

GERMAN GRADUATE SCHOOLS OF NEUROSCIENCE



26 International Graduate Schools at a Glance

Mostly tuition free – All teaching in English

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German Graduate Schools of Neuroscience is a network of 26 international neuroscience graduate schools that operate a joint website and market German neuroscience programs at major conventions. The network was founded to inform international students about the opportunity of studying neuroscience in master and doctoral/PhD programs. Some of these programs offer a fast track option but usually students in Germany do a 2-year master program and after that a 3–4 year doctoral/PhD program. **All programs in this booklet are taught in English.**

Our member programs offer specific information for international applicants on their websites. **Most master programs in Germany don't charge tuition fees. Doctoral and PhD programs are tuition free.** Some member programs offer scholarships for master and/or doctoral students. You will find more information on fees and scholarships in the member programs' entries in this booklet and on their websites.

Located in the heart of Europe, Germany with its more than 80 million inhabitants has a long-standing tradition of science and research. Today, there are 427 state-accredited universities in Germany with more than 18,000 degree programs in 180 cities, including our neuroscience programs. The map on the cover of this brochure shows where to find our member programs.

Germany's higher educational system is state-funded and decentralized. The universities and research organizations are largely independent. Regarding the terms of study there are no standard answers to study regulation questions – these will be answered by the individual programs.

This brochure provides applicants with specific information on our neuroscience programs as well as contact addresses and links for further reading.

www.neuroschools-germany.com

- 4 The Berlin School of Mind and Brain is an international, English-language research school based at the Humboldt-Universität zu Berlin. Founded in 2006 as part of Germany's Excellence Initiative, it offers a unique interdisciplinary three-year doctoral program in the mind/brain sciences. In 2013, the school added a two-year interdisciplinary Master's program "Mind and Brain".

Focus

Of particular interest are research questions that fall on the borders between the mind sciences (e.g. philosophy, behavioral and cognitive psychology, linguistics) and the brain sciences (e.g. neurology, psychiatry, neurobiology, computational neuroscience): perception, attention and consciousness; decision-making; language; lifespan development; mental disorders and brain dysfunction; and social cognition. The school has a faculty comprising 62 distinguished senior researchers, 65 doctoral candidates, 90 doctoral alumni, 14 postdoctoral fellows, and cohorts of 35 Master's students per year.

Career Options for Master Students

Research, education, and laboratories; academic management or areas where science and business, industry or politics overlap.

Support for Doctoral Candidates

Two professorial thesis advisors ("mind" and "brain"); regular meetings with leading international researchers; networking activities; mentoring; coaching; career development advice; academic soft-skill courses; financial assistance to attend international conferences.

Contact Information

CHAIRS Prof. Dr. Michael Pauen, Prof. Dr. Arno Villringer

COORDINATOR Ms Annette Winkelmann, M.A.

E-MAIL mb-admission@hu-berlin.de

WEB www.mind-and-brain.de

Deadline for Application

MSc/MA: 1–31 May.

In 2020: 2 June–15 July.

Doctoral program: 15 January.

PLACES MSc/MA: 35 per year; doctoral program: 10 per year.

SCHOLARSHIPS Approximately 5 per year (doctoral candidates only).

TUITION FEE None.

The Master and PhD Programs at the Bernstein Center for Computational Neuroscience Berlin (BCCN Berlin) involve the three Berlin universities Technische Universität, Humboldt-Universität, Freie Universität, and Charité-Universitätsmedizin Berlin. Both the Master and PhD programs are interdisciplinary and strongly research oriented. They also offer a mentoring program and are embedded in a unique scientific environment. The language of instruction is English.

Focus

Understanding the functioning of the brain requires collaboration between neurobiologists, neuro-psychologists, cognitive scientists, medical researchers, computer scientists, mathematicians, physicists, and engineers, as well as an ongoing interplay between theoretical and experimental approaches. Our goal is to educate master's and PhD students to communicate across these diverse disciplines and work on highly challenging projects, enabling them to contribute to the fast growing field of neuroscience via their own autonomous research.

Research in the Master Program takes the form of lab rotations and

the master's thesis. In the structured Doctoral Program the research project is complemented by course work.

Career Options for Master Students

The MSc qualifies for jobs in the field of programming, machine learning and a scientific career.

Career support for Postdocs

Postdocs find support in the career centers of the participating institutions with network options, grants, entrepreneurship etc.

Contact Information

CHAIR Prof. Dr. Klaus Obermayer

COORDINATOR Lisa Velenosi

E-MAIL graduateprograms@bccn-berlin.de

WEB www.computational-neuroscience-berlin.de

WEB www.computational-neuroscience-berlin.de

Deadline for Application

MSc/PhD: 15 March.

PLACES MSc: 15 per year; doctoral program: admission with other funding measures is possible.

SCHOLARSHIPS Fellowships and paid PhD positions in associated labs are available.

TUITION FEE None.

- 6 Medical Neurosciences, hosted by the Charité, offers research-focused training for natural scientists and physicians. The program provides a thorough education, qualifying for basic neurosciences as well as translational research. As part of the Cluster of Excellence NeuroCure and of the Einstein Center for Neurosciences Berlin, it offers access to its many different research institutions, with research focuses ranging from molecular to systems neuroscience.

Focus

The Medical Neurosciences program combines basic science and clinical research into a translational approach focusing on the central and peripheral nervous systems. Its structure enables MSc and PhD students alike to develop an individual curriculum, taking individual backgrounds and project related needs into account, so students can tailor it to their interests and specific research requirements. Apart from the Cluster of Excellence NeuroCure and the Einstein Center for Neurosciences, close cooperation with many programs and institutions including the Bernstein Center for Computational Neuroscience Berlin and the Berlin School of Mind and Brain, the BIH QUEST Center and Spark Berlin offer

plenty of opportunities for training interactions and interdisciplinary exchange.

