



Klinische Neurowissenschaften Bern

# Research @ Department of Neurology

Dear Reader,

With this newsletter, we have the pleasure to give you insights into ongoing research activities at our Department and to portrait the people behind it. In addition, we would like to inform you about upcoming events, recent publications and open calls for proposals.

We hope you will enjoy reading it!

The Research Board of the Department of Neurology

# January / February 2021

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# Just Asking...

### Dr. Carolina Gutierrez Herrera



### What are your main research interest?

My main research interest focuses on how neurons and glial cells interact, how they form circuits to modulate cognition and sleepdependent processes. Sleep has been described in many species ranging from hydras to humans, and it is tightly associated with brain and body physiology that are essential for the survival and well-being of the organism. Yet, the cellular basis underlying sleep control and its functions remain elusive and a matter of intense debate.

In this context, my recent research projects have identified neuronal

circuits controlling eye-movement during rapid-eye movement sleep (or dreaming) and the mechanisms of spindles, a sleep rhythm important for sleep stability and sleep-dependent memory consolidation 1,2,3,4. From these advances, my ongoing research projects aim at understanding of the role of glial cells in brain dynamics supporting cognition and sleep, in particular in neurological and neuropsychiatric disorders. Particularly, the link between sleep, in particular sleep oscillations, with neurological (e.g. thalamic strokes) and neuropsychiatric disorders such as mood disorders and schizophrenia.

### What is your motivation to do research?

My motivations are both scientific and personal. My scientific motivation is to learn about the neuronal-glial coding of behaviours and its role in plasticity, especially in regards to brain disorders, with the goal that this knowledge will translate into novel targets and therapeutic avenues for novel treatments of neurological and neuropsychiatry disorders including cognitive and mood disorders. In Bern, I have the privilege to be part of very active and interdisciplinary network of neuroscientists and clinicians that aim at bridging experimental, translational and clinical research on the mechanisms of brain disorders including sleep, stroke, or schizophrenia and depression. This is a unique environment that allow direct interactions translations of results from basic research.

On the personal side, my international career has faced many challenges related to gender equity and minorities, yet it has been a rich and insightful path. The training, mentorship





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and collaborations with outstanding scientists in Mexico (Prof A Darzon and Prof CTrevino), the United States of America (Prof P Lammers and Prof E Serrano), Canada (Profs M Colicos, R Thomson, J Bains, B Stell, JC Lacaille, R. Robitaille, A Adamantidis) and now in Switzerland (Dr. Markus Schmidt, Profs C. Bassetti, C. Nissen, W. Strik, K. Do and M. Celio) not only represent a strong drive for science and discovery, but they have also ignited my motivation to support young scientists in developing their research projects using state-of-the-art techniques in an *interdisciplinary and international context and vision*.

**1. Herrera CG**, Cadavieco MC, Jego S, Ponomarenko A, Korotkova T and A. Adamantidis. Hypothalamtic feedforward inhibition of thalamocortical network controls arousal and cosciousness. Nat. Neurosci. vol.19, no.2, pp.290-298, Feb 2016. <u>10.1038/nn.4209</u>

2. Bandarabadi M† **Herrera GC**†, Gent TC†, Bassetti C., Schindler K, Adamantidis AR. A role for spindles in the onset of rapid eye movement sleep. A role for spindles in the onset of rapid eye movement sleep. Nat Comm., vol 11, 5247 Oct 2020. † Co-first authors. <u>https://doi.org/10.1038/s41467-020-19076-2</u>

3. Herrera CG<sup>+</sup> & Girard F<sup>+</sup>, Bilella A, Gent, T.C, Roccaro-Waldmeyer D.M, Adamantidis A, and Celio, M.R. Neurons in the Nucleus papilio contribute to the control of eye movements during REM sleep. Nat. Comm., vol 10 (1) p. 5225. Nov 2019. <sup>+</sup> Co-first authors <u>https://doi.org/10.1038/s41467-019-13217-y</u>

4. Oesch LT, Gaeza M, Gent TC, Bandarabadi M, **Herrera CG**, Adamantidis AR. Reactivation of hypothalamic inhibitory neurons during REM sleep consolidates appetite. PNAS, vol 117 (32) 19590-19598. July 2020. <u>s://doi.org/10.1073/pnas.1921909117</u>

Dr. Carolina Gutierrez Herrera is a Principal Investigator at the Zentrum für Experimentelle Neurologie (ZEN), at the Department of Neurology, Inselspital, Bern University Hospital and the Department for BioMedical Research (DBMR), University of Bern, Switzerland. Contact: carolina.gutierrez@dbmr.unibe.ch

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# Congratulations

# (1) Promotions



# Fabian Balsiger, PhD

has successfully completed his PhD with "summa cum laude" at the Gratuate School for Cellular and Biomedical Sciences of the University of Bern.

