

## 2019 annual report



## **About us**

#### Everything under one roof

The Department of Neurology diagnoses and treats people with disorders of the central and peripheral nervous system, neuromuscular transmission and muscle functions. We provide integrated care by offering the whole treatment chain from emergency care through to rehabilitation.

#### Professional & patient-oriented

We treat patients with the utmost care and based on outstanding specialist knowledge in the field of neurology. We examine our patients holistically, which includes taking mental as well psychosocial aspects into consideration.

## Comprehensive & highly specialised

The department offers high-quality treatment ranging from basic neurological care to highly specialised medicine. It is nationally and internationally recognised in the following specialist areas:

- the certified Stroke Centre
- the Centre for Parkinson's and Movement Disorders (including deep brain stimulation)
- the Sleep-Wake-Epilepsy Centre (including assessments prior to epilepsy surgery)

### Interdisciplinary

The Department of Neurology in Bern is Switzerland's largest neurology clinic. Its proficiency is enhanced through close cooperation within the University Neuro Centre, which is one of the three main strategic cornerstones of Insel Gruppe.

#### Strong in teaching and research

We support the high-quality treatment of our patients with pioneering research and training. The Department of Neurology offers a unique platform for experimental neurophysiological/neurobiological, translational, clinical and technological research, and is Switzerland's largest educational and further training centre for Specialist Physicians in Neurology.

## Department Management



From left to right: Prof. Dr. med. Urs Fischer, Senior Attending Physician, Prof. Dr. med. Andrew Chan, Deputy Chairman of Department and Physician-in-Chief, Prof. Dr. med. René Müri, Medical Head of Department, Prof. Dr. med. Dr. sc. nat. Kaspar Schindler, Deputy Physician-in-Chief, Prof. Dr. med. Claudio L. Bassetti, Chairman of Department and Physician-in-Chief, Rosmarie Wyss, Head of Nursing, Prof. Dr. med. Marcel Arnold, Physician-in-Chief, Prof. Dr. med. Paul Krack, Physician-in-Chief

## **Current news**

#### Centre for Parkinson's and Movement Disorders

The newly created professorship in Parkinson's disease has been filled by Prof. Dr. med. Paul Krack, an internationally renowned expert. At the same time the existing Centre for Movement Disorders was renamed the "Centre for Parkinson's and Movement Disorders". The focus is on organising interdisciplinary care of Parkinson's patients and launching a "Clinic for Diagnostic Notification", together with neurologists, nursing staff, neuropsychologists and psychiatrists, where appropriate.

#### Psychosomatic and Neuropsychosomatic Medicine

The outpatient interdisciplinary group services were expanded in 2019: pain management, dizziness, eating disorders and headache. Quality assurance of multimodal pain therapy was also implemented in accordance with international IMMPACT criteria.

A key focus in 2019 was the creation of educational material to improve understanding of illness for patients as well as an article explaining the principles of treatment in detail. In research work the team showed that a region of the brain involved in these disorders (parieto-occipital transition zones) can be modulated by transcranial magnetic stimulation (TMS). For this purpose new therapies such as TMS and mindfulness meditation were tested in close cooperation between research and clinicians.

#### Neuromuscular Centre

In 2019 Dr. med. Olivier Scheidegger took over management of the centre. Gene therapy for adult patients with spinal muscular atrophy (SMA) is a newly offered service. This makes Bern one of the few centres in Switzerland to carry out this therapy. Third-party funding was successfully acquired (Innosuisse project, Bangerter-Rhyner Foundation, Swiss Foundation for Research on Muscle Diseases).

#### Research

To foster research at the Department of Neurology, fellowships and grants have been created for interested colleagues: the «Excellence in Diversity Fellowship» was awarded for the first time in 2019. The «Research Grants in Neurology» are a great success, guaranteeing colleagues protected research time. The Research Newsletter and the info-board have met with great approval as new communication channels for research.

#### **Promotions**

Prof. Dr. Paul Krack, Physician-in-Chief Prof. Dr. Marcel Arnold, Physician-in-Chief Prof. Dr. Simon Jung, Associate Professor

#### Postdoctoral research

PD Dr. Mirjam Heldner PD PD Dr. Frédéric Zubler PD Dr. Roza Umarova.

Further postdoctoral research

## **Our services**

#### **Outpatient Neurology**

- · Polyclinic with various special clinics
- · Emergency appointments and consultations
- Fast Track infusion therapies
- Centre for Parkinson's and Movement Disorders
- Sleep-Wake-Epilepsy Centre
- Neuromuscular Centre
- Centre for Visual and Perceptual Disorders
- Neurovascular Centre

#### Inpatient Neurology

- Acute ward
- Emergency appointments and consultations
- Stroke Centre
- Neurological-Neurosurgical Intermediate Care Unit

