoxG1 and high Olig-2 labelling indices define a prognostically favourable subset in isocitrate dehydrogenase (IDH)-mutant gliomas. *Neuropathol Appl Neurobiol* 44:207-23

Schaworonkow N, Gordon PC, Belardinelli P, Ziemann U, Bergmann TO, Zrenner C (2018) mu-Rhythm Extracted With Personalized EEG Filters Correlates With Corticospinal Excitability in Real-Time Phase-Triggered EEG-TMS. *Frontiers in Neuroscience* 12:954

Schols L, Gasser T, Krageloh-Mann I, Graessner H, Klockgether T, Munchau A (2018) Centers for Rare Neurological Diseases. *Aktuelle Neurologie* 45:178-86

Schondorf DC, Ivanyuk D, Baden P, Sanchez-Martinez A, **De Cicco S, Yu C**, Giunta I, **Schwarz LK, Di Napoli G, Panagiotakopoulou V**, Nestel S, Keatinge M, Pruszak J, Bandmann O, Heimrich B, **Gasser T**, Whitworth AJ, **Deleidi M** (2018) The NAD plus Precursor Nicotinamide Riboside Rescues Mitochondrial Defects and Neuronal Loss in iPSC and Fly Models of Parkinson's Disease. *Cell Rep* 23**:**2976-88

Schotterl S, Huber SM, Lentzen H, Mittelbronn M, **Naumann U** (2018) Adjuvant Therapy Using Mistletoe Containing Drugs Boosts the T-Cell-Mediated Killing of Glioma Cells and Prolongs the Survival of Glioma Bearing Mice. *Evidence-Based Complementary and Alternative Medicine*, 10.1155/2018/3928572

Schubert V, Bender B, Kinzel M, Peters N, **Freilinger T** (2018) A novel frameshift variant in the CADASIL gene NOTCH3: pathogenic or not? *Journal of Neurology* 265**:**1338-42

Schultheiss M, **Hartig F**, Spitzer MS, Feltgen N, Spitzer B, Husing J, Rupp A, **Ziemann U**, Bartz-Schmidt KU, **Poli S** (2018) Intravenous thrombolysis in acute central retinal artery occlusion - A prospective interventional case series. *PLoS One* 13:e0198114

Schuster S, Schelling Y, **Synofzik M, Hoflinger P, Schols L**, Hauser S (2018) Establishment of STUB1/CHIP mutant induced pluripotent stem cells (iPSCs) from a patient with Gordon Holmes syndrome/ SCAR16. *Stem Cell Research* 29**:**166-69

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, Thor Straten P, Poulsen HS, Ponsati B, Okada H, Rammensee HG, Sahin U, Singh H, Admon A (2018) Identification of Tumor Antigens Among the HLA Peptidomes of Glioblastoma Tumors and Plasma. *Molecular & Cellular Proteomics* 17**:**2132-45

Sofi S, **Fitzgerald JC**, Jahn D, Dumoulin B, Stehling S, Kuhn H, Ufer C (2018) Functional characterization of naturally occurring genetic variations of the human guanine-rich RNA sequence binding factor 1 (GRSF1). *Biochimica Et Biophysica Acta-General Subjects* 1862**:**866-76

Spadaro M, Winklmeier S, Beltran E, Macrini C, Hoftberger R, Schuh E, Thaler FS, Gerdes LA, Laurent S, Gerhards R, Brandle S, Dornmair K, Breithaupt C, **Krumbholz M**, Moser M, Krishnamoorthy G, Kamp F, Jenne D, Hohlfeld R, Kumpfel T, Lassmann H, Kawakami N, Meinl E (2018) Pathogenicity of human antibodies against myelin oligodendrocyte glycoprotein. *Annals of Neurology* 84**:**315-28

Sperber C*, Christensen A*, Ilg W, Giese MA, Karnath HO (2018) Apraxia of object-related action does not depend on visual feedback. *Cortex* 99**:**103-17 *Authors contributed equally

Sperber C, Karnath HO (2018) On the validity of lesion-behaviour mapping methods. *Neuropsychologia* 115**:**17-24

Stankevich Y, Lueken U, Balzer-Geldsetzer M, Dodel R, **Graber-Sultan S**, Berg D, **Liepelt-Scarfone I**, Hilker-Roggendorf R, Kalbe E, Kaut O, Mollenhauer B, Reetz K, Schaffer E, Schmidt N, Schulz JB, Spottke A, Witt K, Linse K, Storch A, Riedel O (2018) Psychometric Properties of an Abbreviated Version of the Apathy Evaluation Scale for Parkinson Disease (AES-12PD). *American Journal of Geriatric Psychiatry* 26**:**1079-90

Stecker M, Pasqualetti P, Barry RJ, Daskalakis ZJ, Siebner HR, **Ziemann U** (2018) Reply to ‚is it significant? Is it relevant?" *Clinical Neurophysiology* 129**:**887-87

