Developmental, Neural, and Behavioral Biology

MSc/PhD Program

in Göttingen, Germany

GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

- Cell Biology
- Developmental Mechanisms
- Molecular Neurobiology
- Systems Neurosciences
- Behavioral Ecology
- Animal Cognition

Deadline for your application is May 15th
Start of the program is October 1st
www.biologie.uni-goettingen.de/msc_dnb

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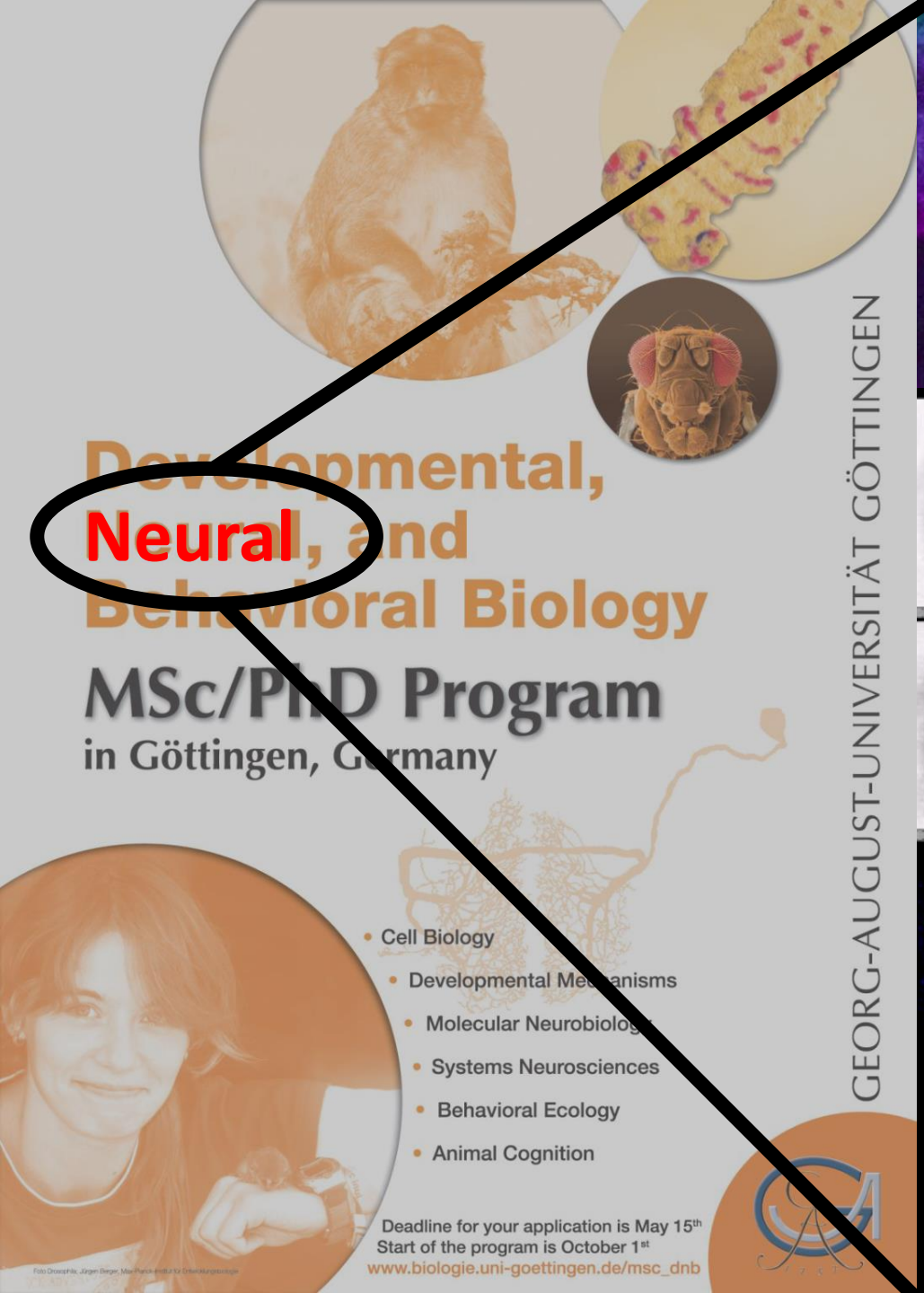
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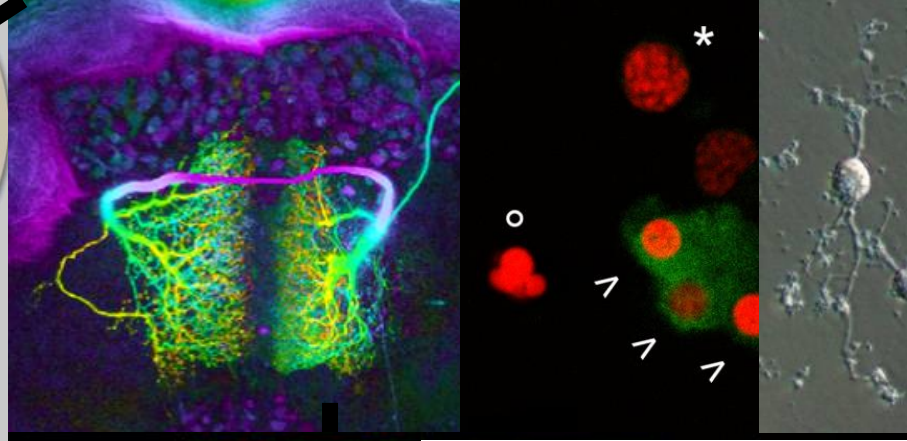
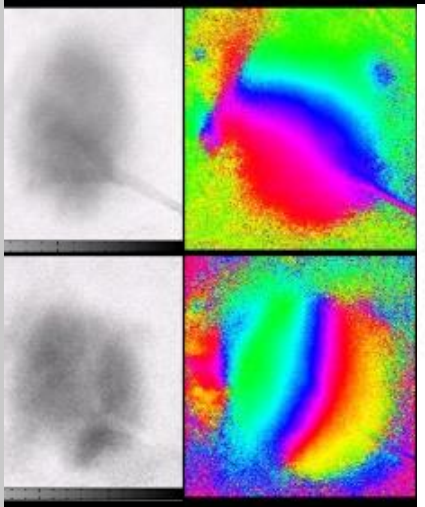
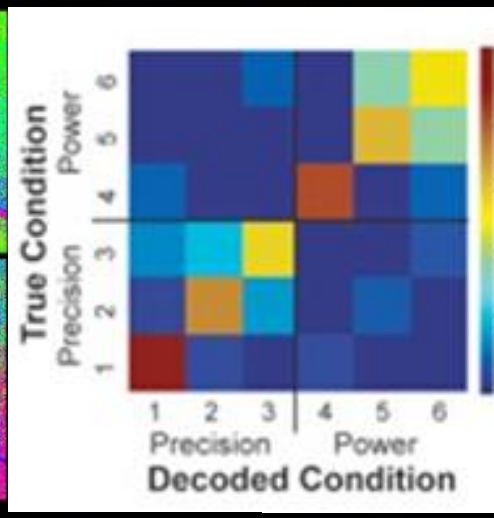