Career Options for Master Students

Most graduates pursue an academic career (PhD, Medical School). However, transitions to industrial research, patent law and similar careers in corporate environments occur frequently.

Career Support

Medical Neurosciences supports and is actively involved in the Career Development Initiative which supports career development inside and outside of academia.

Contact Information

CHAIR Prof. Dr. Helmut Kettenmann

COORDINATOR Dr. Benedikt Salmen

E-MAIL office-medneuro@charite.de

WEB <https://medical-neurosciences.charite.de/en/>
www.neurocure.de
www.ecn-berlin.de

Deadline for Application

MSc: 15 January.

PhD: 15 January, 15 May, 15 September.

PLACES MSc: 15 per year; PhD: not limited.

TUITION FEE €2,500/semester
(only for MSc students).

The MSc Cognitive Neuroscience at Freie Universität Berlin is a two-year integrated and research-oriented international study program. Students obtain broad theoretical and methodological knowledge in analysing and predicting the neurocognitive foundations of behaviour. The program qualifies students for scientific work in the fields of fundamental and applied research with neurocognitive methods.

Focus

The MSc program is hosted by the Psychology department and the Center for Cognitive Neuroscience Berlin. Work in the associated research groups focusses on the neural basis of perception, decision making, and consciousness, combining non-invasive neurocognitive experimentation (M/EEG, fMRI) and computational modelling.

The first year of the course comprises modules on Cognitive Neuroscience, Affective and Social Neuroscience, Neurocognitive Methods and Data Analysis, Probabilistic and Statistical Modelling, Programming, and Computational Cognitive Neuroscience. The second course year is dedicated to individual study and research projects, including the Master thesis project. The hands-on approach of the second

year is supplemented by a Research Workshop, a Neurocognitive Methods practical and an Elective Module.

The program is open to domestic and international students holding a Bachelor's degree in psychology, neurosciences, cognitive sciences, physics, biology, computer science, medicine or an equivalent of the aforementioned fields. The academic year starts in October.

Contact Information

CHAIR Dr. Timo Torsten Schmidt

COORDINATOR Studienbüro Psychologie

E-MAIL info-mcnb@ewi-psy.fu-berlin.de

WEB <https://www.ewi-psy.fu-berlin.de/mcnb>

Deadline for Application

31 May.

PLACES 20 per year.

SCHOLARSHIPS None.

TUITION FEE None.

- 8 The English-taught two-year MSc program “Behaviour: From Neural Mechanisms to Evolution” at Bielefeld University provides a comprehensive understanding of the fundamental principles of autonomous adaptive behaviour of animals and humans. It bridges the gap between neurophysiology and behavioural ecology. Centered in the Faculty of Biology, our interdisciplinary program cooperates with the Center for Cognitive Interaction Technology (CITEC).

Focus

Understanding the mechanisms that allow animals and humans to behave adaptively in complex environments is one of the most challenging tasks in science. Our study program integrates computational and experimental approaches. It focuses on the control of behaviour by neuronal circuits as well as on the evolution of behaviour. Emphasis during the first year is put on individual tutoring and intensive training in small groups. In the second year students will carry out projects in different research groups. Seminar talks by internationally renowned scientists from other institutions extend the scope of the program. Projects can be realised in

a cooperative international research institution.

Career Options for Master Students

Excellent MSc students may change directly to the doctoral program after the successful completion of their first year of studies.

Contact Information

COORDINATOR Prof. Dr. Volker Dürr

E-MAIL master-bene@uni-bielefeld.de

WEB <https://www.unibielefeld.de/fakultaeten/biologie/studium/studieninteressierte/master/bfnme/>

Deadline for Application

MSc: Online applications from 1 June until 15 July via <https://movein-uni-bielefeld.moveonnet.eu>; international students are particularly encouraged to apply early.

PhD: Open PhD positions are advertised by participating research groups.

Applications should be directed to the head of the advertising group.

PLACES MSc: 14 per year; PhD: open.

TUITION FEE None.

The International Graduate School of Neuroscience (IGSN) of the Ruhr University Bochum, offers research and education opportunities in all aspects of neuroscience from the molecular level to higher cognitive functions. The interdisciplinary nature is represented by the four member faculties of Biology, Chemistry, Medicine, and Psychology and the Institute for Neural Computation.

Focus

The traditional educational approach of studying one academic discipline cannot equip a modern neuroscientist to compete in the international field. Transdisciplinary and multidisciplinary educational approaches must be evolved to enable young neuroscientists acquire the best possible grounding in neuroscience research.

The IGSN incorporates neuroscientists of high international renown, who work in very diverse scientific disciplines, to achieve this goal. The mission of the IGSN is to generate a cooperative synergy among these scientists, from which young neuroscientists can benefit through the acquisition of high-level transdisciplinary PhD training.

Through highly-focused, individualized PhD training, we aim to enable

fast-track PhD training that culminates in a qualitative PhD in Neuroscience within 36 months. Combined with soft skills training and a state-of-the-art English language curriculum, our goal is to give young neuroscientists from all over the world the best possible education, which will in turn serve as a launch-pad for an outstanding career in the field of neuroscience.

Contact Information

DIRECTOR / DEAN OF STUDIES

Prof. Dr. Denise Manahan-Vaughan

COORDINATOR Ms Ursula Heiler, M.A.

E-MAIL igs@rub.de

WEB www.rub.de/igs

Deadline for Application

Applications are welcome throughout the year.