#### Neurorehabilitation

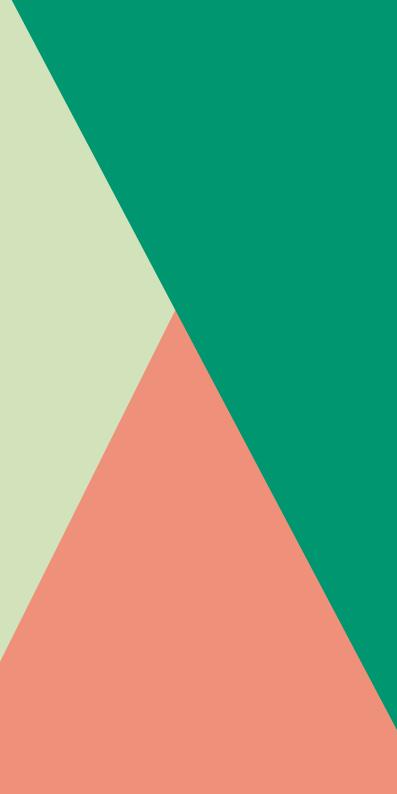
- Wards at the Inselspital and Riggisberg sites, early rehabilitation
- Outpatient clinic
- Interdisciplinary Memory Clinic

## Psychosomatic Medicine

- · Pain and stress disorders
- Functional somatic syndromes
- Eating disorders
- Neuropsychosomatic medicine

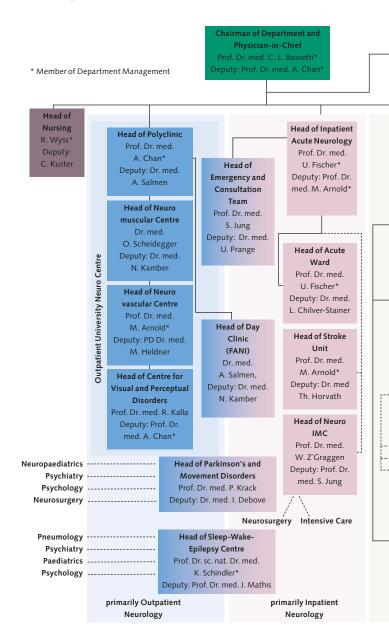
## Teaching and research

- Centre for Experimental Neurology (Zentrum für experimentelle Neurologie, ZEN)
- Neuro Clinical Trials Unit (NCTU)



## Organisational chart

Department of Neurology, Inselspital, Bern



#### Department Management Staff

Gabriela Lory, Executive Assistant Anne-Marie Moning, Department Management Assistant Sebastian Becker, Project Manager

NCTU Neurological Clinical Trials Unit

IMC Intermediate Care

Fast Track Outpatient Infusion Therapies

#### Head of University Neurorehabilitation

Prof. Dr. med. R. Müri\* Deputy: Dr. med. O. Höfle

#### Head of University Acute Neuro-

rehabilitation Inselspital Prof. Dr. med. R. Müri\*

Deputy: Dr. med. J. Müllner

#### **Head of Memory** Clinic Prof. Dr. med.

R. Müri\* Deputy: Dr. med. J. Müllner

#### Ophthalmology Geriatric Psychiatry Cardiac

Rehabilitation

#### **Head of University** Neurorehabilitation

Riggisberg Dr. med. O. Höfle Deputy: Dr. med. A. Maurer

Head of **Psychosomatic** Medicine PD Dr. med.

N. Egloff, Deputy: Dr. med. N. Bischoff Deputy: Dr. med.

## G. Kokinogenis Specialism:

**Eating Disorders** Dr. med. N. Bischoff. Deputy: Dr. med. T. Krüger

#### Specialism: Pain disorders

Dr. med. G. Kokinogenis Deputy: Dr. med. K. Schwegler

#### Specialism: **Psychosomatic** Medicine 2

Prof. Dr. med. S. Aybek Deputy: med. pract. A. Barbey

#### Specialism: Neuropsychosomatic Medicine

Prof. Dr. med. S. Aybek Deputy: med. pract. A. Barbey

#### Psychosomatic Medicine 1 and 2

#### Head of Research Prof. Dr. med.

U. Fischer\* Deputy: Prof. Dr. A. Adamantidis

Head of Centre for Experimental Neurology (ZEN)

Prof. Dr. A. Adamantidis Prof. Dr. med. A. Chan

#### Head of Human System Neurophysiology (human laboratories)

Prof. Dr. med. R. Müri\* Deputy: Prof. Dr. sc. nat. Dr. med.

K. Schindler\*

#### **Head of Clinical** Neurology (NCTU)

Prof. Dr. med. U. Fischer\* Prof. Dr. med. A. Chan\*

Head of Gerontotechnology and Rehabilitation Prof. Dr. med.