True Condition
Precision
Power
1 2 3 4 5 6
Precision
Power
Decoded Condition

Core studies

Core modules

Developmental and Cell Biology			Neurobiology		Behavioral Biology			Bioinformatics	
M.Bio.303	M.Bio.321	M.Bio.322	M.Bio.304	M.Bio.305	M.Bio.306	M.Bio.307	M.Bio.308	M.Bio.310	M.Bio.323
Cell Biology	*Current developmental biology*	*Frontiers in neural development*	*Neuro-biology 1*	*Neuro-biology 2*	*Introduction to behavioral biology*	*Behavioral biology*	*Social behavior and communi-cation*	*Systems biology*	*Introduction to Bayesian Statistics and Information Theory*
lecture + seminar + methods course	lecture + seminar + methods course	lecture + seminar + methods course	lecture + methods course	lecture + methods course	lecture + seminar + methods course	lecture + seminar + methods course	lecture + seminar + methods course	lecture + seminar + practical training	lecture + seminar + practical training
winter term	winter term	summer term	winter term	summer term	winter term	summer term	summer term	summer term	winter term

Neurobiology 1
Winter term – Block 2
01.12.2025 – 16.01.2026
Prof. Göpfert

Neurobiology 2
Summer term – Block 1
13.04. – 15.05.2026
Prof. Fiala

Core Modules M.Bio.304 and 305
Neurobiology 1 and 2

JFB-Institute for Zoology und Anthropology
Fiala, Göpfert, Löwel, Heinrich, Hehlert, Hernandez …

MPI Multidisciplinary Sciences
Werner, Sereda, Möbius …

European Neuroscience Institute
Frank, Carter, Schwiedrzik, ...

Medical Faculty
Gollisch, Rizzoli, Staiger, Wichmann …

German Primate Center
Gail, Scherberger, Boretius, Treue, Heide …

Core modules

M.Sc. Developmental, Neural and Behavioral Biology

timetable core modules - 2024/25

	Block 1	Block 2	Block 3
period		01.12.2025- 16.01.2026 Christmas break: 20.12 – 04.01.	
winter term	M.Bio.303: Cellbiology	M.Bio.304: Neurobiology 1	M.Bio.306: Introduction to behavioral biology
	M.Bio.323: Introduction to Bayesian Statistics		M.Bio.321: Current Developmental biology