TUITION FEE None.

- 10 Uniting the Max Planck Institute for Neurobiology of Behavior – caesar, the University of Bonn, a “University of Excellence”, and the German Center for Neurodegenerative Diseases (DZNE) in Bonn, the International Max Planck Research School (IMPRS) for Brain and Behavior offers a competitive world-class PhD program in neuroscience since 2016.

Our program offers 10 fully-funded positions each year for outstanding students holding a relevant Master’s degree. We especially encourage students from neuroscience, mathematics, informatics, computer science, physics, engineering, and life science backgrounds to apply. We offer the possibility to perform lab rotations before choosing a supervisor. The program is taught in English.

Focus

Our research program addresses how the collective activity of the vast numbers of interconnected neurons in the brain gives rise to the plethora of animal behaviors. The level of analysis ranges from understanding molecular signaling cascades in spines during learning to understanding how sensory and motor circuits are activated in awake behaving animals. Students

admitted to this unique IMPRS program will profit tremendously from the range of cutting-edge techniques as many of the IMPRS faculty have developed key methods that have been instrumental in better understanding brain circuit function in the whole animal.

Career Support for Doctoral Students

Neuroscience boot camp. Travel grants to attend international conferences; extended research stays at other institutions. Soft skills courses. Thesis advisory committee. Support by coordinator and international office. Family support.

Contact Information

SPEAKER Dr. Kevin Briggman

COORDINATOR Ezgi Bulca

E-MAIL imprs.info@mpinb.mpg.de

WEB <https://imprs-brain-behavior.mpg.de>

Deadline for Application

1 November.

PLACES 10.

SCHOLARSHIPS All positions are fully-funded.

TUITION FEE None.

The BIGS Neuroscience program at the University of Bonn is designed for aspiring neuroscientist and offers an excellent education that imparts a broad neuroscientific knowledge and qualifies for a career in basic or translational research. The program provides access to the Bonn Neuroscience community working on topics ranging from molecular and cellular neurobiology to psychology. Students can use advanced technology platforms and core facilities. BIGS Neuroscience cooperates with other local graduate programs such as the International Max Planck Research School for Brain and Behavior and the BIGS Clinical and Populations Science.

Focus

BIGS Neuroscience specializes in educating doctoral students in the molecular and cellular mechanisms underlying complex behavior and enables them to apply these to understand brain disorders. Our structured, interdisciplinary program includes scientists of different faculties (Mathematics & Natural Sciences, Medicine, Arts) and research centers (University of Bonn, German Center for Neurodegenerative Diseases, Max Planck Institute for Neurobiology of Behavior – caesar. The curriculum consists of a summer school, a student

retreat, method and soft skills courses, progress reports, scientific seminars as well as poster and oral presentations. Depending on their academic education, doctoral students can graduate with one of the following degrees: Dr. rer. nat., Ph.D., M.D./Ph.D., Dr. phil.

Career Support for Doctoral Students

High quality mentoring, summer school, soft skills and methods courses and comprehensive career development programs. Grants for the participation in international conferences and workshops. The competitive BIGS Neuroscience Thesis Award is provided annually for the best thesis.

Contact Information

CHAIR Prof. Dr. Sandra Blaess
COORDINATORS Paunica Giesler,
 Dr. Anne Boehlen, Marion Rozowski, PhD
E-MAIL info@biggs-neuroscience.de /
office.org@biggs-neuroscience.de
WEB www.biggs-neuroscience.de

Deadline for Application

Date of each year: Applications are welcome throughout the year. Applicants must have a position in one of the research groups of BIGS Neuroscience before enrolling in our program. Please consult our webpage.

PLACES Not restricted.

TUITION FEE None.

12 The MSc Neurosciences at the University of Bonn is a two-year research oriented, international study program. The curriculum is entirely taught in English and divided into modules, combining courses, lectures, seminars and laboratory work.

The major objective of the MSc Neurosciences program is to train talented students in the rapidly expanding field of Neuroscience.

The Bonn International Graduate School (BIGS) Neuroscience and the International Max Planck Research School (IMPRS) for Brain and Behavior provide a coordinated curriculum that builds upon our Master's program Neurosciences.

Focus

During the first semester three compulsory modules in neuroanatomy, neurophysiology and molecular neurobiology provide the basics in neurosciences. Additionally, students have to choose one elective module. In the second semester a fourth compulsory module propagates knowledge in statistics, research ethics, and scientific writing. Three elective modules from different research fields complete the second semester. In the third semester students have to select two compulsory practical

trainings. Finally, in the fourth semester, the program is completed by writing the Master's thesis.

The program is open to domestic and international students holding a Bachelor's degree or higher in one of the life sciences, including biology, neurosciences, medicine, pharmacy, biochemistry, biophysics, or related fields. The academic year starts in mid-October, following a week of orientation. Applications are welcome even if the required degree has not been awarded by the time of application as long as this will be conferred before courses start in October.

Career Options for Master Students

Successful graduates are proficient to engage in future ground-breaking research and start careers in a large variety of associated medical and biological fields.

Contact Information

CHAIR Prof. Dr. Christian Steinhäuser,
Prof. Dr. Gerhard von der Emde

COORDINATOR Dr. Silke Künzel

E-MAIL neurosciences@uni-bonn.de

WEB www.neurosciences.uni-bonn.de

Deadline for Application

15 March.

PLACES 20 per year.

TUITION FEE None.

