

2015 annual report



About us

Competent and patient-focussed

We treat patients with the utmost care based on our outstanding specialist knowledge in the field of neurology. Our work is based on an integral view of patients in all their dimensions, including mental and psychosocial aspects.

Comprehensive & varied

The Department of Neurology specializes in the diagnosis and treatment of patients with disorders of the central and peripheral nervous system, neuromuscular transmission and muscles. The department offers high-quality treatment ranging from basic neurological care to highly specialised medicine.

Integrated care

We provide integrated care by offering comprehensive management from emergency care to rehabilitation for our patients.

Highly specialised

The Department of Neurology is particularly competent in highly specialised medicine at a national and international level

- with its certified Stroke Centre
- with the Centre for Movement Disorders (including deep brain stimulation)
- with the Sleep-Wake-Epilepsy Centre that was renovated and reopened in 2015 (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 composed of the Department of Neurology, the Department of Neurosurgery, the Department of Diagnostic and Interventional Neuroradiology, the Department of Neuropaediatrics and the University Psychiatric Services Bern. In addition, the Department of Neurology exchanges information with other Inselspital departments, further clinics in Switzerland and established physicians. It is also one of the three main strategic cornerstones of Inselspital Bern.

Current news

In August 2015, the **University Outpatient Neuro Centre (Ambulantes Neurozentrum ANZ)** moved to new premises. This means that the specialist disciplines of neurology, neurosurgery, neuroradiology, psychiatry and neuropaediatrics are now located in closer proximity to each other. Experienced neurologist and MS specialist **Prof. Andrew Chan** took over medical management of the ANZ and the Neurology Polyclinic in February 2016. The ANZ offers patients and referring physicians central access to all neurology disciplines and to a wide range of specialty clinics. The Inselspital Department of Neurology will be opening a university **Neurorehabilitation** unit with 20 beds (later increasing to 36 beds) in **Spital Riggisberg** in September 2016 to supplement the existing services in the Anna-Seiler-Haus on the Inselspital site.

Department Management (last updated: February 2016)



From left to right: R. Müri, A. Chan, M. Sturzenegger, C.L. Bassetti, R. Wyss, Ch. Leutert.

- **Prof. Dr. med. Claudio L. Bassetti**, Chairman and Head
- **Prof. Dr. med. Andrew Chan**, Deputy Physician-in-Chief, Head of University Outpatient Neuro Centre and Neurology Polyclinic
- **Dr. med. Christa Leutert**, Department Manager
- **Prof. Dr. med. René Müri**, Head of Unit of Cognitive and Restorative Neurology
- **Prof. Dr. med. Mathias Sturzenegger**, Deputy Chairman of Department and Physician-in-Chief, Head of Inpatient Neurology
- **Rosmarie Wyss**, Head of Nursing

Our services

Outpatient Neurology

- Poliklinik with various special clinics, now also on Tuesday evening (general neurology, multiple sclerosis, headaches, dizziness, dementia, etc.)
- Emergency appointments and neurology consultations
- Centre for Movement Disorders, including botulinum-toxin
- Sleep-Wake-Epilepsy Centre
- Neuromuscular Centre, including neuromorphology laboratory
- Neurovascular Centre, with Doppler laboratory
- Day clinic for fast-track outpatient neurology infusion therapies (FANI)

Inpatient Neurology

- Acute ward
- Stroke Centre
- Neurology/Neurosurgery Intermediate Care ward (Neuro IMC)