(2) Awarded Grants



PD Dr. med. Mirjam Heldner (Main Applicant)

Funding Institution:	sitem-Insel Support Funds (SIFS) (Link)
Title:	BISS – Bernese Intracranial Stenosis Study
Awarded Grant:	CHF 70'000



# Prof. Dr. phil. nat. Smita Saxena (Main Applicant)

Funding Institution:	Synapsis Foundation (Link)
Title:	Sleep as an opportunistic window for memory improvements in AD/FTD/FT-ALS
Co-Applicant:	Prof. Antoine Adamantidis
Awarded Grant:	CHF 257'280





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Prof. Dr. phil. nat. Smita Saxena (Main Applicant)

**Funding Institution:** 

Title:

Innomedica (Link)

Efficacy of compound TLN in ALS- 2nd pilot

CHF 100'000

study

Awarded Grant:

Prof. Dr. med. Claudio L. Bassetti

and his group:

Dr.med. Irina Filchenko

Dr.med. Martijn Dekkers

Dr.med. Markus Schmidt

Dr.phil. Simone Duss

Funding Institution: European Stroke Research Foundation – esrf (Link)

Title:The role of sleep in the evolution of cognitive functioning after thalamic<br/>and basal ganglia stroke

Awarded Grant: EUR 47'328







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### (3) Awarded Prizes



# Prof. Dr. med. Claudio L. Bassetti

Prof. Bassetti has been awarded the Gheorgu Marinescu Medal by the Romanian Neurological Society.





# Dr. med. Maxime Baud

(together with Dr. Timothée Priox, University of Geneva)

has been awarded the Alfred-Hauptmann-Prize for Epilepsy Research 2021 of the Swiss League against Epilepsy (Link) for the Priox et al. paper in Lancet Neurology (see below). The prize sum amounts to EUR 10'000.





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### (4) Outstanding Publications



**Dr. med. Maxime Baud** (Last Author)



Epilepsy 'weather forecasts' could let patients plan lives around fluctuations in seizure risk

### **Publication details**

Proix T, Truccolo W, Leguia MG, Tcheng TK, King-Stephens DK, Rao VR, Baud MO. *Forecasting seizure risk in adults with focal epilepsy: a development and validation study.* Lancet Neurol. 2020 Dec 17;S1474-4422(20)30396-3. doi:10.1016/S1474-4422(20)30396-3.

Media Release Insel Gruppe

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Media Release Eurek Alert UC San Francisco



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Universitäre Psychiatrische Dienste Bern	Psychiatrie
	Neuroradiologie



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# (5) Other Highlights



- Newsweek ranks the leading hospitals in 21 countries and the world's best specialized hospitals.
- The Department of Neurology has been listed as one of the world's best specialized hospitals 2021.

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# Call for Grants and Prizes

# **CTU Research Grants**

# *<b>WINSELGRUPPE*

Focus of the grant:	Clinical research; Protected Research Time; salary for doctoral students or study nurses
Eligible for:	Young researchers

- Aim at excellent MD's, doing clinical research at Insel Gruppe.
- Applicants must have an employment of at least one year at Insel Gruppe, be under the age of 40 and have no habilitation yet.
- Funding entails a maximum of CHF 80'000 staff salary and a maximum of CHF 8'000 for consumables.
- Funding can be used for protected research time of the applicants, or as staff salary for doctoral students and/ or study nurses.
- Submission Deadline at DLF: 31 March 2021 Link

# SNF Project Funding Exercise Rational Fonds Schweizerischer National Fonds Schweizerischer National Fonds Focus of the grant: Basic and clinical research Eligible for: Advanced researchers

- With its project funding scheme, the SNF enables researchers to independently conduct research projects with topics and goals of their own choice.
- Applicants can apply for funding of research costs and staff salaries (not their own salary), as well as of scientific cooperation, networking and communication.
- The funding period ranges from one to four years, with grants starting at CHF 50'000 (minimum amount). The SNF recommends that researchers focus on one project and plan it for a four-year period.
- Applicants with a doctorate must have obtained the latter four years before the submission date of the application. Applicants without a doctorate must generally have completed three years of research work as their main source of income.
- Submission Deadline: 1 April 2021, 17:00 Link



- As a means to promote interdisciplinary research the University of Bern is inviting applications for interdisciplinarity grants.
- With "UniBE ID Grants" as start-up financing, leaders of research groups should be better able to prepare for applications to national and international programs (typically SNF Synergia or ERC Synergy).
- The sum pledged for each application is generally between CHF 75'000 and 150'000..
- Submission Deadline: 29 August 2021 Link

### **Other Open Calls for Proposals**

- Bridge Scholarship in Translational Research in Neurology
   Deadline: 28 February 2021 Link
- Excellence in Diversity Fellowship
   Deadline: 28 February 2021 Link
- Research Grant in Neurology
   Deadline: 28 February 2021 Link
- UniBE Doc.Mobility
   Deadline: 1 March 2021 Link
- UniBE 120%-Care Grant
   Deadline: 1 March 2021 Link
- Foundation for Laboratory Medicine
   Deadline: 1 March 2021 Link
- BRIDGE Discovery
   Deadline: 1 March 2021 (Letter of Intent); Deadline: 17 May 2021; 17:00 Link
- JPND Research EU Joint Programme Neurodegenerative Disease Research Deadline pre-proposal: 2 March 2021; Deadline proposal: 29 June 2021 Link