The international Master of Neurosciences Program at the Center for Cognitive Sciences in Bremen educates students to become researchers in the field of cognitive neuroscience, including pathologies that afflict the brain. The program is conducted by an interdisciplinary team of researchers from biology, physics, and psychology, providing in-depth education in all fundamental aspects of modern neuroscience – spanning the range from mathematical and neuro-computational concepts to hands-on experience in single- and multi-electrode recordings, optogenetics, neuropharmacology, and functional imaging

Focus

The main focus of the program is on cognitive neurosciences. In the first semester, students acquire basic theoretical knowledge in cellular, molecular, systemic, theoretical and clinical neurosciences and practical experience by attending courses of programming and laboratory animal science. The second term allows students to focus on their individual interests by choosing three advanced practical modules. Consolidation and application of the advanced theoretical and practical knowledge and training of abilities in

the area of experimental design and scientific communication is the aim of two lab rotations in the third term which can be made in another institute or clinic in Germany or abroad, followed by a Master's project in the last term. Due to their broad education, our students are highly appreciated. 80% of them start with a PhD after finishing their Master studies.

Career Options for Master Students

The program allows access to neuroscientific basic and clinical research as well as many industrial sectors.

Contact Information

COORDINATOR Prof. Dr. Michael Koch

E-MAIL ajanssen@neuro.uni-bremen.de

WEB www.uni-bremen.de/mscneuro

Deadline for Application

30 April.

PLACES 20 per year (MSc).

TUITION FEE None.

FRANKFURT

INTERNATIONAL MAX PLANCK RESEARCH SCHOOL (IMPRS) FOR NEURAL CIRCUITS

- 14 The IMPRS for Neural Circuits is a graduate program, which was established by the Max Planck Institute for Brain research in 2011. The program offers talented students holding a relevant Master's or Bachelor's degree up to ten positions every year for to perform research resulting in a PhD.

IMPRS for Neural Circuits offers a multidisciplinary educational program (taught in English) and research experience in the participating institutions of the Frankfurt Neuroscience community to excellent doctoral students with backgrounds in neuroscience, mathematics, physics, computer science, (bio) chemistry, biology and medicine. The educational program includes laboratory rotations and neuroscience courses but also in trainings in transferable skills as well as summer schools, lecture series and exchange programs with excellent research institutes abroad.

A special fast track option is offered to excellent students holding a Bachelor's as their highest degree.

Focus

The common focus of the IMPRS for Neural Circuits is the understanding of neural circuits (from the simple to the large and complex), at all scales required to achieve this understanding.

This ambitious objective requires analyses at the molecular, cellular, multicellular, network and behavioral levels, with the full understanding that macroscopic phenomena (spatial patterns, dynamics) can be scale-dependent, and that reductionism is not always sufficient as a method. The IMPRS Faculty are 22 Frankfurt neuroscientists from Max Planck Institute for Brain Research, Max Planck Institute of Biophysics, Goethe University, Ernst Strüngmann Institute for Neuroscience and Frankfurt Institute for Advanced Studies.

Contact Information

SPEAKER Prof. Dr. Moritz Helmstaedter
(Max Planck Institute for Brain Research)

COORDINATOR Dr. Irina Epstein (Max
Planck Institute for Brain Research)

E-MAIL irina.epstein@brain.mpg.de

WEB www.brain.mpg.de/imprs

The MSc Neuroscience program provides theoretical and practical training in neuroscience, covering both the foundations and the latest research in the field. We offer specialisations in computational neuroscience, neural circuits and behavior, and neurotechnology and our modular course structure caters to the specific backgrounds and research interests of each student.

Focus

The English-taught two-year course is offered by labs from three faculties and research centers. Transcending the neuroscientific disciplines, our program takes an integrated approach: incorporating skill training and education in a wide range of theoretical and experimental methods, students are encouraged to approach problems from different angles. The program starts in October and will last two years. After finishing your first term learning the methodological and scientific foundations, you have the opportunity to select an individual research path. Graduates of the neurosciences have made academic careers as lecturers and professors. They can also be found in the healthcare and service sectors.

Contact Information

CHAIR Prof. Dr. Carsten Mehring

COORDINATOR Dr. Birgit Ahrens

E-MAIL mscneuro@uni-freiburg.de

WEB www.mscneuro.uni-freiburg.de

Deadline for Application

31 May.

PLACES 25 per year.

TUITION FEE Tuition fee for international students (non EU-citizens) and for a second degree – please read following Web-Page: <https://www.studium.uni-freiburg.de/en/student-services>

- 16 What are the theoretical foundations and basic mechanisms of brain function? And how can this knowledge be applied in the development of prostheses and interfaces that directly connect to the nervous system? The Bernstein Center Freiburg (BCF) has been established as the university's central scientific facility to provide a platform to organize this branch of research in Freiburg.

Focus

The BCF offers a multi-disciplinary PhD program in Computational Neuroscience & Neurotechnology. In an international team of PhD students from the natural sciences, mathematics, engineering sciences or computer science you will acquire the scientific and methodological skills of our disciplines, while keeping track of the latest findings at the BCF and beyond. Our training offers a solid foundation for an academic or application-oriented career.

Contact Information

CHAIR Prof. Dr. Stefan Rotter

COORDINATOR Prof. Dr. Stefan Rotter

E-MAIL phd.program@bcf.uni-freiburg.de

WEB <https://www.bcf.uni-freiburg.de/teaching/phd-program>

Deadline for Application

Applications are welcome throughout the year.

PLACES Varies annually.

TUITION FEE None.

Understanding human perception and behavior is one of the greatest challenges facing science. Fueled by recent advances in artificial intelligence, there is a growing need in numerous application areas for expertise in methods and models addressing this mystery. Mind, Brain and Behavior is a research-oriented, international Master's program at the University of Giessen, Germany, aimed at training the next generation for research and application in cognitive and behavioral neurosciences.