Stefanou MI, Desideri D, Belardinelli P, Zrenner C, Ziemann U (2018) Phase Synchronicity of mu-Rhythm Determines Efficacy of Interhemispheric Communication Between Human Motor Cortices. *Journal of Neuroscience* 38**:**10525-34

Stefanou MI, Ott G, **Ziemann U, Mengel A** (2018) Histiocytic necrotising lymphadenitis identical to Kikuchi-Fujimoto disease in CNS lupus. *BMJ Case Rep* pii:bcr-2018-225668

Stefanou MI, Rath D, **Stadler V, Richter H**, Hennersdorf F, Lausberg HF, Lescan M, Greulich S, **Poli S**, Gawaz MP, **Ziemann U, Mengel AM** (2018) Cardiac Myxoma and Cerebrovascular Events: A Retrospective Cohort Study. *Frontiers in Neurology* 9:823

Stoessel D, **Schulte C**, dos Santos MCT, Scheller D, Rebollo-Mesa I, **Deuschle C,** Walther D, Schauer N, **Berg D**, da Costa AN, **Maetzler W** (2018) Promising Metabolite Profiles in the Plasma and CSF of Early Clinical Parkinson's Disease. *Frontiers in Aging Neuroscience* 10:51

Stoessel D, Stellmann JP, Willing A, **Behrens B**, Rosenkranz SC, Hodecker SC, Sturner KH, Reinhardt S, Fleischer S, **Deuschle C, Maetzler W, Berg D**, Heesen C, Walther D, Schauer N, Friese MA, Pless O (2018) Metabolomic Profiles for Primary Progressive Multiple Sclerosis Stratification and Disease Course Monitoring. *Frontiers in Human Neuroscience* 12:226

Suarez-Calvet M, Capell A, Araque Caballero MA, Morenas-Rodriguez E, Fellerer K, Franzmeier N, Kleinberger G, Eren E, Deming Y, Piccio L, Karch CM, Cruchaga C, Paumier K, Bateman RJ, Fagan AM, Morris JC, Levin J, Danek A, **Jucker M**, Masters CL, Rossor MN, Ringman JM, Shaw LM, Trojanowski JQ, Weiner M, Ewers M, Haass C, Dominantly Inherited Alzheimer N, Alzheimer's Disease Neuroimaging I (2018) CSF progranulin increases in the course of Alzheimer's disease and is associated with sTREM2, neurodegeneration and cognitive decline. *EMBO Mol Med* 10:e9712

Sukkar B, Hauser S, Pelzl L, Hosseinzadeh Z, Sahu I, al-Maghout T, Bhuyan AA, Zacharopoulou N, Stournaras C, **Schols L**, Lang F (2018) Inhibition of Lithium Sensitive Orai1/ STIM1 Expression and Store Operated Ca2+ Entry in Chorea-Acanthocytosis Neurons by NF-B Inhibitor Wogonin. *Cellular Physiology and Biochemistry* 51:278-89

Sulzer P, Becker S, Maetzler W, Kalbe E, van Nueten L, Timmers M, **Machetanz G**, Streffer J, Salvadore G, Scholz E, **Tkaczynska Z, Brockmann K, Berg D, Liepelt-Scarfone I** (2018) Validation of a novel Montreal Cognitive Assessment scoring algorithm in non-demented Parkinson's disease patients. *Journal of Neurology* 265:1976-84

Surges R, Alber M, Bast T, Baier H, Bien CG, Borggraefe I, Boesebeck F, Brandl U, Hamer HM, Hethey S, Holtkamp M, Jacobs J, Kellinghaus C, Kerling F, Knake S, Kunze A, Kurlemann G, Laufs H, **Lerche H**, Mayer T, Moeddel G, Neubauer BA, Noachtar S, Panzer A, von Podewils F, Polster T, Rona S, Rosenow F, Schmitz B, Schulze-Bonhage A, von Spiczak S, Staudt M, Steinhoff BJ, Stephani U, Stodieck SRG, Straub H-B, Strzelczyk A, Wellmer J, Elger CE (2018) Tasks and Structure of Modern Epilepsy Centres in Germany. *Aktuelle Neurologie* 45:513-33

Synofzik M, Helbig KL, Harmuth F, Deconinck T, Tanpaiboon P, Sun B, Guo WT, Wang RW, Palmaer E, Tang S, Schaefer GB, Gburek-Augustat J, Zuchner S, Krageloh-Mann I, Baets J, de Jonghe P, Bauer P, Chen SRW, **Schols L, Schule R** (2018) De novo ITPR1 variants are a recurrent cause of early-onset ataxia, acting via loss of channel function. *European Journal of Human Genetics* 26:1623-34

Thies M, Zrenner C, Ziemann U, Bergmann TO (2018) Sensorimotor mu-alpha power is positively related to corticospinal excitability. *Brain Stimulation* 11:1119-22