Core Module: Neurobiology 1

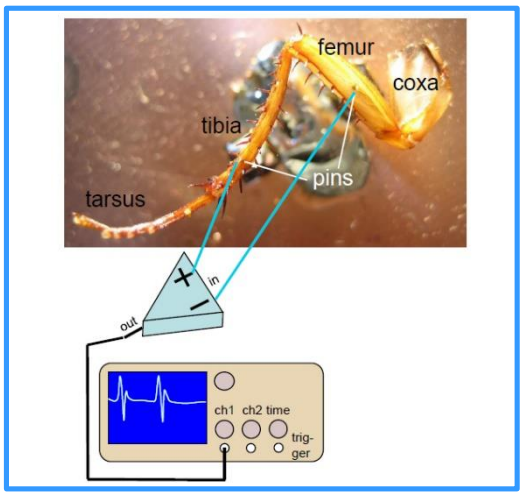
Lectures at SSF: Mondays through Thursdays at 8:15 AM,
(Fridays free for Lecture Löwel M.Bio.359)
Recapitulation of textbook knowledge coupled to the practical parts of the module

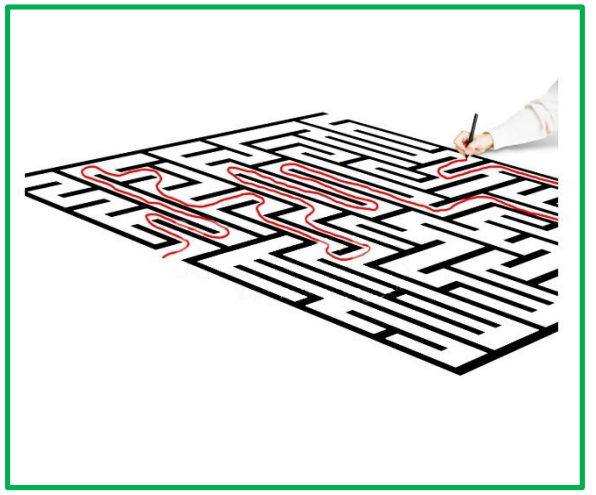
Courses at SSF: daily 10:15 – ~17:00

Neuroanatomy (Locust nervous system, Nerve backfill)

Electrophysiology (Cockroach leg preparation)

Experiments on human learning





Core Module: Neurobiology 1

Lectures: Mondays through Thursdays at 8:15 AM,
(Fridays free for Lecture Löwel M.Bio.359)
Essential Neurobiology

Courses at SSF: 10:15 – ~17:00, SSF
Neuroanatomy (Locust nervous system, Nerve backfill)
Electrophysiology (Cockroach leg preparation)
Experiments on human learning

Mini-Rotations in various labs: each student performs three mini-rotations of three days duration

Introduction and assigment during the first course week
Establishment of primary cell cultures from an intact brain, Electron microscopy, Isolation and characterization of glial proteins, Insect muscle, Drosophila acoustic communication, Drosophila olfactory behavior, Zebrafish brain activity, and many more .....

Scientific question and methods will be explained by lab heads and project supervisors
⇔ Material for presentations

Core Module: Neurobiology 1

Lectures: Mondays through Thursdays at 8:15 AM,
(Fridays free for Lecture Löwel M.Bio.359)
Essential Neurobiology

Courses at SSF: 10:15 – ~17:00), SSF
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Seminar January 6, 2026
Presentations of all Mini-Rotations by students

Written exam January 9, 2026
Multiple choice and short-answer questions

Core modules

M.Sc. Developmental, Neural and Behavioral Biology

timetable core modules - 2024/25

	Block 1	Block 2	Block 3
period	13.04. – 15.05.2026		
summer term	M.Bio.305: Neurobiology 2	M.Bio.322: Frontiers in Neural Development	M.Bio.307: Behavioral biology
		M.Bio.308: Social behavior and communication	
	**M.Bio.310: Systems biology (during lecture period only)		

Core Module: Neurobiology 2

Lectures: *Current concepts and questions in neuroscience*
extending text book knowledge to actual research

Lab project: participating labs offer projects of 3-4 weeks duration
students chose one project from various offers that will be outlined on the first day

Presentation of lab project:
Week 5: preparing a poster that …
…introduces the topic and research question
…explains the methods
…describes results and conclusions (in case of success)

Written exam: Assay questions on the content of a short scientific paper. You can select one from three papers with neuroscientific content.

main focus

Neurobiology

	modules	remarks
Core modules	**M.Bio.304**: Neurobiology 1	both modules are obligatory
	M.Bio.305: Neurobiology 2	
Advanced modules	**M.Bio.314**: Cellular Neurobiology	Two out of these modules are obligatory
	M.Bio.315: Molecular Neurobiology	
	M.Bio.316: Systemic Neurobiology	
	M.Bio.318: Social behavior, communication and cognition	
Master thesis	in department of one of the two selected advanced modules	

Common examination

Core modules	**M.Bio.321**: Current Developmental biology	one of these modules is obligatory
	M.Bio.322: Frontiers in Neurodevelopment	
	M.Bio.303: Cell biology	obligatory module

Neurobiology-associated labs

(eligible to host students for lab rotations (= advanced modules) and masters theses)

Numerous labs from the

Johann-Friedrich Blumenbach Institute
German Primate Center
Faculty for Medicine
Max-Planck Institute of Multidisciplinary Sciences
European Neuroscience Institute

Additional groups are possible upon approval by the study committee.

Questions?