Focus

The program is designed to provide essential skills for a career in academia or industry in cognitive and behavioral neurosciences by combining theoretical and hands-on methods courses. Theoretical courses are taught by renowned experts and address for example perception and action, cognition, and perception of colors and materials. Hands-on courses cover a range of key empirical methods, including functional magnetic resonance imaging, electroencephalography, measurements of eye and body movements, computer graphics, virtual reality, computational modelling and machine learning. We have a network of close national and international collaboration partners in

academia and industry interested in core topics and methods of the program (e.g., Meta Reality Labs or SR Research).

Career Options for Master Students:

The program qualifies for jobs in academia and industry, for example in human-machine interaction, virtual reality, autonomous driving, cognitive robotics, or machine learning.

Contact Information

CHAIR Prof. Dr. Katja Fiehler

COORDINATOR Dr. Philipp Schmidt

E-MAIL filipp.schmidt@psychol.uni-giessen.de

WEB <https://www.uni-giessen.de/studium/master/mbb>

Deadline for Application

Online applications from 1 June until 15 July; international students are particularly encouraged to apply early.

PLACES 30 per year.

SCHOLARSHIPS None.

TUITION FEE None.

18 The integrated MSc/PhD/MD-PhD Program/International Max Planck Research School for Neurosciences is open for candidates with a Bachelor's degree in the natural sciences and related fields. The program is part of the Göttingen Graduate Center for Neurosciences, Biophysics, and Molecular Biosciences (GGNB) offered by the University of Göttingen, the Max Planck Institute for Multidisciplinary Sciences, the Max Planck Institute for Dynamics and Self-Organization, the European Neuroscience Institute, and the German Primate Center. All courses are taught in English. Scholarships are available.

Focus

Successful applicants with a BSc degree participate in a multidisciplinary, research-oriented program. Throughout the first MSc year a comprehensive lecture series covers relevant fields in molecular, cellular, behavioral, theoretical and clinical neurosciences. Class members carry out three research projects of two months each. Special emphasis is put on individual advice and intensive training in small groups.

The transition to the three-year PhD period can either be direct via the fast track (no MSc thesis) or after completing a six-month master's thesis, leading

to an MSc degree. Throughout the dissertation advanced methods courses, professional skills training, and funding for participation in international conferences are provided.

Graduates holding an MSc degree can directly apply for PhD positions in the Graduate Center GGNB.

Career Options for Master Students

After the first MSc year BSc graduates may qualify for direct admission to a PhD project without completing a master's thesis (fast track). Alternatively, the PhD phase can be started after a six-month MSc thesis. MSc graduates are invited to directly apply to GGNB.

Career Support for Postdocs

GGNB runs its own Career Service Unit to support postdoctoral researchers and late-stage doctoral students.

Contact Information

COORDINATOR Dr. Jonas Barth

E-MAIL gpneuro@gwdg.de

WEB www.gpneuro.uni-goettingen.de,
www.ggnb.uni-goettingen.de

Deadlines for Application

For BSc degree holders: 15 January.
For MSc degree holders: no deadline in GGNB.

PLACES IN MSc/PHD CLASS 20 per year.

SCHOLARSHIPS IN MSc/PHD CLASS
20 per year.

TUITION FEE None.

The Interdisciplinary Center for Neurosciences (IZN) of the University Heidelberg is one of the largest Neuroscience Centers in Germany with more than 60 research groups working in all areas of neurosciences, from molecules to the clinic and part of the Excellence Cluster CellNetworks. It offers an interdisciplinary Major of Neurosciences within the Master's Program of Molecular Biosciences. The International Graduate Program of the IZN is also centered at the Faculty of Biosciences and forms an umbrella for several specialized graduate programs of our collaborative research centers.

Focus

Apart from our classical strengths in molecular, cellular, systems and translational neurosciences, current research topics are centered around our collaborative research centers: SFB1158 (acute and chronic pain), FOR2289 (neuroinflammation and neurodegeneration in MS), BCCN (information processing in psychiatric conditions).

Other hallmarks are:

- access to high-end technology platforms
- weekly neuroscience lecture series
- wide range of training courses
- TACs ensure high quality mentoring
- BrainAid-IZN-Master's Award, IZN-PhD-Poster Award, IZN/CHS Young Investigator Neuroscience Award
- cooperation with the Hoffmann-Berling International Graduate School (HBIGS)

Career options for medical students

Medical students aiming at a research career can apply to the MD/PhD-Program of the Faculties of Biosciences and Medicine.

Career options for postdocs

Career Service of the University.

Contact Information

COORDINATOR PHD PROGRAM Dr. Otto Bräunling

E-MAIL braeunling@nbio.uni-heidelberg.de

COORDINATOR MSC PROGRAM Dr. Victor Winter

E-MAIL winter@uni-heidelberg.de

WEB www.uni-heidelberg.de/izn/

Deadlines for Application

MSc: 15 March, PhD: open, MD/PhD: 31 May.

PLACES MSc: 35 per year, PhD: open, MD/PhD: 6 per year.

TUITION FEES FOR MSC-STUDENTS

No tuition for EU students, €1,500/semester for non-EU students.

20 The IMPRS CoNI is based at the Max Planck Institute for Human Cognitive and Brain Sciences and Leipzig University and has partnerships with TU Dresden and UCL London. This brand-new three-year graduate program for international PhD students covers the highly interdisciplinary and fast-paced fields of cognitive neuroscience, clinical and translational neuroscience, and neuroimaging.

Introductory courses and project-specific advanced training provide doctoral students with a solid foundation for their theses. An emphasis on neuroimaging and computational modeling strengthens the foundation further and enables new types of doctoral projects at the leading edge of the field.

