Degree program in brief

Duration of study/credits/language
4 semesters/120 credits, full-time program/
English

Degree type
Master of Science (M. Sc.)

Start of program
October 2018

Admission requirements
- Bachelor in the field of natural science such as biology, molecular medicine, physics or similar
- Adequate knowledge of the English language
- Passing the selection procedure

Costs per semester
No tuition fee. Detailed information:
www.tum.de/en/studies/fees-and-financial-aid/

Further information
www.med.tum.de/biomedicalneuroscience
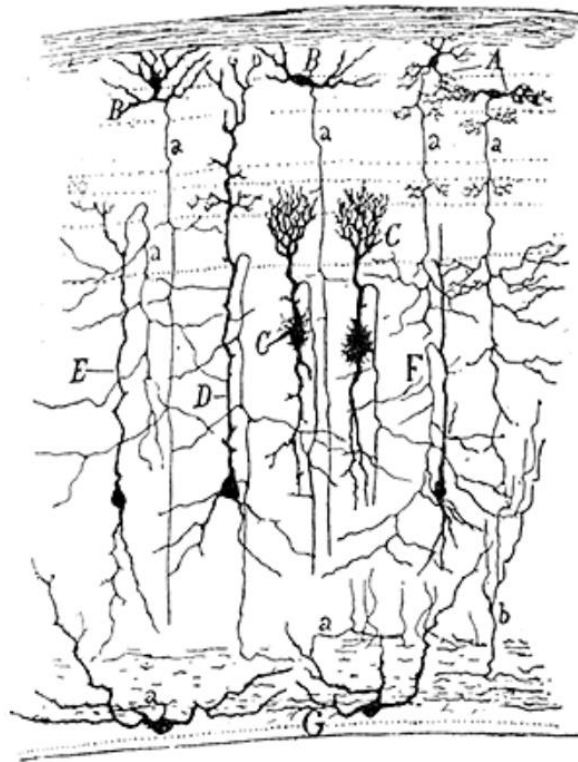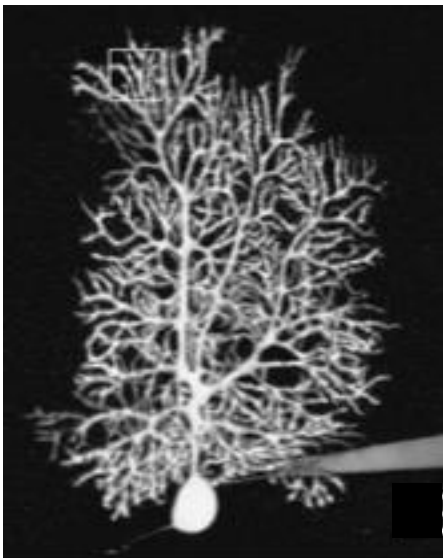
Contact

General questions
Student Service Center
Tel +49 89 289 22737
www.tum.de/en/studies/student-service-center/
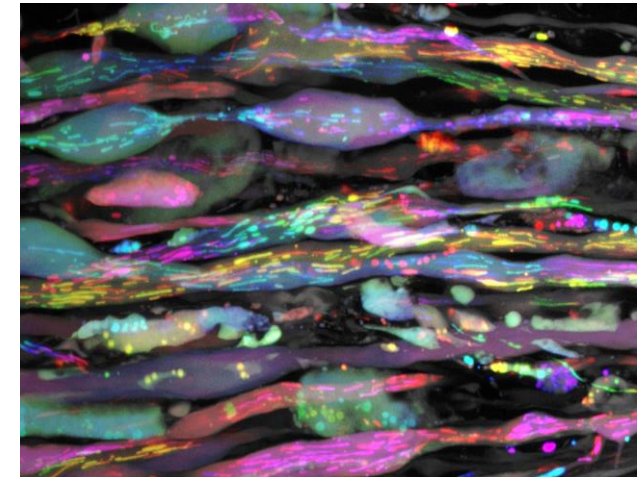
Program specific questions
Jacqueline Emmerich
Tel +49 89 4140-6305
master.mec.med@tum.de

Application
January 1st-July 31st
www.tum.de/en/studies/application-and-acceptance/

Master of Science Biomedical Neuroscience

Objectives

The program in Biomedical Neuroscience is an ´Elite Master Program´ funded by the Elite Network of Bavaria.
The overall goal is to train excellent scientific professionals in the field of biomedical neuroscience, i.e. to train graduates to achieve a top-level understanding of neuroscience theory and experimental practice, as well as a focus on neurological and neuro-psychiatric diseases.
The MSc-BmN will be embedded into a highly professionalized and successful medical and scientific training infrastructure. It nurtures excellence in neuroscience training and didactics by offering an exemplary curriculum on basic and disease-related neuroscience at the intersection of the undergraduate and postgraduate levels, including dedicated modules to foster professional and personal development.
The students are closely guided through the program by an individualized mentoring program.

Photo: Hr. Bauer/TUM

Modules of the program

1st semester	• Molecular Neuroscience • Cellular Neuroscience • Neuroanatomy and Neuropathology • Mol. biology and -omics approaches • Microscopy of nervous system structure • Scientific practice • Life & Science • Lab visit
2nd semester	• Systems and behavior • Pathophysiology of circuits and systems • Nervous system disorders and treatment • Computational analysis and modelling • Neuroimaging and electrophysiology • Scientific practice • Life & Science • Lab visit
3rd semester	• Qualifying colloquium • Lab rotation (I-II) • Lab visit
4th semester	• Master´s Thesis and colloquium

Career profile

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. Hence our graduates will enter a growth market – so the career prospects of the graduates of the MSc-BmN program will be extremely good in basic academic research, clinical settings and in industry.

Requirements

To enjoy the program and to succeed, your interests and qualities should meet the following:

- Strong affinity to basic and translational neuroscience
- High motivation to acquire experimental skills
- Enjoy working in interdisciplinary teams and projects

Staff faculty include

Helmuth Adelsberger	Behavioral neuroscience
Leanne Godinho	Developmental neuroscience
Bernhard Hemmer	Translational neurology
Arthur Konnerth	Optical imaging and optogenetics
Thomas Korn	Neuroimmunology
Stefan Lichtenthaler	Molecular neuroscience
Thomas Misgeld	Cellular neuroscience
Israel Nelken	Data analysis
Ruben Portugues	Computational neuroscience
Jürgen Schlegel	Neuroanatomy and Neuropathology
Mikael Simons	Translational neuroscience
Juliane Winkelmann	Neurogenetics
Claus Zimmer	Brain imaging and Neuroradiology
Pascal Berberat	Medical didactics
Michael Brunnhuber	Scientific practice

Technical University of Munich
Faculty of Medicine

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