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- ERA-NET Neuron: Call for Proposals for Transnational Research Projects on Neurodevelopmental Disorders
   Deadline for pre-proposal: 9 March 2021 Link
- CTU-Forschungs-Grants
   Deadline: 31 March 2021; internal deadline Research Board: 15 March 2021 Link
- SNF Project Funding
   Deadline: 1 April 2021 Link
- UniBE Promotion Fund
   Deadline: 13 April 2021 Link
- Berne University Research Foundation
   Deadline: 26 April 2021 Link
- SNF R'Equip
   Deadline: 2 May 2021 Link
- De Barjac Prize
   Deadline: 1 June 2021 Link
- SNG Scholarship 2021
   Deadline: 31 July 2021 Link
- SNG Prize 2021
   Deadline: 31 July 2021 Link
- UniBE ID Grants
   Deadline: 29 August 2021 Link

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# **Important Dates**

- CNB Brain Week, 15 18 March 2021, online event; Link
- Colloque Interville (Lausanne, Lugano, Bern), 28 May 2021, 14.30–18.00, Lugano; Link
- World Sleep Forum: 5th Think Tank on neurodegeneration related to sleep, 27–29 May 2021; virtual meeting. <u>Flyer</u>
- 7<sup>th</sup> Congress of the European Academy of Neurology virtual congress, 19 22 June 2021; Link
- SNS Academy, 9th module, 1-3 July 2021, Inselspital Bern, Link

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# Support

# 1) Topic of the Month: Check your Site Inspection Readiness

A clinical trial can be inspected by Swissmedic at the trial site at any time. Such GCP inspections focus on:

- ensuring the safety and personal rights of study participants,
- data integrity and validity,
- compliance with applicable regulations (GCP, HFV, KlinV and SOPs),
- whether the trial is being conducted in accordance with the scientific criteria for quality and integrity.

The announcement of an inspection is usually made **4-6 weeks before** the scheduled inspection date.

The following are checked during the inspection:

- premises (lockable)
- equipment (incl. validations, calibrations)
- documents
- records (patient files)
- quality assurance system (SOPs)
- other relevant resources at the investigational site and participating services (e.g. laboratory, pharmacy)

Prior to an inspection, all documentation should be prepared and reviewed including the ISF or TMF. In general, it is better to always be inspection ready with timely filing and regular reviews than to catch up just before the inspection.

The inspector will check: (list based on frequent findings by authorities but **<u>not</u> conclusive**)

- Is the study documentation in the **ISF/TMF** complete with all relevant GCP essential documents and up to date?
- Informed consent of study participants
  - o Are all consent forms available in original and completely filed (not only signature pages)?
  - Are only correct and current versions of the consent forms used?
  - Is the signature and date of the study participant in the participant's own hand and the investigator has signed after the participant?
  - Has consent been given prior to study examinations and interventions, and sufficient time was granted for decision?
  - Is the informed consent process documented in the medical record including date and time of discussion, questions from the patient and verification of the inclusion & exclusion criteria?
  - o If discussion and consent are on the same day is the time of day of consent documented?
  - If relevant new information required re-consenting, was a KEK-approved Addendum to the original form signed by the patient? Best not multiple consents.
- Adverse events appropriately addressed and reported
  - Were the safety assessments carried out according to the protocol? If applicable, are AEs fully and correctly recorded and grading and relationship to treatment documented in source data?







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- Are the criteria for SAEs correctly applied and all SAEs documented and reported in a timely manner and by a physician?
- Were there any problems/discrepancies related to recording and reporting of SAEs?
- Are emergency envelopes (if blinded) complete and intact?
- o Are SUSAR reports, ASRs and safety information acknowledged and filed?
- How does the **PI** retains control and **oversight** of the conduct of the study?
  - Is there a communication plan? Are study meetings documented?
  - Are documents timely signed? Are e.g. laboratory printouts signed before treatment clearance?
- Is study staff appropriately qualified and trained and the delegation log and training logs properly completed, filed and signed?
  - Are all study staff and all study tasks on the delegation log and authorised before start date?
  - Are the timelines for training  $\rightarrow$  authorisation PI signature  $\rightarrow$  start date plausible?
  - When leaving the team, is the end date entered?
  - Is there documentation for the qualification of study staff (e.g. CVs, recognised GCP-certificates)? Is training of study staff (e.g. protocol, equipment, software, study procedures) correctly conducted and documented? Do training logs reflect training of amendments and safety relevant information (IB, SUSARs)?
- Are **protocol** and all protocol amendments reviewed and approved by the EC, signed and filed? Is there a procedure for implementing amendments?
  - Are protocol procedures properly and timely implemented?
  - o Are all included study participants eligible according to protocol criteria?
  - Are treatment interruptions or discontinuations properly documented?
  - Were there protocol violations and are they properly documented and preventive measures taken?
- Are there shortcomings in the calibration and maintenance of equipment on site?
- Do the CRFs reflect the source data?
  - Are the patient records and other source data defined in a source data location form, complete, available and adequately maintained?
  - o Are there procedures for source-data-verification and corrections?
  - Is concomitant medication adequately documented?
  - o Is storage/archiving of source data and CRFs secure?
  - Are access conditions incl. audit trail for e-filed verifiable?
- Are study test products controlled and documented?
  - Is drug accountability coherent? Overall and per patient? Proof of receipt (shipping documents) and use available? Is traceability of a batch back to the patient ensured?
  - Are required transport and storage conditions fulfilled (lockable, access-controlled, temperature-controlled)?
  - Is complete temperature documentation available? Daily control with calibrated min-max-thermometer also for RT storage? And how was the response to deviations?
  - o Are IMPs labelled and controlled against, mix-up and use after expiry date?
  - Are quality complaints documented and correctly addressed?
  - Are IMPs correctly returned to sponsor or destroyed? Are destruction certificates available?
- Were **samples** correctly collected, labelled, prepared (e.g. centrifugation), stored (e.g. temperature control, access) and shipped (e.g. conform packaging)
- Were there breeches of patient **confidentiality** (e.g. identity of patient on CRF or on SAE sent to sponsor, patient name on IMP returned to sponsor)
- Is there a quality management system in place?
  - Are there SOPs for study conduct available, up-to-date and trained?
  - Are the study procedures compliant with the SOPs?
  - o Does the study documentation adhere to Good Documentation Practice?



