

Behavioral Biology

#### Participating Institutions (core- & advanced-modules)

Georg August University Göttingen



Johann-Friedrich-Blumenbach-Institute for Zoology and Anthropology

- Sociobiology/Anthropology (Kappeler)
- Primate Cognition (Fischer)
- Behavioral Ecology (Ostner)

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#### German Primate Center



- Behavioral Ecology/Sociobiology (Kappeler)
- Cognitive Ethology (Fischer)
- Primate Social Evolution (Ostner)
- Evolutionary Endocrinology (Behringer)
- Primate Genetics (Walter)
- Cognitive Neurosciences (Treue)
- Neurobiology (Scherberger)

# Focus of core research groups

- Evolution of social behavior, social cognition, sexual selection mainly in nonhuman primates
- Broad range from behavioral ecology, sociobiology (functions of behavior) to cognition and physiology (mechanisms)
- Link to Biodiversity study programs
- Field research in Madagascar, Senegal and Thailand

Research on managed primate population (France, Germany) and

captive primates at the DPZ

check out websites for more detailed information





#### GEORG-AUGUST-UNIVERSITÄT-GÖTTINGEN

#### **Key Modules in Behavioral Biology**

Core

Introduction to behavioral biology [MBio 306)

Theory
Basic concepts
Overview of methods

#### Key competence in statistics [MBio 358]

Core emester 2 Social Behavior & Communication [MBio 308)

Two-week excursion to study Barbary macaques in Germany or France

Behavioral Biology [MBio 307)

Practical in Göttingen or Madagascar

Advanced emester 3 Social Behavior, Communication & Cognition
[MBio 318)

Population and Behavioral Biology [MBio 317)

Join a lab for a sevenweek research internship (two or three)

Systemic Neurobiology [MBio 316]

Project Sem. 3

Scientific Project Management (MBio 331)

Prepare proposal for Msc thesis

Thesis

Master thesis in one of the associated research groups

**Conduct Msc thesis** 





# The core modules

M.Bio.308:

**Social Behavior and** 

**Communication** 

Current debates in BB

M.Bio.307:

**Behavioral Biology** 

Advanced topics of

**Behavioral Biology** 

M.Bio.306\*: Introduction to Behavioral Biology

Fundamental topics of Behavioral Biology

<sup>\*</sup> Obligatory for Master in BB: 306 + 307 or 308

#### **Introduction to behavioral biology** [M.Bio.306]

Theory

Basic concepts

Overview of methods

Lecture: Ostner, Schülke

Practical: Behringer, Ostner,

Roos, Schülke

Seminar: Schülke, Kappeler

Core

Semester 1

19.01. - 20.02.2025

(16+ students)

Coordination:

Schülke

This core module is obligatory

#### The 3X6 series

M.Bio.366: Lecture

M.Bio.346: Lecture + Seminar

M.Bio.306: Lecture + Seminar + Practical

Coordination: Oliver Schülke <u>oschuel@gwdg.de</u>

Location: DPZ (Kellnerweg 4): old LH=lecture hall NW end of old

DPZ (Kellnerweg 4): LAB= hormone or genetics lab / MFG-SR=S

Uni K6 (Kellnerweg 6): SR= seminar room 2.111

ENI (Grisebachstr. 5)

# Just as an example – dates / details will change!

Week 1:	Mo, 13.01.	Di, 14.01.	Mi, 15.01.	Do, 16.01.	Fr,17.01.
9:15-10:00	prep seminar	prep seminar	prep seminar	prep seminar	
10:15-11:45	lecture (JO/OS) old LH				
12:00-12:45					prep seminar
BREAK					
13:15-16:45	Observation Methods (OS) SR	Observation Methods (OS) SR	Acoustic Communication (KW) SR	Acoustic Communication (KW) SR	
Week 2:	Mo, 20.01.	Di, 21.01.	Mi, 22.01.	Do, 23.01.	Fr, 24.01.
9:15-10:00	prep seminar	prep seminar	prep seminar	prep seminar	11/ 24/02/
10:15-11:45	lecture (JO) old LH	prep seminar	prep seminar	prep seminar	
12:00-12:45					seminar (OS + PMK)
BREAK					SR & MFG-SR >13:45
13:15-16:45	Genetics (group 1) /Hormones (group 2) /(CR/JO) LAB				
Week 3:	Mo, 27.01.	Di, 28.01.	Mi, 29.01.	Do, 30.01.	Fr, 31.01.
9:15-10:00	prep seminar	prep seminar	prep seminar	prep seminar	,
10:15-11:45	lecture (JO) old LH				
12:00-12:45					seminar (OS + PMK) SR & MFG-SR >13:45
BREAK					- 5K & MFG-5K >15:43
13:15-16:45	Eye-tracking (group1) ENI (CS)	Learning (TB) SR	Learning (TB) SR	Learning (TB) SR	
Week 4:	Mo, 03.02.	Di, 04.02.	Mi, 05.02.	Do, 06.02.	Fr, 07.02.
9:15-10:00	prep seminar	prep seminar	prep seminar	prep seminar	
10:15-11:45	lecture (OS) old LH				seminar (OS + PMK)

### **Statistics for Biology using R [M.Bio.001]**

Understanding of basic statistical concepts + hands-on experience in R

(Wibral)

weekly lecture and weekly exercise

strongly recommended!!!

Each winter semester, continuous semester course

Key competence

Semester 1

Coordination: Wibral



### Social behavior and communication [M.Bio.308]

Five week module with two-week excursion to

Rocamadour, France (Fischer)

Aim: design and carry out own research project on

Barbary macaques

Core

Semester 2

Middle block

(12 students)

Coordination: Fischer



(One of the advanced modules (M.Bio. 307 or 308) is obligatory, the other one is recommended)

### **Behavioral biology** [M.Bio.307]

Five week module: Fichtel, Kappeler

Lecture: advanced topics

Seminar: design your study

Practical: Göttingen or Madagascar (Sep)



Core

Semester 2

Last block and practical in Sept

(12 students)

Coordination: Fichtel

(One of the advanced modules (M.Bio. 307 or 308) is obligatory, the other one is recommended)

#### 2 out of 3 Advanced modules (Lab rotations)

- Population and behavioral biology [M.Bio 317]
- Social behavior, communication and cognition [M.Bio 318]
- Your choice... e.g. Systems Neuroscience [M.Bio 316]







## Scientific project management [M.Bio.331]

Attend colloquia

Prepare proposal for thesis

Project

Semester 3

(32 students)



#### **MASTER THESIS**

Conduct master thesis

(in the main focus of one of the completed advanced modules)

Thesis

Semester 4

26 weeks