Thijssen B, **Dijkstra TMH**, Heskes T, Wessels LFA (2018) Bayesian data integration for quantifying the contribution of diverse measurements to parameter estimates. *Bioinformatics* 34:803-11

Thomalla G, Simonsen CZ, Boutitie F, Andersen G, Berthezene Y, Cheng B, Cheripelli B, Cho TH, Fazekas F, Fiehler J, Ford I, Galinovic I, Gellissen S, Golsari A, Gregori J, Gunther M, Guibernau J, Hausler KG, Hennerici M, Kemmling A, Marstrand J, Modrau B, Neeb L, de la Ossa NP, Puig J, Ringleb P, Roy P, Scheel E, Schonewille W, Serena J, Sunaert S, Villringer K, Wouters A, Thijs V, Ebinger M, Endres M, Fiebach JB, Lemmens R, Muir KW, Nighoghossian N, Pedraza S, Gerloff C, Investigators W-U (**Ziemann U, Poli S, Härtig F, Richter H, Russo F, Ribitsch M, Ebner M, Schlak D** et al) (2018) MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset. *New England Journal of Medicine* 379:611-22

Tian XG, Yoshida M, **Hafed ZM** (2018) Dynamics of fixational eye position and microsaccades during spatial cueing: the case of express microsaccades. *Journal of Neurophysiology* 119:1962-80

van Uem JMT, Cerff B, Kampmeyer M, Prinzen J, Zuidema **M, Hobert MA, Graber S, Berg D, Maetzler W, Liepelt-Scarfone I** (2018) The association between objectively measured physical activity, depression, cognition, and health-related quality of life in Parkinson's disease. *Parkinsonism & Related Disorders* 48:74-81

Velazquez-Perez L, Rodriguez-Labrada R, Torres-Vega R, Ortega-Sanchez R, Medrano-Montero J, Gonzalez-Pina R, Vazquez-Mojena Y, Auburger G, **Ziemann U** (2018) Progression of corticospinal tract dysfunction in pre-ataxic spinocerebellar ataxia type 2: A two-years follow-up TMS study. *Clinical Neurophysiology* 129:895-900

Vogel AP, Rommel N, Oettinger A, **Stoll LH, Kraus EM,** Gagnon C, Horger M, Krumm P, Timmann D, Storey E, **Schols L, Synofzik M** (2018) Coordination and timing deficits in speech and swallowing in autosomal recessive spastic ataxia of Charlevoix-Saguenay (ARSACS). *Journal of Neurology* 265:2060-70

von Bismarck O, Dankowski T, Ambrosius B, Hessler N, Antony G, Ziegler A, Hoshi MM, Aly L, Luessi F, Groppa S, Klotz L, Meuth SG, Tackenberg B, Stoppe M, Bergh FT, Tumani H, Kumpfel T, Stangel M, Heesen C, Wildemann B, Paul F, Bayas A, Warnke C, Weber F, Linker RA, **Ziemann U**, Zettl UK, Zipp F, Wiendl H, Hemmer B, Gold R, Salmen A, German Competence Network M (2018) Treatment choices and neuropsychological symptoms of a large cohort of early MS. *Neurology-Neuroimmunology & Neuroinflammation* 5:e446

Waiblinger C, Whitmire CJ, Sederberg A, Stanley GB, **Schwarz C** (2018) Primary Tactile Thalamus Spiking Reflects Cognitive Signals. *Journal of Neuroscience* 38:4870-85

Walsh RR, Krismer F, Galpern WR, Wenning GK, Low PA, Halliday G, Koroshetz WJ, Holton J, Quinn NP, Rascol O, Shaw LM, Eidelberg D, Bower P, Cummings JL, Abler V, Biedenharn J, Bitan G, Brooks DJ, Brundin P, Fernandez H, Fortier P, Freeman R, **Gasser T**, Hewitt A, Hoglinger GU, Huentelman MJ, Jensen PH, Jeromin A, Kang UJ, Kaufmann H, Kellerman L, Khurana V, Klockgether T, Kim WS, Langer C, LeWitt P, Masliah E, Meissner W, Melki R, Ostrowitzki S, Piantadosi S, Poewe W, Robertson D, Roemer C, Schenk D, Schlossmacher M, Schmahmann JD, Seppi K, Shih L, Siderowf A, Stebbins GT, Stefanova N, Tsuji S, Sutton S, Zhang J (2018) Recommendations of the Global Multiple System Atrophy Research Roadmap Meeting. *Neurology* 90:74-82

Wassouf Z, Hentrich T, **Samer S, Rotermund C, Kahle PJ, Ehrlich I**, Riess O, Casadei N, Schulze-Hentrich JM (2018) Environmental Enrichment Prevents Transcriptional Disturbances Induced by Alpha-Synuclein Overexpression. *Frontiers in Cellular Neuroscience* 12:112