For questions, please contact Susan Baumann-Barltrop, <u>susan.baumann-</u>barltrop@insel.ch.

2) Other News

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#### FNSNF SNF: Open research data: which data repositories Schweizerischer Nationalfonds zur Förderung der wissenschaftlichen Forschung can be used?

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To support researchers in their search for suitable platforms, the SNF has published a list of data repositories that meet the ORD policy criteria. FAIR is a set of guiding principles to make data Findable, Accessible, Interoperable and Re-usable. Finding the "perfect" repository providing all necessary features to host FAIR data can be challenging. Thus, the SNF decided to define a set of minimum criteria that repositories have to fulfil to conform with its ORD policy. Link

# 3) Training

**University Library Trainings** 

# Writing Lab – Data Management Plan

Organized by the University Library Bern, the Writing Labs – Data Management Plan (DMP) offer support for researchers who have to write a DMP in the course of their SNF grants. The Writing Labs are free of charge for employees of Inselspital und the University of Bern.

Tuesday, 2 March 2021, 13:00 – 15:00, zoom-meeting •

# Link and Registration

# Open Science workshops: Open Access Publishing and Research Data Management

- **9 March 2021** (14:15 17:00): Open Access Publishing Link •
- 14 April 2021 (10:00 11:00): Avoiding Predatory Publishers and Conferences Link
- 26 April 2021 (9:00 17:00): Introduction to research data management Link ٠

# Open Access and Open Data requirements by the SNF

20 April and 22 April 2021 (14:00 – 16: 00): Life Sciences and Medicine Link •

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# **CTU Trainings:**

# Clinical Investigators I: Basic GCP & clinical research training

This is a course split in two parts. The first part consists of self-learning and home-based exercises. For the second part, participants will attend the lectures and workshops. The course is designed to introduce basic concepts of patient-oriented clinical research to health care professionals involved in the recruitment of study participants.

- Tuesday, 20 + 27 April 2021
   2 half days: 8:15-12:25 (on 20 April) and 13:25-17:30 (on 27 April)
   Date for voluntary exam: 4 May 2021, 14:00 15:30 (to get 1.0 ECTS)
- Tuesday, 17 + 24 August 2021

2 half days: 8:15-12:25 (on 17 August) and 13:25-17:30 (on 24 August) Date for voluntary exam: 31 August 2021, 14:00 - 15:30 (to get 1.0 ECTS)

Tuesday, 12 October 2021

 full day: 8:15-17:30
 Date for voluntary exam: 19 October 2021, 14:00 - 15:30 (to get 1.0 ECTS)

Link and Registration

# Clinical Investigators II: Advanced GCP & clinical research training

This is a course which aims at providing especially sponsor-investigators and principal investigators with the knowledge to set-up their own project.

- Tuesday, 18 Mai 2021
   1 full day: 8:15-17:30
   Date for voluntary exam: 25 Mai 2021, 14:00 15:30 (to get 0.5 ECTS)
- Tuesday, 7 + 14 September 2021

2 half days: 8:15-12:25 (on 7 September) and 13:25-17:30 (on 14 September) Date for voluntary exam: 22 September 2021, 14:00 - 15:30 (to get 0.5 ECTS)

Tuesday, 16 + 23 November 2021
 2 half days: 8:15-12:25 (on 16 November) and 13:25-17:30 (on 23 November)
 Date for voluntary exam: 30 November 2021, 14:00 - 15:30 (to get 0.5 ECTS)

Link and Registration



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### GCP Refresher for clinical research

This course is aimed at providing a refresher training to clinical investigators with the essential knowledge of Good Clinical Practice (GCP) and of other regulatory and ethical requirements, and the skills for contributing to clinical trials.

The GCP Refresher course is split in four parts, whereas each part of the course is held as a seperate CTU Lecture.

Lecture 1: consists of the basic principles and study project required documentation.

Lecture 2: addresses study preparation and conduct.

Lecture 3: continues on study conduct and project closure.

Lecture 4: is kept flexible and will address additional learning contents such as upcoming regulatory changes or key topics in clinical research.

### Dates 2021:

- Lecture 1: Wednesday, 17th March 2021, 12.45-13.30, online via zoom
- Lecture 2: Wednesday, 21st April 2021, 12.45-13.30, online via zoom
- Lecture 3: Wednesday, 19th May 2021, 12.45-13.30, online via zoom
- Lecture 4: Wednesday, 16th June 2021, 12.45-13.30, online via zoom

### Evening Round:

- Lecture 1: Wednesday, 29th September 2021, 17.00-17.45, online via zoom
- Lecture 2: Wednesday, 27th October 2021, 17.00-17.45, online via zoom
- Lecture 3: Wednesday, 24h November 2021, 17.00-17.45, online via zoom
- Lecture 4: Wednesday, 8th December 2021, 17.00-17.45, online via zoom

Link and Registration

### **REDCap Database Implementation**

The course will give an introduction to the Clinical Data Management System REDCap and is designed for persons



who plan to set up their own study in REDCap. After the course researchers will be able to set up their own database in REDCap. Target audience: Clinical Researchers, Study Nurses and all persons who would like to set up their own study in REDCap.