Focus

The IMPRS CoNI comprises three modules for training and research:

- Cognitive Neuroscience
- Clinical and Translational Neuroscience
- Development of Neuroimaging Methods and Modeling Methods

Innovative teaching approaches including hybrid teaching, flipped classroom activities, as well as remote learning elements aim at accelerating students' learning curves. Curricular activities are adapted to individual backgrounds via

individual development plans (IDP), while quality management such as peer evaluation and frequent faculty feedback ensure consistency. The program also focuses on Open Science and provides students with skills in research data management.

Additionally, the strong methodological focus of the school draws on the presence of all major neuroimaging techniques at the institute as well as cutting-edge equipment, such as:

- 3T and 7T MRI
- PETMRI
- Simultaneous EEGMRI
- TMSMRI
- TDCSMRI
- Connectome MRI scanner with ultra-high magnetic field gradients

Career Support for Doctoral Students

IDP; soft skills courses; alumni program; financial support conference visits; international office; research stays at one of the partner sides.

Contact Information

CHAIR Prof. Dr. Nikolaus Weiskopf

COORDINATOR Dr. Veronika Krieghoff

E-MAIL imprsoni@cbs.mpg.de

WEB www.imprsoni.mpg.de

TWITTER @IMPRSCoNI

Deadline for Application

15 November

PLACES 15–20 per year.

TUITION FEE None.

The English-taught doctoral program offers exceedingly bright students a superior grasp of the different methods and approaches in the rapidly evolving field of Cognition. Founded in 2018 as a collaboration between the Federal Ministry of Education and Research and the Max Planck Society, the school has an outstanding faculty from diverse scientific backgrounds. The PhD program starts with a one-year orientation period followed by three years of research for the doctorate and is fully funded.

Focus

The Max Planck School of Cognition doctoral program has a multidisciplinary approach aiming at excellent international applicants from diverse backgrounds. It bridges the gap between various disciplines such as neuroscience, biology, computer science, psychology, genetics or philosophy. Students take e-learning courses in related fields. Furthermore, they will attend classroom weeks and work with their selected supervisors to execute a feasible project for their doctorate. PhD degrees will be awarded by the university to which the supervisor is affiliated. Students with a Bachelor's (fast-track) or a Master's degree can apply to the four-year doctoral program.

Career Options

Students with backgrounds in artificial intelligence, biology, cognitive neuroscience/neuroscience, genetics, linguistics, mathematics, neurobiology, neurology, psychiatry, philosophy, and psychology are encouraged to apply to the Max Planck School of Cognition. The program consists of an orientation year (basic courses, lab rotations) followed by three years of research for their doctorate.

Contact Information

SPEAKERS Prof. Dr. Arno Villringer (Leipzig); Prof. Dr. Katrin Amunts (Düsseldorf)

SCIENTIFIC COORDINATOR Dr. Natacha Mendes

E-MAIL natacha.mendes@maxplanckschools.de

WEB <https://cognition.maxplanckschools.org/en>

Deadline for Application

In autumn – please consult webpage.

PLACES 25 PhD students per year.

SCHOLARSHIPS Available.

TUITION FEE None.

22 The “MSc Integrative Neuroscience” is an interdisciplinary research degree offered by the Otto-von-Guericke University Magdeburg. It prepares students for doctoral studies and a professional career in neuroscience, is taught entirely in English, and is targeted equally at German and international students.

The MSc programme focuses on the neural basis of animal and human behaviour and covers an exceptionally wide range of neuroscience approaches, including molecular, cellular, systems, behavioural, cognitive, and theoretical neuroscience. It also emphasizes computational and theoretical skills, which are becoming increasingly indispensable.

Focus

The MSc Integrative Neuroscience programme opens to its students almost the entire spectrum of advanced neuroscience research. This includes animal behaviour and neurophysiology, human cognition and functional brain imaging, numerous advanced techniques such as spectroscopy, optogenetics, two-photon microscopy, molecular dynamics, and more, as well as related fields such as medical neuroscience, neuroprosthetics, neuro-inspired engineering, and neuroeconomics.

The MSc Integrative Neuroscience programme provides a broad foundation in the basic areas of neuroscience. This includes molecular and cellular neuroscience, systems and behavioural neuroscience, as well as theoretical and computational neuroscience. Students take core courses in all of these areas and choose from a range of advanced courses. They perform practical or laboratory exercises in all core areas and spend several weeks each in three research laboratories. The wide range of areas and requirements makes for an intensive and rewarding study experience.

Career Options for Master Students

The MSc qualifies equally for doctoral studies and for a non-academic professional career in neuroscience.

Contact Information

CHAIR Prof. Jochen Braun, PhD

COORDINATOR Nicole Zenker

E-MAIL neurosci@ovgu.de

WEB <https://www.neuroscience-magdeburg.de>

Deadline for Application

15 March.

PLACES 40 per year.

SCHOLARSHIPS Up to 2 for students with excellent results after the first exam period.

TUITION FEE None.

The MD-PhD/PhD Program of “Translational Biomedicine” at the Johannes Gutenberg University in Mainz is a structured training program, which combines biomedical and translational research with clinical training elements. Whereas medical graduates typically face the problem of simultaneously acquiring research skills and dealing with clinical obligations, natural science graduates need to gain insight into relevant unmet medical needs and to obtain access to patient material.

A central purpose of our program is to develop young medical graduates and natural science graduates with an aim to enabling them to become future leaders in the field of biomedical neuroscience, both in academia as well as in the pharmaceutical industry.