Weiss D, Hieber L, Sturm J, Bortlein A, Buchthal J, Dippon C, Arnold G, **Wachter T** (2018) Health-related quality of life outcomes from botulinumtoxin treatment in blepharospasm. *Clinical Neurology and Neurosurgery* 172:130-33

Weiss D, Massano J (2018) Approaching adaptive control in neurostimulation for Parkinson disease Autopilot on. *Neurology* 90:497-98

Weiss D, Pal GD (2018) Validating the targets for neurostimulation in essential tremor. *Neurology* 91:247-48

Wendeln AC, Degenhardt K, Kaurani L, Gertig M, Ulas T, Jain G, **Wagner J, Hasler LM, Wild K, Skodras A**, Blank T, Staszewski O, Datta M, Centeno TP, Capece V, Islam MR, Kerimoglu C, **Staufenbiel M**, Schultze JL, Beyer M, Prinz M, **Jucker M**, Fischer A, **Neher JJ** (2018) Innate immune memory in the brain shapes neurological disease hallmarks. *Nature* 556:332-38

Whelan CD, Altmann A, Botia JA, Jahanshad N, Hibar DP, Absil J, Alhusaini S, Alvim MKM, Auvinen P, Bartolini E, Bergo FPG, Bernardes T, Blackmon K, Braga B, Caligiuri ME, Calvo A, Carr SJ, Chen J, Chen S, Cherubini A, David P, Domin M, Foley S, Franca W, Haaker G, Isaev D, Keller SS, **Kotikalapudi R**, Kowalczyk MA, Kuzniecky R, Langner S, Lenge M, Leyden KM, Liu M, Loi RQ, **Martin P**, Mascalchi M, Morita ME, Pariente JC, Rodriguez-Cruces R, Rummel C, Saavalainen T, Semmelroch MK, Severino M, Thomas RH, Tondelli M, Tortora D, Vaudano AE, Vivash L, von Podewils F, Wagner J, Weber B, Yao Y, Yasuda CL, Zhang G, Bargallo N, Bender B, Bernasconi N, Bernasconi A, Bernhardt BC, Bluemcke I, Carlson C, Cavalleri GL, Cendes F, Concha L, Delanty N, Depondt C, Devinsky O, Doherty CP, **Focke NK**, Gambardella A, Guerrini R, Hamandi K, Jackson GD, Kalviainen R, Kochunov P, Kwan P, Labate A, McDonald CR, Meletti S, O'Brien TJ, Ourselin S, Richardson MP, Striano P, Thesen T, Wiest R, Zhang J, Vezzani A, Ryten M, Thompson PM, Sisodiya SM, Consortium UKBE, Grp EN-EW (2018) Structural brain abnormalities in the common epilepsies assessed in a worldwide ENIGMA study. *Brain* 141:391-408

Wilke C, Baets J, De Bleecker JL, Deconinck T, **Biskup S, Hayer SN**, Zuchner S, **Schule R**, De Jonghe P, **Synofzik M** (2018) Beyond ALS and FTD: the phenotypic spectrum of TBK1 mutations includes PSP-like and cerebellar phenotypes. *Neurobiology of Aging* 62**:**5

Wilke C, Bender F, Hayer SN, Brockmann K, Schols L, Kuhle J, **Synofzik M** (2018) Serum neurofilament light is increased in multiple system atrophy of cerebellar type and in repeat-expansion spinocerebellar ataxias: a pilot study. *Journal of Neurology* 265**:**1618-24

Wilke C, Rattay TW, Hengel H, Zimmermann M, Brockmann K, Schols L, Kuhle J**, Schule R, Synofzik M** (2018) Serum neurofilament light chain is increased in hereditary spastic paraplegias. *Annals of Clinical and Translational Neurology* 5**:**876-82

Wirsching HG, **Tabatabai G**, Roelcke U, Hottinger AF, Jorger F, Schmid A, Plasswilm L, Schrimpf D, Mancao C, Capper D, Conen K, Hundsberger T, Caparrotti F, von Moos R, Riklin C, Felsberg J, Roth P, Jones DTW, Pfister S, Rushing EJ, Abrey L, Reifenberger G, Held L, von Deimling A, Ochsenbein A, Weller M (2018) Bevacizumab plus nypofractionated raciotnerapy versus radiotherapy alone in elderly patients with glioblastoma: tie randomized, open-label, phase II ARTE trial. *Annals of Oncology* 29**:**1423-30

Wuttke TV, Markopoulos F, Padmanabhan H, Wheeler AP, Murthy VN, Macklis JD (2018) Developmentally primed cortical neurons maintain fidelity of differentiation and establish appropriate functional connectivity after transplantation. *Nature Neuroscience* 21**:**517-29