### **Next Training Dates**

- Thu, 11. MAR 2021, 15.00-17.00, Online Deutsch
- Thu, 08. APR 2021, 15.00-17.00, Online English
- Thu, 06. MAY 2021, 15.00-17.00, Online Deutsch
- Thu, 10. JUN 2021, 15.00-17.00, Online English





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Additional dates will follow. Until further notice, all REDCap courses will be offered online. The course participants will receive a personal e-mail with specific instructions on how to login to the digital class room before the course is held.

Link and Registration

### Introduction to Stata

SIGIC Data Analysis and Statistical Software

Stata is intensively used in the medical

science, both for statistical analyses and for supporting data managers and monitors. In this workshop we will learn how to use Stata step-by-step: the looks, basics, data import/export, labelling/formatting, data manipulation, good practices, help, and essential statistics. The course is open for clinical researchers of the Inselspital Bern and the staff of the Medical Faculty of the University of Bern. It is not available for external participants.

- Tuesday, 9 + 16 March 2021, 13:00 17:00
- Venue: ISPM; Mittelstrasse 43, 3012 Bern
- Costs: Internal participants: CHF 30.00

Link and Registration

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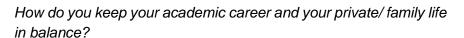
# Gender Equality and Diversity

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If you come across interesting news and/ or would like to read about a specific topic related to gender equality and diversity, please let us know (<u>chantal.kottler@insel.ch</u>).

### Let's Talk! Dr. med. Thomas Meinel



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Defining one of both as the top priority helps in case of inner conflict. Home office and digital availability are both a blessing and a curse for the compatibility, but some separation with "protected family time" is necessary. Establishing support by friends, especially if the grandparents are far away or unavailable. Good organization, teamwork and setting realistic goals. Nevertheless, it remains a constant struggle, especially since there are two careers involved. We should all fight and vote to reduce inequities for families in both domains.

# Equal Opportunities Measures of the Faculties

The faculties and centres of the University of Bern take measures to promote equal opportunities in their respective structures and cultures. For the new phase 2021-24, they have been commissioned by the Executive Board of the University of Bern to focus on topics such as physical and mental impairments, age, ethnic origin, sexual orientation, social origin or gender identity, in addition to their previous efforts to promote gender equality.

All faculties and centers adopted new equal opportunities schemes for 2021-24, among them the Faculty of Medicine, as well as ARTORG: Link

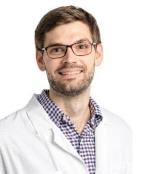
# **Prevention against Sexual Harassment**

# 30.04. - 07.05.2021 Save the date: Action week «Who comes too close goes too far!»

Prevention campain against sexual harassment at the University of Bern. Different events will take place during the whole week. A detailed program will follow. Link



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# SNF to introduce quotas to promote gender equality in research



Gender equality is a prime concern of the Swiss National Science Foundation. To offer additional visibility to women in academia, it is introducing gender quotas in its evaluation bodies with immediate effect. According to the new rules, men and women each need to hold a share of at least 40 per cent in the Research Council and the Presiding Board. In commissions focussing on a specific field, the quota is adapted to the respective research area. Link

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# **Recent Publications**

# **Research on COVID-19**

- Beghi E, Helbok R, Crean M, Hsiang-Yi Chou S, McNett M, Moro E, Bassetti C, EAN Neuro-COVID Task Force. The European Academy of Neurology COVID-19 registry (ENERGY): an international instrument for surveillance of neurological complications in patients with COVID-19. Lancet Neurol. Eur J Neurol. 2020 Nov 21;10.1111/ene.14652. doi:10.1111/ene.14652.
- 2) Cuffaro L, Carvalho V, Di Liberto G, Klinglehoefer L, Sauerbier A, Garcia-Azorin D, Tábuas-Pereira M, Vashchenko N, Moro E, Bassetti CLA. Neurology training and research in the COVID-19 pandemic: a survey of the Resident and Research Fellow Section of the European Academy of Neurology. Eur J Neurol. 2020 Dec 23. doi:10.1111/ene.14696.
- Zis P, Artemiadis A, Bargiotas P, Nteveros A, Hadjigeorgiou GM. Medical Studies during the COVID-19 Pandemic: The Impact of Digital Learning on Medical Students' Burnout and Mental Health. Int J Environ Res Public Health. 2021 Jan 5;18(1):349. doi: 0.3390/ijerph18010349.