MD-PhD Program in Translational Biomedicine, Neuroscience for Medical Graduates

The program offers an integrated training curriculum for medical graduates interconnected with clinical training/residency in the specialist disciplines.

PhD Program in Translational Biomedicine, Neuroscience for Natural Science Graduates

The program offers an integrated

training curriculum for natural science graduates.

Focus

The core curriculum in neuroscience, which is open to all students in Mainz and Frankfurt, is offered by the Focus Program Translational Neurosciences (FTN) and the Rhine-Main-Neuroscience Network (rmn2). The program covers a broad range of approaches to study the molecular, cellular, developmental, structural, functional, evolutionary, computational, and medical-clinical aspects of the nervous system.

Career Options for Master Students

Scientific career, jobs in modern clinical diagnostics and biomedical research laboratories e.g. in the pharmaceutical industry.

Contact Information

CHAIR Prof. Dr. Thomas Mittmann, Mainz

COORDINATOR (SECTION NEUROSCIENCE)

Sabine Tensing

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WEB <https://www.blogs.uni-mainz.de/ftn-eng/>

Deadline for Application

MSc 15 May, PhD throughout the year.

PLACES 15 per year (PhD, MD-PhDs and MSc).

SCHOLARSHIPS 3–5 per year (PhD and MD-PhDs).

TUITION FEE None.

24 How does the brain work? Significant progress has been made in the fields of cellular and molecular neuroscience, and modern in vivo techniques have revolutionized non-invasive observation of brain activity even in humans. Today's challenges lie in understanding the brain as a complex functioning system and many problems remain to be solved. Our program strives to educate a new generation of neuroscientists through an integrated program of study, taking students from their bachelor to a master's or doctoral degree.

Focus

With an excellent understanding of the molecular, cellular and systemic principles of neurobiology, our students acquire a deeper knowledge of neuron–neuron interaction, the dynamics of neuron–glia interaction, rules of information transfer in simple and complex circuits of single brain centers, interaction of different brain centers, and the function of the human brain. We offer foci in the neuroscience fields of:

- Behavior & cognition
- Biomedical neuroscience
- Cellular & systems neuroscience
- Molecular & developmental neuroscience

- Neurophilosophy
- Theoretical neuroscience & technical application

Career Options for Master Students

Academic career path, industry positions, medical applications, and consulting.

Career Support for Postdocs

Under the umbrella of the Munich Center for Neurosciences – Brain & Mind, we have various established entities to offer support for local postdoc positions and a developed international network including the Queensland Brain Institute and the Harvard Center for Brain Science.

Contact Information

CHAIR Prof. Dr. Benedikt Grothe

COORDINATOR Ms Lena Bittl

E-MAIL gsn@lmu.de

WEB www.gsn.lmu.de

Deadline for Application

MSc/Fast-Track/PhD: 15 February.

PLACES Varies annually.

SCHOLARSHIPS The number varies annually, please see our website for further information.

TUITION FEE None.

Neurological and neuropsychiatric disorders are on a rise in developed societies, so further expansion of research and development in neurology-related health care and biomedicine is to be anticipated. Biomedical Neuroscience is an interdisciplinary program executed by lectures from natural science institutes as well as from clinicians and clinical scientists. The program is located at the Medical School of the Technical University of Munich and is funded by the Elite Network of Bavaria.

Focus

Aim of the full-time program is an intensive education in the field of basic neuroscience and neuro-psychiatric diseases. This includes both the theoretical background and the technical skills for commonly used experimental approaches in basic and clinical research. Teaching is performed in a combination of theory and hands on classes and includes project oriented scientific work in the laboratories of the participating institutes. Furthermore the students are trained to evaluate scientific data and apply appropriate statistical tests. Additional qualifications like scientific ethics, management and communication are part of the curriculum.

The program is open to domestic and international students holding a bachelor's or higher degree in the field of natural science, including biology, pharmacy, chemistry, physics or related fields.

Career Options for Master Students

The graduates are ideal candidates for one of the PhD-programs offered in the field of biomedical neuroscience, as well as for jobs in pharmaceutical companies.

Contact Information

CHAIR Profs. Dr. Pascal Berberat, Thomas Misgeld, Arthur Konnerth

COORDINATORS Prof. Dr. Helmuth Adelsberger, Dr. Silke Herzer, Michael Brunnhuber

E-MAIL master.mec.med@tum.de

WEB www.med.tum.de/biomedical neuroscience

Deadline for Application

31 May.

PLACES 20 per year.

TUITION FEE None.

26 Neuroengineering is an emerging interdisciplinary field that aims to translate findings in neuroscience to real-world practical engineering applications, as well as to provide engineering solutions for neuroscience research. The Master's Program in Neuroengineering (MSNE) provides research-oriented, interdisciplinary and international training in this novel research fields. The program is offered by Technical University of Munich (TUM) and is part of the Elite Network of Bavaria.

Focus

The overall goal of the Neuroengineering program at TUM is to educate and to train a new generation of students in the interdisciplinary area between engineering and neuroscience; thereby providing them with knowledge and skills to envision and to create innovative neuro-inspired systems and solutions for neuroscience research. The MSNE program offers exclusive interdisciplinary education with integrated soft-skills training. Core courses in neuroscience, electrical engineering, computational modeling, data analysis, and machine learning are supplemented by mentor-approved electives, hands-on practicals, research internships, early-career training for independent research,

and awareness of ethical aspects of neuro-technology.

Career Options for Master Students

Academic career path and positions in (research-oriented) industry.

Contact Information

CHAIR Prof. Dr. Gordon Cheng

COORDINATOR Florian Rattei

E-MAIL msne@ei.tum.de

WEB www.msne.ei.tum.de

Deadline for Application

31 May.

PLACES 20–30 per year.