Yahia A, Elsayed L, Babai A, Salih MA, El-Sadig SM, Amin M, **Koko M**, Abubakr R, Idris R, Taha SOMA, Elmalik SA, Brice A, Ahmed AE, Stevanin G (2018) Intra-familial phenotypic heterogeneity in a Sudanese family with DARS2-related leukoencephalopathy, brainstem and spinal cord involvement and lactate elevation: a case report. *Bmc Neurology* 18**:**175

Yang Y, Zhao H, Boomsma DI, Ligthart L, Belin AC, Smith GD, Esko T, **Freilinger TM**, Hansen TF, Ikram MA, Kallela M, Kubisch C, Paraskevi C, Strachan DP, Wessman M, van den Maagdenberg AMJM, Terwindt GM, Nyholt DR, Int Headache Genetics C (2018) Molecular genetic overlap between migraine and major depressive disorder. *European Journal of Human Genetics* 26**:**1202-16

Yilmaz R, Strafella AP, **Bernard A, Schulte C**, van den Heuvel L, Schneiderhan-Marra N, Knorpp T, Joos TO, Leypoldt F, Geritz J, Hansen C, Heinzel S, **Apel A, Gasser T**, Lang AE, **Berg D, Maetzler W**, Marras C (2018) Serum Inflammatory Profile for the Discrimination of Clinical Subtypes in Parkinson's Disease. *Frontiers in Neurology* 9**:**9

Zaman SM, Mullen SA, Petrovski S, Maljevic S, Gazina EV, Phillips AM, Jones GD, Hildebrand MS, Damiano J, Auvin S, **Lerche H, Weber YG**, Berkovic SF, Scheffer IE, Reid CA, Petrou S (2018) Development of a rapid functional assay that predicts GLUT1 disease severity. *Neurology-Genetics* 4:e297

Zesiewicz TA, Wilmot G, Kuo SH, Perlman S, Greenstein PE, Ying SH, Ashizawa T, Subramony SH, Schmahmann JD, Figueroa KP, Mizusawa H, **Schols L**, Shaw JD, Dubinsky RM, Armstrong MJ, Gronseth GS, Sullivan KL (2018) Comprehensive systematic review summary: Treatment of cerebellar motor dysfunction and ataxia: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. *Neurology* 90**:**464-71

Ziemann U (2018) Neuer Stellenwert des PFO-Verschlusses in der klinischen Praxis. *Klinikarzt* 47**:**52-57

Zimmermann M, Wilke C, Schulte C, Hoffmann J, **Klopfer J**, Reimold M, **Brockmann K, Synofzik M** (2018) Biallelic Parkin (PARK2) mutations can cause a bvFTD phenotype without clinically relevant parkinsonism. *Parkinsonism & Related Disorders* 55**:**145-47

Zipser CM, Fullbier L, Beschorner R, Bosmuueller H, **Ziemann U**, Tatagiba MS, **Tabatabai G**, Bender B, Behling F (2018) Intraspinal intradural nodular fasciitis mimicking glioblastoma metastasis: a case report. *Folia Neuropathologica* 56**:**75-79

Zipser CM, Premoli I, Belardinelli P, Castellanos N, Rivolta D, Heidegger T, **Muller-Dahlhaus F, Ziemann U** (2018) Cortical Excitability and Interhemispheric Connectivity in Early Relapsing-Remitting Multiple Sclerosis Studied With TMS-EEG. *Frontiers in Neuroscience* 12:393

Zrenner C, Desideri D, Belardinelli P, Ziemann U (2018) Real-time EEG-defined excitability states determine efficacy of TMS-induced plasticity in human motor cortex. *Brain Stimul* 11**:**374-89

Zuchner S, Rebelo A, Abreu L, **Schule R**, Danzi M, Powell E, Isasi R (2018) Update on the genesis platform for innovative genomic analysis and collaboration. *Journal of the Peripheral Nervous System* 23:301

Zussy C, Gomez-Santacana X, Rovira X, De Bundel D, Ferrazzo S, **Bosch D, Asede D**, Malhaire F, Acher F, Giraldo J, Valjent E, **Ehrlich I**, Ferraguti F, Pin JP, Llebaria A, Goudet C (2018) Dynamic modulation of inflammatory pain-related affective and sensory symptoms by optical control of amygdala metabotropic glutamate receptor 4. *Mol Psychiatry* 23:509-20

Reviews

Bergmann TO (2018) Brain State-Dependent Brain Stimulation. *Frontiers in Psychology* 9:2108

Decard BF, Pham M, **Grimm A** (2018) Ultrasound and MRI of nerves for monitoring disease activity and treatment effects in chronic dysimmune neuropathies - Current concepts and future directions. *Clinical Neurophysiology* 129:155-67

Geisler T, **Mengel A, Ziemann U, Poli S** (2018) Management of Embolic Stroke of Undetermined Source (ESUS). *Drugs* 78:823-31