# Stroke

- de Havenon A, Narata AP, Amelot A, Saver JL, Bozorgchami H, Mattle HP, Ribo M, Andersson T, Zaidat OO, ARISE II investigators. *Benefit of endovascular thrombectomy for M2 middle cerebral artery occlusion in the ARISE II study*. J Neurointerv Surg. 2020 Nov 20;neurintsurg-2020-016427. doi:10.1136/neurintsurg-2020-016427.
- Dobrocky T, Piechowiak EI, Volbers B, Slavova N, Kaesmacher J, Meinel TR, Arnold A, Fischer U, Jung S, Gralla J, Mordasini P, Heldner MR. Treatment and Outcome in Stroke Patients With Acute M2 Occlusion and Minor Neurological Deficits. Stroke. 2021;52:00–00. doi:10.1161/STROKEAHA.120.031672.
- Hajdu SD, Kaesmacher J, Michel P, Sirimarco G, Knebel JF, Bartolini B, Kurmann CC, Puccinelli F, Mosimann PJ, Bonvin C, Arnold M, Niederhäuser J, Eskandari A, Mordasini P, Gralla J, Fischer U, Saliou G. Machine-learning-based outcome prediction in stroke patients with middle cerebral artery-M1 occlusions and early thrombectomy. Eur J Neurol. 2020 Nov 21. doi:10.1111/ene.14651.
- 4) Hamann J, Herzog L, Wehrli C, Dobrocky T, Bink A, Piccirelli M, Panos L, Kaesmacher J, Fischer U, Stippich C, Luft AR, Gralla J, Arnold M, Wiest R, Sick B, Wegener S. Machinelearning-based outcome prediction in stroke patients with middle cerebral artery-M1 occlusions and early thrombectomy. Eur J Neurol. 2020 Nov 21. doi:10.1111/ene.14651.
- Seiffge DJ, Meinel T, Purrucker JC, Kaesmacher J, Fischer U, Wilson D, Wu TY. Recanalisation therapies for acute ischaemic stroke in patients on direct oral anticoagulants. J Neurol Neurosurg Psychiatry. 2021 Feb 4;jnnp-2020-325456. doi:10.1136/jnnp-2020-325456.



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Klinische Neurowissenschaften Bern

- Seners P, (...), Heldner HR, et al. Prediction of Early Neurological Deterioration in Individuals With Minor Stroke and Large Vessel Occlusion Intended for Intravenous Thrombolysis Alone. JAMA Neurol. 2021 Jan 11;e204557. doi:10.1001/jamaneurol.2020.4557.
- 7) Kaesmacher J, Meinel TR, Kurmann C, Zaidat OO, Castonguay AC, Zaidi SF, Mueller-Kronast N, Kappelhof M, Dippel DWJ, Soudant M, Bracard S, Hill MD, Goyal M, Strbian D, Heiferman DM, Ashley W, Anadani M, Spiotta AM, Dobrocky T, Piechowiak EI, Arnold M, Goeldlin M, Seiffge D, Mosimann PJ, Mordasini P, Gralla J, Fischer U. Safety and efficacy of intra-arterial fibrinolytics as adjunct to mechanical thrombectomy: a systematic review and meta-analysis of observational data. J Neurointerv Surg. 2021 Jan 29;neurintsurg-2020-016680. doi:10.1136/neurintsurg-2020-016680.
- 8) Kaesmacher J, Meinel TR, Nannoni S, Olivé-Gadea M, Piechowiak EI, Maegerlein C, Goeldlin M, Pierot L, Seiffge DJ, Pereira VM, Heldner MR, Grunder L, Costalat V, Arnold M, Dobrocky T, Gralla J, Mordasini P, Fischer U, BEYOND-SWIFT Investigators. Bridging May Increase the Risk of Symptomatic Intracranial Hemorrhage in Thrombectomy Patients With Low Alberta Stroke Program Early Computed Tomography Score. Stroke. 2021 Jan 28;STROKEAHA120030508. doi:10.1161/STROKEAHA.120.030508.
- 9) Ospel JM, Singh R, Kashani N, Almekhlafi M, Wilson A, Fischer U, Campbell B, Yoshimura S, Turjman F, Sylaja P, Heo J-H, Hill MD, Saposnik G, Goyal M, Menon B. Endovascular Treatment Decision Making in Patients with Low Baseline ASPECTS: Insights from UNMASK EVT, an International Multidisciplinary Study. J Stroke Cerebrovasc Dis. 2020 Dec;29(12):105411. doi:10.1016/j.jstrokecerebrovasdis.2020.105411.
- Polymeris AA, (...), Fischer U, et al. Serum neurofilament light in atrial fibrillation: clinical, neuroimaging and cognitive correlates. Brain Commun. 2020 Oct 6;2(2):fcaa166. doi:10.1093/braincomms/fcaa166.
- 11) Vynckier J, Demeestere J, Lambert J. *Black-blood Magnetic Resonance Imaging in Giant Cell Arteritis*. J Rheumatol. 2021 Feb;48(2):301-302. doi:10.3899/jrheum.190286.
- 12) Zaidat OO, Ribo M, Mattle HP, Saver JL, Bozorgchami H, Yoo AJ, Ehm A, Kottenmeier E, Cameron HL, Qadeer RA, Andersson T. *Health economic impact of first-pass success among patients with acute ischemic stroke treated with mechanical thrombectomy: a United States and European perspective*. J Neurointerv Surg. 2020 Dec 21;neurintsurg-2020-016930. doi:10.1136/neurintsurg-2020-016930.