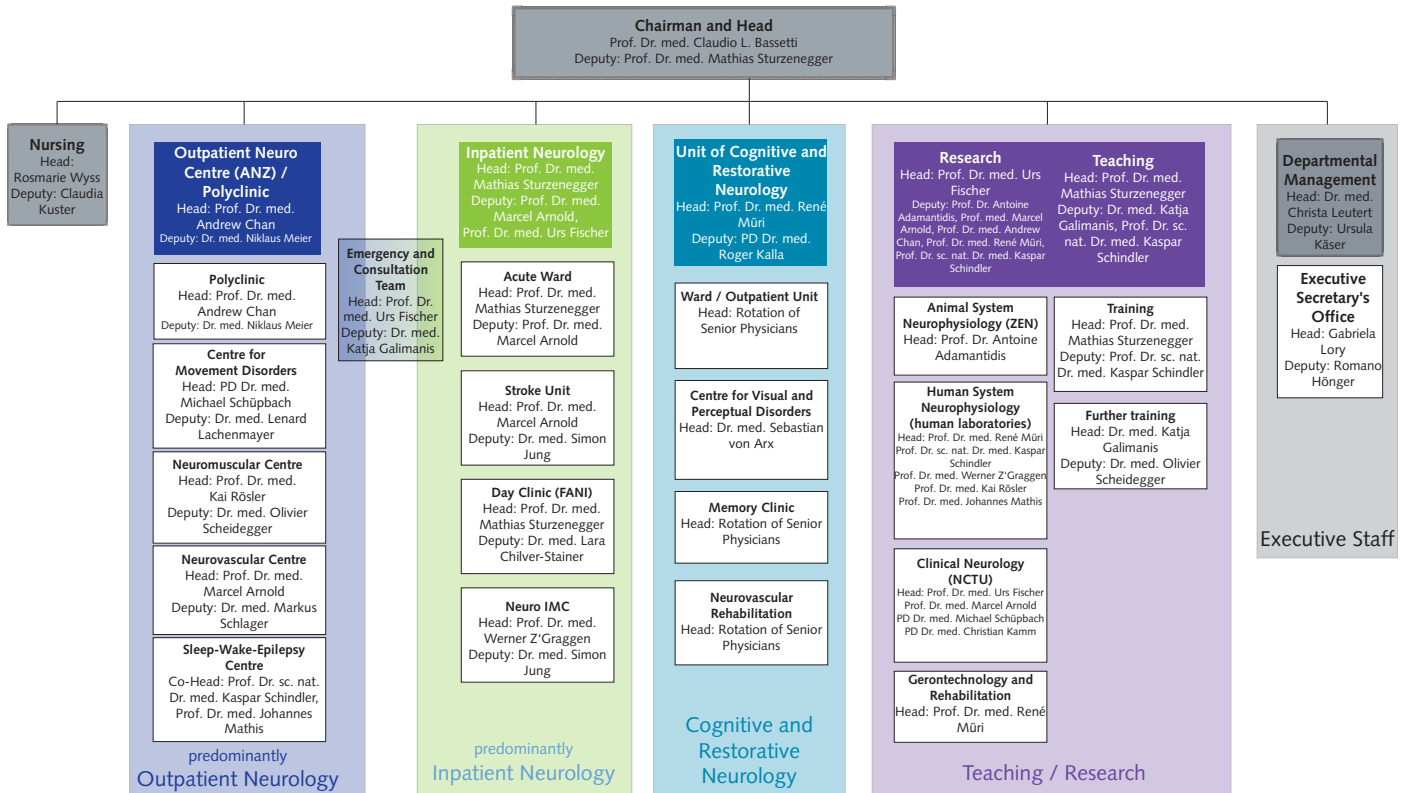
Cognitive and Restorative Neurology (Neurorehabilitation)

- Ward
- Outpatient Clinic with Memory Clinic, Eye Centre, Neuro-vascular Rehabilitation

Teaching and research

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

Organisational chart



Key figures 2014-2015 development: strong growth

In 2015, the Department of Neurology treated more patients. The average length of stay was shorter than in the previous year.