Grimm A, Allendoerfer J, Bischoff C, Buchner H, Decard B, Kaps M, Schelle T, Schulte-Mattler W, Walter U, Witte OW, Nedelmann M, Koehrmann M, Schminke U (2018) Position Paper of the German Society for Clinical Neurophysiology DGKN and the German Society for Ultrasound in Medicine DEGUM, Department of Neurology on the „Value of Nerve and Muscle Ultrasound in the Diagnosis of Neuromuscular Diseases". *Klinische Neurophysiologie* 49:236-37

Grimm A, Axer H (2018) Chronic immune-mediated Neuropathies - Diagnostics and Therapy. *Fortschritte Der Neurologie Psychiatrie* 86:439-50

Haeusler KG, Groschel K, Kohrmann M, Anker SD, Brachmann J, Bohm M, Diener HC, Doehner W, Endres M, Gerloff C, Huttner HB, Kaps M, Kirchhof P, Nabavi DG, Nolte CH, Pfeilschifter W, Pieske B, **Poli S**, Schabitz WR, Thomalla G, Veltkamp R, Steiner T, Laufs U, Rother J, Wachter R, Schnabel R (2018) Expert opinion paper on atrial fibrillation detection after ischemic stroke. *Clinical Research in Cardiology* 107:871-80

Hausler KG, Groschel K, Kohrmann M, Schnabel RB, Anker SD, Brachmann J, Bohm M, Diener HC, Doehner W, Endres M, Gerloff C, Huttner HB, Kaps M, Kirchhof P, Nabavi DG, Nolte CH, Pfeilschifter W, Pieske B, **Poli S**, Schabitz WR, Thomalla G, Veltkamp R, Steiner T, Laufs U, Rother J, Wachter R (2018) Position Paper on Atrial Fibrillation Detection After Ischemic Stroke Working Group Heart and Brain of the German Cardiac Society (DGK) and the German Stroke Society (DSG). *Aktuelle Neurologie* 45:93-106

Ilg W, Branscheidt M, Butala A, Celnik P, de Paola L, Horak FB, **Schols L**, Teive HAG, **Vogel AP**, Zee DS, Timmann D (2018) Consensus Paper: Neurophysiological Assessments of Ataxias in Daily Practice. *Cerebellum* 17:628-53

Jinnah HA, Albanese A, Bhatia KP, Cardoso F, Da Prat G, de Koning TJ, Espay AJ, Fung V, Garcia-Ruiz PJ, Gershanik O, Jankovic J, Kaji R, Kotschet K, Marras C, Miyasaki JM, Morgante F, Munchau A, Pal PK, Rodriguez Oroz MC, Rodriguez-Violante M, **Schols L**, Stamelou M, Tijssen M, Uribe Roca C, de la Cerda A, Gatto EM, Int Parkinson's Die M (2018) Treatable Inherited Rare Movement Disorders. *Movement Disorders* 33:21-35

Jucker M, Walker LC (2018) Propagation and spread of pathogenic protein assemblies in neurodegenerative diseases. *Nat Neurosci* 21:1341-49

Kellmeyer P, Grosse-Wentrup M, Schulze-Bonhage A, **Ziemann U**, Ball T (2018) Electrophysiological correlates of neurodegeneration in motor and non-motor brain regions in amyotrophic lateral sclerosis-implications for brain-computer interfacing. *Journal of Neural Engineering* 15:041003

Lang F, Pelzl L, **Hauser S**, Hermann A, Stournaras C, **Schols L** (2018) To die or not to die SGK1-sensitive ORAI/STIM in cell survival. *Cell Calcium* 74:29-34

Lerche H (2018) Synaptic or ion channel modifier? PRRT2 is a chameleon-like regulator of neuronal excitability. *Brain* 141:938-41

Recasens A, Ulusoy A, **Kahle PJ**, Di Monte DA, Dehay B (2018) In vivo models of alpha-synuclein transmission and propagation. *Cell and Tissue Research* 373:183-93

Rodriguez-Labrada R, Velazquez-Perez L, **Ziemann U** (2018) Transcranial magnetic stimulation in hereditary ataxias: Diagnostic utility, pathophysiological insight and treatment. *Clinical Neurophysiology* 129:1688-98

Roheger M, Kalbe E, **Liepelt-Scarfone I** (2018) Progression of Cognitive Decline in Parkinson's Disease. *Journal of Parkinsons Disease* 8:183-93

Rossi M, Anheim M, Durr A, Klein C, Koenig M, **Synofzik M**, Marras C, van de Warrenburg BP, Int Parkinson Movement D (2018) The Genetic Nomenclature of Recessive Cerebellar Ataxias. *Movement Disorders* 33:1056-76

Rotermund C, **Machetanz G, Fitzgerald JC** (2018) The Therapeutic Potential of Metformin in Neurodegenerative Diseases. *Frontiers in Endocrinology* 9:26