# Neuroimmunology

- Diem L, Bürge M, Leichtle A, Hakim A, Chan A, Salmen A, Evangelopoulos M-E, Hoepner R. Pathological cerebrospinal fluid protein concentration and albumin quotient at relapse predicts short-term disability progression in multiple sclerosis: a retrospective single center observational study. Ther Adv Neurol Disord. 2020 Dec 29;13:1756286420975909. doi:10.1177/1756286420975909.
- Diem L, Hoepner R, Bagnoud M, Salmen A, Chan A, Friedli C. Natalizumab induced blood eosinophilia: A retrospective pharmacovigilance cohort study and review of the literature. J Neuroimmunol. 2021 Jan 30;353:577505. doi:10.1016/j.jneuroim.2021.577505.





Klinische Neurowissenschaften Bern

- Chan A. Viele kleine Schritte machen den Unterschied. Leading Opinions Neurologie&Psychiatrie, 6/2020. <u>PDF</u>
- 4) Fortunato R, van der Maas NA, Biland-Thommen U, Kaufmann M, Sieber C, Kamm CP, Zecca C, Gobbi C, Chan A, Calabrese P, Kesselring J, von Wyl V, Swiss Multiple Sclerosis Registry. *Physiotherapy use and access-barriers in persons with multiple sclerosis: A cross-sectional analysis.* Mult Scler Relat Disord. 2020 Dec 23;48:102710. doi:10.1016/j.msard.2020.102710.
- 5) **Graber M**, **Chan A**. *Multiple Sklerose und Schwangerschaft*. Psychiatrie + Neurologie, 5/2020. <u>PDF</u>
- McKinley R, Wepfer R, Aschwanden F, Grunder L, Muri R, Rummel C, Verma R, Weisstanner C, Reyes M, Salmen A, Chan A, Wagner F, Wiest R. Simultaneous lesion and brain segmentation in multiple sclerosis using deep neural networks. Sci Rep. 2021 Jan 13;11(1):1087. doi:10.1038/s41598-020-79925-4.
- Ostkamp P, Salmen A, et al. Sunlight exposure exerts immunomodulatory effects to reduce multiple sclerosis severity. Proc Natl Acad Sci U S A. 2021 Jan 5;118(1):e2018457118. doi:10.1073/pnas.2018457118.
- Rodriguez B, Hoepner R, Salmen A, Kamber N, Z'Graggen WJ. Immunomodulatory treatment in postural tachycardia syndrome: A case series. Eur J Neurol. 2020 Dec 31. doi: 10.1111/ene.14711.
- 9) Torkildsen Ø, Linker RA, Sesmero JM, Fantaccini S, Sanchez-de la Rosa R, de Seze J, Duddy M, Chan A. Living with secondary progressive multiple sclerosis in Europe: perspectives of multiple stakeholders. Neurodegener Dis Manag. 2021 Feb;11(1):9-19. doi:10.2217/nmt-2020-0054.
- Wipke BT, Hoepner R, Strassburger-Krogias K, Thomas AM, Gianni D, Szak S, Brennan MS, Pistor M, Gold R, Chan A, Scannevin RH. *Different Fumaric Acid Esters Elicit Distinct Pharmacologic Responses*. Neurol Neuroimmunol Neuroinflamm. 2021 Jan 19;8(2):e950. doi:10.1212/NXI.00000000000950.

# SWEZ

- 1) Ancona S, Faraci FD, Khatab E, Fiorillo L, Gnarra O, Nef T, Bassetti CLA, Bargiotas P. Wearables in the home-based assessment of abnormal movements in Parkinson's disease: a systematic review of the literature. J Neurol. 2021 Jan 6. doi:10.1007/s00415-020-10350-3.
- Dietmann A, Gallino C, Wenz E, Mathis J, Bassetti CLA. Multiple sleep latency test and polysomnography in patients with central disorders of hypersomnolence. Sleep Med. 2021 Jan 2;79:6-10. doi:10.1016/j.sleep.2020.12.037.
- 3) Duss SB, Brill AK, Baillieul S, Horvath T, Zubler F, Flügel D, Kägi G, Benz G, Bernasconi C, Ott SR, Korostovtseva L, Sviryaev Y, Salih F, Endres M, Tamisier R, Gouveris H, Winter Y, Denier N, Wiest R, Arnold M, Schmidt MH, Pépin JL, Bassetti CLA. Effect of early sleep apnoea treatment with adaptive servo-ventilation in acute stroke patients on cerebral lesion





Klinische Neurowissenschaften Bern

evolution and neurological outcomes: study protocol for a multicentre, randomized controlled, rater-blinded, clinical trial (eSATIS: early Sleep Apnoea Treatment in Stroke). Trials. 2021 Jan 22;22(1):83. doi:10.1186/s13063-020-04977-w.