Patients

	2014	2015	Change in %, rounded
Number of emergency neurology patients	5 018	5 554	+10.7
Number of initial outpatient appointments	13 195	14 542	+10.2
Number of discharged inpatients*	1 498	1 890	+26.2
Number of nursing days	9 033	10 051	+11.3
Average length of stay in days*	6.0	5.3	-11.7
Case mix index (CMI)*/**	1.602	1.491	-6.9

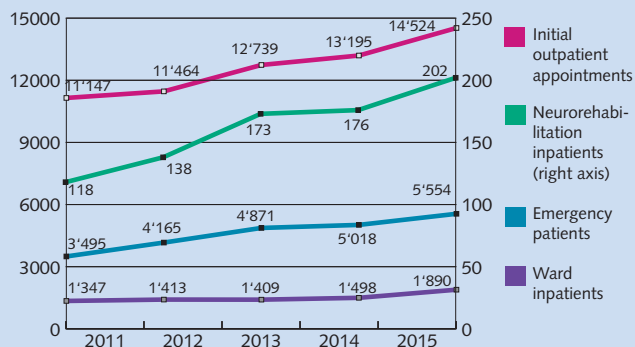
Neurorehabilitation

Number of cases	176	202	+14.8
Number of nursing days	6 489	6 153	-5.2
Average length of stay in days	36.9	30.5	-17.3

* without Neurorehabilitation

** CMI reflects the degree of severity/complexity of cases

Number of patients



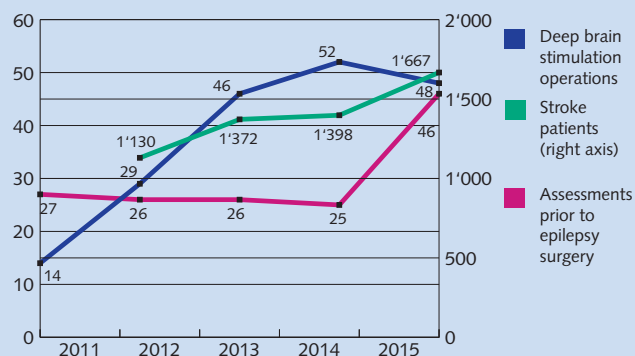
Beds	2015	2016
Acute ward	35*	35
Stroke Unit (Hirnschlagzentrum)	12	12
Neurorehabilitation Insel campus	19	19
Neurorehabilitation Riggisberg**		20
Total number of beds	67	87

* from April

** from September

Highly specialised medicine	2014	2015	Change in %
Number of deep brain stimulation operations	52	48	-8
Number of assessments prior to epilepsy surgery	25	46	+84
Number of stroke patients (Hirnschlagpatienten)	1 398	1 667	+19.2

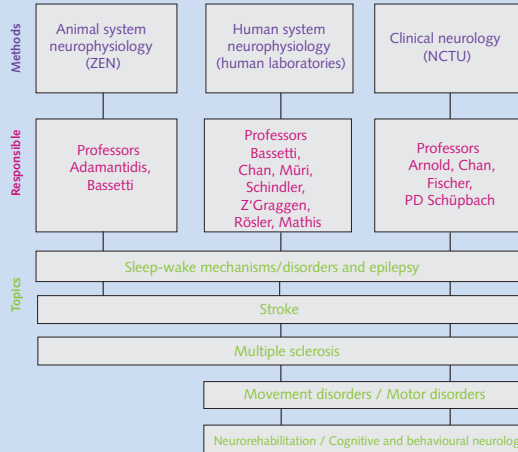
Highly specialised medicine



Staff	2014	2015	Change in %
Number of full-time equivalent positions (FTE) as of 31.12.2015, rounded	238	263	+10.8

Teaching and research

Main research interests: approaches and methods



Prof. Urs Fischer was appointed **Extraordinary Professor of Acute Neurology and Stroke Medicine (Extraordinarius II)**.

Prof. Claudio Bassetti, Prof. Antoine Adamantidis, Prof. Reto Huber (Children's Hospital Zurich) and Prof. Marcello Massimini (University of Milan) were awarded a **Sinergia grant** of 1.8 million Swiss francs by the SNSF for the project "Sleep as a model to understand and manipulate cortical activity in order to promote neuroplasticity and functional recovery after stroke".