TUITION FEE None.

Both graduate programs provide research-oriented and international in-depth training in neurosciences. They aim to recruit students with a variety of different BSc/MSc degrees. The programs are uniquely focussed on sensory neuroscience, building on locally established research strengths (e.g., Cluster of Excellence “Hearing4All”, Research Centre “Neurosensory Sciences”). They integrate basic biological research with clinical and applied research on sensory processes.

Focus

- Clear focus: Sensory systems
- Levels: From molecule to behaviour
- Broad scope of methods: Molecular genetics, systems physiology and behaviour, mathematical modelling, modern imaging techniques
- Hands-on and personal: Most courses include lab time or exercises. Individual projects in research groups
- Intensive: Block course structure allows to focus on one topic at a time
- Specific Skills Modules enhance broader scientific education
- International: All courses taught in English; a semester abroad is possible
- Interdisciplinary: Teachers and students with mixed backgrounds, joint courses with Biology and Psychology

- Fast track option allows streamlined transition into PhD
- Career perspectives in Oldenburg: Graduate school, Cluster of Excellence and more

Career Options for Master Students

Focus on sensory neuroscience qualifies for positions in research, industry, administration and clinics.

Career Support for Postdocs

Mentoring programs of Cluster of Excellence “Hearing4All”; Graduate Academy Carl von Ossietzky University; excellent support for families.

Contact Information

CHAIRS Prof. Dr. Jutta Kretzberg (MSc), Prof. Dr. Georg Klump (PhD)

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WEB www.uol.de/en/master-neuroscience, www.uol.de/en/oltech

Deadline for Application

MSc: 31 May, international students 31 March; MSc/PhD fast track: 1 March; PhD applications are welcome anytime.

PLACES Up to 25 MSc per year.

TUITION FEE None.

28 The GTC offers a comprehensive theoretical and practical training under the guidance of leading neuroscientists. In addition to master programs, the GTC provides a doctoral program and an IMPRS MSc/PhD program with supplementary neuroscience and softskills training, summer schools and visits to conferences. The individual graduate programs have their specific scientific foci and complement one another optimally. Together they provide a markedly broad spectrum of neuroscience research and training opportunities, which has made Tübingen a prime location for graduate students interested in any one of the many aspects of neuroscience. Teaching is entirely in English.

Focus

The three graduate programs are:

1. 'Neural & Behavioral Sciences': systems and cognitive neuroscience, neurophysiology, neuropsychology and brain imaging techniques.
2. 'Cellular & Molecular Neuroscience': genetic, molecular and cellular processes of neurodegenerative diseases and state-of-the-art molecular imaging techniques.
3. 'Neural Information Processing': theoretical and computational neuroscience, modeling of neuronal

processes, BCI, neuroprosthetics and machine learning.

In Tübingen, interdisciplinary neuroscience research is performed at various university and extra-university institutions. The GTC/IMPRS is an integral part of these institutions and, thus, can take full advantage of the lively research community and the state-of-the-art facilities for theoretical and practical training of their students.

Career Options for Master Students

The GTC offers three MSc-degree programs (starting annually in the winter term), which provide the ideal preparation for a subsequent doctoral dissertation.

Contact Information

CHAIR PD Dr. Marc Himmelbach

COORDINATOR Dr. Katja Thielges,
Dr. Monika Lam

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WEB www.neuroschooll-tuebingen.de

Deadline for Application

MSc: 31 March; IMPRS MSc/PhD program: 30 November

PLACES 15 per year for each of the 3 MSc programs; 15 per year for the IMPRS MSc/PhD program.

SCHOLARSHIPS 15 per year for students of the IMPRS MSc/PhD program; doctoral positions are generally project funded.

TUITION FEE Students from outside the EU are required to pay a tuition fee of €1,500/semester for the MSc programs.

The MSc program MTN offers research-based training in clinical and therapeutically oriented neurosciences. Specific theoretical, methodological and practical knowledge of cellular and molecular processes in neural cells and in general in the nervous system is then applied to new diagnostic and therapeutic procedures as well as clinical applications. In addition to introductory basic lectures and practical trainings, students can right from the beginning, select subjects providing more in-depth knowledge in different fields such as clinical Neuroscience, European Patent law, Clinical trials and specialized courses in translational aspects towards clinical and pharmaceutical applications. Our pharmaceutical industry partner Boehringer Ingelheim is closely linked to the program and offers several courses as well as possibilities for practical trainings.

Focus

The aim of the MSc Program is to provide a qualified training in the field of research oriented neurosciences with regard to clinical applications and focuses in:

- Exploring the molecular mechanisms of brain disorders
- Research with the aim of testing innovative therapies
- Investigating molecular neurobio-

logical issues with a bridge between cellular and pharmacological basic research, molecular neurobiology, behavioral physiology, diagnostics, and pharmacological applications.

The participation of institutes from the medical faculty, the clinical study center, and industrial partners showing the practical side of interactions between basic research and therapeutics development result in several modules in the master program spanning topics from a broad overview in translational neuroscience to specific contents and detailed insights.

Career Options for Master Students

Graduate students may follow the academic career path with a PhD, for example in the Graduate School of Molecular Medicine at Ulm University. Further options could be industry positions, medical applications, clinics, consulting and patent law.

Contact Information

CHAIR Prof. Dr. Leda Dimou

COORDINATOR Ms. Julia Solar

E-MAIL mtn@uni-ulm.de

WEB www.uni-ulm.de/mtn

Deadline for Application

15 May.

PLACES Around 20 per year; varies every year

TUITION FEE €1.500/semester for non-EU/EEA-students.

30 **Publisher**

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