- Grau Leguia M, Andrzejak RG, Rummel C, Fan JM, Mirro EA, Tcheng TK, Rao VR, Baud MO. Seizure Cycles in Focal Epilepsy. JAMA Neurol. 2021 Feb 8;e205370. doi: 10.1001/jamaneurol.2020.5370.
- 5) Müller M, Rossetti AO, Zimmermann R, Alvarez V, Rüegg S, Haenggi M, Z'Graggen WJ, Schindler K, Zubler F. Standardized visual EEG features predict outcome in patients with acute consciousness impairment of various etiologies. Crit Care. 2020 Dec 7;24(1):680. doi:10.1186/s13054-020-03407-2.
- Proix T, Truccolo W, Leguia MG, Tcheng TK, King-Stephens DK, Rao VR, Baud MO. Forecasting seizure risk in adults with focal epilepsy: a development and validation study. Lancet Neurol. 2020 Dec 17;S1474-4422(20)30396-3. doi:10.1016/S1474-4422(20)30396-3.
- Rossetti AO, Schindler K, Alvarez V. Assessment of a Study of Continuous vs Repeat-Spot Electroencephalography in Patients With Critical Illness-Reply. JAMA Neurol. 2021 Feb 1. doi:10.1001/jamaneurol.2020.5343.

# ZfPB

- Amstutz D, Michelis JP, Debove I, Maradan-Gachet ME, Lachenmayer ML, Muellner J, Schwegler K, Krack P. Reckless generosity, parkinson's disease and dopamine: A case series and literature review. Mov Disord Clin Pract. Accepted Author Manuscript. doi:10.1002/mdc3.13156.
- Bargiotas P, Nguyen TAK, Bracht T, Mürset M, Nowacki A, Debove I, Muellner J, Michelis JP, Pollo C, Schüpbach WMM, Lachenmayer ML. Long-Term Outcome and Neuroimaging of Deep Brain Stimulation in Holmes Tremor: A Case Series. Neuromodulation. 2021 Jan 3. doi:10.1111/ner.13352.
- 3) Cavallieri F, (...), **Krack P** et al. *Predictors of Long-Term Outcome of Subthalamic Stimulation in Parkinson Disease.* Ann Neurol. 2020 Dec 21. <u>doi:10.1002/ana.25994.</u>
- Castrioto A (...), Krack P, et al. A randomized controlled double-blind study of rotigotine on neuropsychiatric symptoms in de novo PD. NPJ Parkinsons Dis. 2020 Dec 15;6(1):41. doi:10.1038/s41531-020-00142-x.
- He S (...), Tinkhauser G, et al. Subthalamic beta-targeted neurofeedback speeds up movement initiation but increases tremor in Parkinsonian patients. Elife. 2020 Nov 18;9:e60979. doi:10.7554/eLife.60979.
- 6) Zoon TJC, van Rooijen G, Balm GMFC, Bergfeld IO, Daams JG, **Krack P**, Denys DAJP, de Bie RMA. *Apathy Induced by Subthalamic Nucleus Deep Brain Stimulation in Parkinson's Disease: A Meta-Analysis.* Mov Disord. 2020 Dec 16. doi:10.1002/mds.28390.



Klinische Neurowissenschaften Bern

# Neurorehabilitation

- Hupp M, Pfender N, Vallotton K, Rosner J, Friedl S, Zipser CM, Sutter R, Klarhöfer M, Spirig JM, Betz M, Schubert M, Freund P, Farshad M, Curt A. *The Restless Spinal Cord in Degenerative Cervical Myelopathy. AJNR Am J Neuroradiol. 2021 Feb 4.* doi:10.3174/ajnr.A6958.
- Marzoughi S, Banerjee A, Jutzeler CR, Prado MAM, Rosner J, Cragg JJ, Cashman N. Tardive neurotoxicity of anticholinergic drugs: A review. J Neurochem. 2020 Nov 21. doi:10.1111/jnc.15244.
- 3) Van Overwalle F (...), **Sokolov AA**, et al. *Consensus Paper: Cerebellum and Social Cognition.* Cerebellum. 2020 Dec;19(6):833-868. <u>doi:10.1007/s12311-020-01155-1</u>.

# Headache

- Puledda F, O'Daly O, Schankin C, Ffytche D, Williams SC, Goadsby PJ. *Disrupted connectivity within visual, attentional and salience networks in the visual snow syndrome.* Hum Brain Mapp. 2021 Jan 15. doi:10.1002/hbm.25343.
- 2) Pohl H, (...), **Schankin CJ** et al. *Green Flags and headache: A concept study using the Delphi method.* Headache. 2021 Jan 6. doi:10.1111/head.14054.

# **Psychosomatic Medicine**

- Baslet G, Bajestan SN, Aybek S, Modirrousta M, Clin Psy JPD, Cavanna A, Perez DL, Lazarow SS, Raynor G, Voon V, Ducharme S, LaFrance Jr WC. Evidence-Based Practice for the Clinical Assessment of Psychogenic Nonepileptic Seizures: A Report From the American Neuropsychiatric Association Committee on Research. J Neuropsychiatry Clin Neurosci. Winter 2021;33(1):27-42. doi:10.1176/appi.neuropsych.19120354.
- Heydrich L, Walker F, Blättler L, Herbelin B, Blanke O, Aspell JE. Interoception and Empathy Impact Perspective Taking. Front. Psychol., 18 January 2021. doi:10.3389/fpsyg.2020.599429.



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# Center for Rare Diseases (Zentrum für Seltene Krankheiten, ZSK)

 Fields T, (...), Bremova-Ertl T et al. A master protocol to investigate a novel therapy acetyl-Lleucine for three ultra-rare neurodegenerative diseases: Niemann-Pick type C, the GM2 gangliosidoses, and ataxia telangiectasia. Trials. 2021 Jan 22;22(1):84. doi:10.1186/s13063-020-05009-3.

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