The Department of Neurology received an extremely positive rating (overall score: 5.5 out of 6) in the 2015 survey conducted by the Swiss Medical Association (FMH) among assistant physicians on their **continuing education**.

In 2015, there were 14 ongoing **projects supported by the SNSF** (total amount for 2015: more than 1 million CHF) in the Department of Neurology.

The Department of Neurology published a total of 138 **papers** in 2015, including 82 original works.

2015 publications: selection

Long-term outcome after arterial ischemic stroke in children and young adults. Goeggel, SB; Cavelti, A; Arnold, M; Bigi, S; Regenyi, M; Mattle, HP; Gralla, J; Fluss, J; Weber, P; Hackenberg, A; Steinlin, M; Fischer, U (2015) in: *Neurology*, 84(19), p. 1941-1947. Hypothalamic feed-forward inhibition of thalamocortical network controls arousal and consciousness. Gutierrez Herrera C; Carus Cadavieco M; Jengo S; Ponomarenko A; Korotkova T and Adamantidis A (2016) in: *Nature Neuroscience*, 19, 290-298 .

Identification of Sleep-Modulated Pathways Involved in Neuroprotection from Stroke. Pace, M; Baracchi, F; Gao, B; Bassetti, C (2015) in: *Sleep*, 38(11), p. 1707-1718.

Chow-Liu trees are sufficient predictive models for reproducing key features of functional networks of periictal EEG time-series. Steimer, A; Zubler, F; Schindler, K (2015) in: *Neuroimage*, 118, p. 520-537.

Stent-retriever thrombectomy after intravenous t-PA vs. t-PA alone in stroke. Saver, JL; Goyal, M; Bonafe, A; Diener, HC; Levy, EI; Pereira, VM; Albers, GW; Cognard, C; Cohen, DJ; Hacke, W; Jansen, O; Jovin, TG; Mattle, HP; Nogueira, RG; Siddiqui, AH; Yavagal, DR; Baxter, BW; Devlin, TG; Lopes, DK; Reddy, VK; du Mesnil de, RR; Singer, OC; Jahan, R (2015) in: *N Engl J Med*, 372(24), p. 2285-2295.



Advanced training

The Department of Neurology offers a high-quality and balanced advanced training programme for established neurologists, GPs and hospital doctors.

Current overview: www.neuro-bern.ch

How to contact us

Contacts for medical referrals

(in writing or on-line wherever possible)

www.neuro-bern.ch - except in the case of emergencies)

Emergencies (including strokes)

Tel. 031 632 17 02
Fax 031 632 42 69
Pager 181 60 09
(Senior Physician on duty)

General enquiries

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Executive Secretary's Office

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(Emergency referrals)

Emergency / Consultation Team

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(Senior Physician on duty)
Pager 181 6444
(Physician on duty)
Pager 181 5488 (Senior
Consultant)
Tel. 031 632 23 36
(Secretary's office)
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(Consultation service)
Fax 031 632 42 69
(Emergency service)

Centre for Movement Disorders

Tel. 031 632 93 64
Fax 031 632 12 07
movement.disorders@insel.ch

Sleep-Wake-Epilepsy Centre

Tel. 031 632 30 54
Fax 031 632 94 48
EEG@insel.ch
schlafmedizin@insel.ch

Neuromuscular Centre

Tel. 031 632 30 98
Fax 031 632 30 11
ENMG@insel.ch

Neurovascular Centre (Doppler)

Tel. 031 632 31 56
Fax 031 632 89 60

Inpatient Neurology

Acute ward

Registration for hospitalisation

Tel. 031 632 78 93
Fax 031 632 05 21

Inpatients

Tel. 031 632 05 20
Fax 031 632 05 21
Tel. 031 632 78 32
stroke@insel.ch

Stroke Centre

Day Clinic / Fast-track

Outpatient Neurology Infusion Therapies (FANI) Neuro IMC

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Cognitive and Restorative Neurology (Neurorehabilitation) Outpatient Department

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