Schmidt-Wilcke T, Fuchs E, Funke K, Vlachos A, **Muller-Dahlhaus F**, Puts NAJ, Harris RE, Edden RAE (2018) GABA-from Inhibition to Cognition: Emerging Concepts. *Neuroscientist* 24:501-15

Schubert V, Auffenberg E, Biskup S, Jurkat-Rott K, **Freilinger T** (2018) Two novel families with hemiplegic migraine caused by recurrent SCN1A mutation p.F1499L. *Cephalalgia* 38:1503-08

Schwarz N, Uysal B, Rosa F, Loeffler H, Mau-Holzmann UA, Liebau S, **Lerche H** (2018) Generation of an induced pluripotent stem cell (iPSC) line from a patient with developmental and epileptic encephalopathy carrying a KCNA2 (p.Leu328Val) mutation. *Stem Cell Research* 33:6-9

Stuttgen MC, **Schwarz C** (2018) Barrel cortex: What is it good for? *Neuroscience* 368:3-16

Telleman JA, **Grimm A**, Goedee S, Visser LH, Zaidman CM (2018) Nerve ultrasound in polyneuropathies. *Muscle & Nerve* 57:716-28

Walker FO, Cartwright MS, Alter KE, Visser LH, Hobson-Webb LD, Padua L, Strakowski JA, Preston DC, Boon AJ, Axer H, van Alfen N, Tawfik EA, Wilder-Smith E, Yoon JS, Kim B-J, Breiner A, Bland JDP, **Grimm A**, Zaidman CM (2018) Indications for neuromuscular ultrasound: Expert opinion and review of the literature. *Clinical Neurophysiology* 129:2658-79

Books, book chapters and proceedings

Karnath H-O, Zihl J, Schenk T (2018). Neglect und andere räumliche Orientierungsstörungen. In: Therapie und Verlauf neurologischer Erkrankungen, 7. Auflage. Diener HC, Gerloff C, Dieterich M (eds). Verlag W. Kohlhammer, pp 282-292

Synofzik M, Németh AH (2018) Recessive ataxias. In: Handbook of Clinical Neurology – The Cerebellum: Disorders and Treatment. Manto M, Huisman T (eds). Elsevier Academic Press, pp 73-89

Thier P, Pomper JK (2018) Rehabilitation zerebraler Sehstörungen. In: Therapie und Verlauf neurologischer Erkrankungen, 7. Auflage. Diener HC, Gerloff C, Dieterich M (eds). Verlag W. Kohlhammer, pp 298-303

Yilmaz R, **Berg D** (2018) Transcranial B-Mode Sonography in Movement Disorders. In: Imaging in Movement Disorders: Imaging Applications in Non-Parkinsonian and Other Movement Disorders. Politis M (ed). Elsevier Academic Press, pp 179-212

List of Student Training in 2018

(In alphabetical order)

Lectures

(Summer Term/Winter Term)

Basic Neurobiology
Prof. Dr. Philipp Kahle (coordinator), Dr. Jonas Neher, Jun.-Prof. Dr. Dr. Michela Deleidi, Dr. Henner Koch, Dr. Sven Geisler, Prof. Dr. Ingrid Ehrlich, PD Dr. Daniel Weiß
Curriculum Molecular Medicine

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

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)

BioRobotics
Dr. Daniel Häufle
Faculty of Science (Informatics)

Cell Imaging Techniques
Dr. Henner Koch, Dr. Angelos Skodras et al.
Graduate Training Centre of Neuroscience

Computational Motor Control
Dr. Winfried Ilg, Dr. Daniel Häufle
Graduate Training Centre of Neuroscience

Diagnosis of Brain Death
Dr. Sven Poli
Medical Faculty

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, PD Dr. Felix Bischof, 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

Introduction to Clinical Neurology
Dr. Annerose Mengel, Prof. Dr. Tobias Freilinger, PD Dr. Daniel Weiß, PD Dr. Markus Krumbholz
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
***D**r Sascha Dammeier (Institute for Ophthalmic Research), PD Dr. Christian Johannes Gloeckner*
Medical Faculty (S05VMEDTEC10, winter term only)

Methods in Neuropsychology
PD Dr. Marc Himmelbach, Christoph Sperber,
Graduate Training Centre of Neuroscience

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

Neurochemistry and Neurotransmitters
Prof. Dr. Philipp Kahle
Graduate Training Centre of Neuroscience

Neurocritical Care
Dr. Florian Müller-Dahlhaus
Winter School Critical Care
(Society of Neurocritical Care Medicine)

Neurogenesis, Excitability, Plasticity and Neurostimulation
Dr. Christoph Zrenner
Medical Technology – Human Biology IV

Neurogenetic Research
Prof. Dr. Ludger Schöls
Medical Faculty

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
Dr. Sven Poli
Medical Faculty

Neurophysiology
Prof. Dr. Cornelius Schwarz, Dr. Christine Pedroarena
Graduate Training Centre of Neuroscience