R. Müri\*

#### **Head of Teaching** Prof. Dr. sc. nat.

Dr. med. K. Schindler\* Deputy: Prof. Dr. med. S. Jung

#### **Head of Training** Prof. Dr. sc. nat. Dr. med. K. Schindler\* Deputy: Prof. Dr.

med. S. Jung

#### **Head of Further Training** Dr. med. Th. Horvath Deputy: Dr. med. A. Salmen

#### Head of Advanced **Training** Prof. Dr. med.

S. Jung Deputy: Prof. Dr. med. U. Fischer\*

### Head of NeuroTec Centre

Prof. Dr. sc. nat. Dr. med. K. Schindler\* Deputy: Dr. M. Baud

#### -- ARTORG Centre `--Geriatric Psychiatry

Teaching/Research

#### Neurorehabilitation

## 2019 key figures

2019 proved to be a challenging year, especially in the competitive job market. Vacant posts and long-term absences for a wide variety of reasons were partly responsible for the fact that some beds could not be operated, ultimately leading to a slight decrease in the number of discharged patients.

In addition, the average nursing days per discharged patient were marginally reduced in all fields. However, the case mix index in the acute neurology field increased slightly.

The number of consultations in the outpatient sphere is slightly higher compared to the previous year.

Department of	2019
Neurology	
Discharged patients	3 146
Number of staff	567
Beds	132
Nursing days	32 676
Outpatient consultations	32 105
Case mix index	1,4
Specialism of Acute Neurology	2019
Discharged patients	2 366
Nursing days	11 584
Outpatient consultations	32 105
Specialism of Neurorehabilitation	2019
Discharged patients	551
Nursing days	17 010
Specialism of Psychosomatic	2019
Medicine	
Discharged patients	229
Nursing days	4 082

## Teaching and research

With over 50 resident physicians, the Department of Neurology is Switzerland's largest neurology training centre. It offers comprehensive neurological training and facilitation of part-time scientific positions, as reflected in the training curriculum for assistants.

### 2019 third-party funding

In 2019 the Department of Neurology was involved with 22 ongoing SNF projects (11 principal applicants, 6 co-applicants, 5 project partners). In 2019 the spending of third-party funds granted by SNF totalled around 2.2 million francs, half a million more than the previous year. The figures increased even more markedly for other competitive grants: from 1.8 in 2018 to 3.2 million francs in 2019.

#### 2019 Publications

There has also been a significant increase in the number of publications:

	2019	2018
Original papers in-house	65	50
Original papers collaborations	81	72
Reviews	22	17
Other publications	34	28

The most notable publications from the specialisms of the Department of Neurology include the following:

- Kaesmacher J, et al. Intra-arterial Urokinase as a promising treatment option after mechanical thrombectomy. JAMA Neurol. 2019 Dec;9(3): 318-326. PMID: 31816018
- Komagata N, et al. Dynamic REM sleep modulation by ambient temperature (T) and a Critical role of the melanin-concentrating hormone (MCH) system. Curr Biol. 2019 Jun;17(12):1976-1987.
   PMID: 31155350
- Zito G, et al. Abnormal postural behavior in patients with functional movement disorders during exposure to stress. Psychoneuroendocrinology. 2019 Mar;1(01):232-239. PMID: 30471572
- Hoepner R, et al. Vitamin D, mTOR inhibition and synergistic effects on anti-inflammatory glucocorticosteroids. Acta Neuropathol. 2019 Sep;138(3):443-456. PMID: 31030237

### Advanced training

The Department of Neurology offers a high-quality advanced training programme for established neurologists, GPs and hospital doctors. The year's programme can be seen on the website.

## How to contact us

Patients can be referred to us on working days between 08.00 and 17.00 h (except emergency referrals, which are accepted at any time).

Physicians can also refer their patients online or using an electronic form at www.neurologie.insel.ch

# Emergencies (contact with physician)

(incl. stroke)

## Tel. +41 31 632 17 02

#### General enquiries

Department of Neurology

Inselspital, 3010 Bern Tel. +41 31 632 70 00 Fax +41 31 632 03 21 neurozentrum@insel.ch

# Executive Secretary's Office

Tel. +41 31 632 30 66 Fax +41 31 632 96 79 neurologie.direktion@ insel.ch

## Outpatient Neurology

Patient registration

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Neurology
Inselspital, 3010 Bern
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Fax +41 31 632 03 21
neurozentrum@insel.ch

### **Inpatient Neurology**

Patient registration

Tel. +41 31 632 78 93 Fax +41 31 632 05 21

#### Neurorehabilitation

Patient registration

University Acute Neurorehabilitation Inselspital, 3010 Bern Tel. +41 31 632 30 86 Fax +41 31 632 97 70 sekretariat-nreh@insel.ch

#### Psychosomatic Medicine

Patient registration & contact with physician

Specialist field of Psychosomatic Medicine C.L. Lory-Haus Inselspital, 3010 Bern

Tel. +41 31 632 20 14 Fax +41 31 632 05 39 psychosomatik@insel.ch

### Sleep-Wake-Epilepsy Centre

Patient registration & contact with physician

University Sleep-Wake-Epilepsy Centre Inselspital, 3010 Bern Tel. +41 31 632 30 54 Fax +41 31 632 94 48 eeg@insel.ch schlafmedizin@insel.ch

## Inselspital

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