Multimodal Therapy of Parkinson's Disease for Pharmacists
PD Dr. Rebecca Schüle
Faculty of Science

Perception, Cognition & Behavior
PD Dr. Marc Himmelbach, Prof. Dr. Ziad Hafed, 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

Ringvorlesung Wissenschaflichkeit (Neuroscience)
Prof. Dr. Mathias Jucker
Medical Faculty

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

Am Rande des Sprachverarbeitungsnetzwerks - emotions and non-literal meanings
Prof. Dr. Ingo Hertrich
General Linguistics (Philosophical Faculty) and Cognitive Science (Faculty of Science)

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

Beyond Broca and Wernicke – Update of the Language Network
Prof. Dr. Ingo Hertrich
General Linguistics (Philosophical Faculty) and Cognitive Science (Faculty of Science)

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

Clinic, diagnosis and therapy of inflammatory diseases of the nervous system
PD Dr. Felix Bischof
Medical Faculty

Cognitive Disorder
PD Dr. Inga Liepelt-Scarfone
Department of Psychology (Faculty of Science)

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
Department of Psychology (Faculty of Science)

Geriatric-neurological-psychiatric Case Conference
Prof. Dr. Gerhard W. Eschweiler (UKT), Prof. Dr. Matthis Synofzik, PD Dr. Daniel Weiß, Dr. Günther Schnauder (UKT)
Medical Faculty

Hands-on rare neurological diseases: Hospitation in ZSE clinics
Prof. Dr. Ludger Schöls
Medical Faculty

Hertie Lunch Seminar
Prof. Dr. Uwe Ilg
Medical Faculty

i-KLiC
Prof. Bornemann, PD Dr. Markus Krumbholz et al.
Medical Faculty

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
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
Medical Faculty Neuroscience

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

LSC Wissenschaftlichkeit - Projekt "Kongruenz motorischer funktioneller Netzwerke in resting-state und task-basierter funktioneller MRT"
PD Dr. Marc Himmelbach
Medical Faculty

LSC Wissenschaftlichkeit – Projekt "Kongruenz visueller funktioneller Netzwerke in resting-state und task-basierter funktioneller MRT"
PD Dr. Marc Himmelbach
Medical Faculty

Machine Learning 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
Prof. Dr. Ulrike Naumann
Medical Faculty

Neurobiological Monday Seminar
Prof. Dr. Uwe Ilg
Medical Faculty

Neurocolloquium
Prof. Dr. Hans-Peter Thier
Graduate Training Centre of Neuroscience /
Medical Faculty

Neurohistology and -morphology
Block course of the Department of Cellular Neuology
Prof. Dr. Mathias Jucker
Graduate Training Centre of Neuroscience

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, Dr. Markus Kowarik, PD Dr. Markus Krumbholz, Dr. Annerose Mengel et al.
Medical Faculty

Seminars and Courses

(Summer Term/Winter Term)

Neurological Seminar
Prof. Dr. Ludger Schöls, PD 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. Kathrin Brockmann, Dr. Annerose Mengel
Medical Faculty

Neuropathological Case Meeting
Prof. Dr. Manuela Neumann (Dept. of Neuropathology, UKT)
Medical Faculty

Neurophysiology Seminars
and De-Briefing of Practical Course
Dr. Ulrike Hedrich, Dr. Henner Koch
(coordinator: Prof. Dr. Olga Garaschuk)
Medical Faculty

Neuropsychological Disorders of Dementia I
PD Dr. Inga Liepelt-Scarfone
Department of Psychology (Faculty of Science)

Neuropsychologie der Demenz II
PD Dr. Inga Liepelt-Scarfone
Department of Psychology (Faculty of Science)

Oncolytic Viruses as Cancer Therapeutic Drugs
Prof. Dr. Ulrike Naumann
Medical Faculty

OSCE
PD Dr. Markus Krumbholz et al.
Medical Faculty

Practical Course of Optical Imaging
Dr. Angelos Skodras
Medical Faculty Neurophysiology

Practical Neurobiology
Prof. Dr. Ziad Hafed
Faculty of Science (Biology)

Retreat IZKF Promotionskolleg
Prof. Dr. Ulrike Naumann
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

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

IMPRINT

Published by
The Center of Neurology
University Hospital of Neurology
Hoppe-Seyler-Straße 3
and
Hertie Institute for Clinical Brain Research
Otfried-Müller-Straße 27
D-72076 Tübingen

Coordination
Prof. Dr. Thomas Gasser and Dr. Astrid Proksch

Editing & Setting
Simone Eberle, healthytranslations.com

Printed by
Druckerei Maier GmbH, Rottenburg am Neckar

Concept & Design
Carolin Rankin, Rankin Identity

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN

Hertie-Institut
für klinische Hirnforschung

Universitätsklinikum
Tübingen