## Module title
Introduction to Genetics and Human Genetics

### Abbreviation
03-98-PGH-202-m01

### Module coordinator
holder of the Chair of Clinical Biochemistry and Pathobioc-chemistry and holder of the Chair of Neurobiology and Ge-
genetics and Research Center for Infectious Diseases

### Module offered by
Faculty of Medicine

### ECTS
5

### Method of grading
numerical grade

### Only after succ. compl. of module(s)
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### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
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### Contents
Introduction to human genetics, general genetics and genetic diagnostics in human diseases: diseases caused by genetic instability, neurodegenerative diseases, hereditary cancer. Practical part: molecular genetic diagno-
sis, genetics of trypanosomes, genetic tools in Drosophila, optogenetics and thermogenetics.

### Intended learning outcomes
Students will acquire a fundamental knowledge of human, trypanosome and Drosophila genetics as well as mo-
lecular genetic diagnostics and genetic counselling. They will develop an advanced knowledge of the genetics of
selected diseases.

### Courses
(type, number of weekly contact hours, language — if other than German)

- **V (2) + Ü (3)**

### Method of assessment
(type, scope, language — if other than German, examination offered — if not every semester, information on whether
module is creditable for bonus)

- written examination (45 to 90 minutes) and successful completion of exercises (ungraded), oral test during expe-
riments (approx. 15 minutes) and written examination (90 minutes).
Each experiment comprises preparation, performance and evaluation. Test as well as performance of experi-
ments can each be repeated once.

### Allocation of places
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### Additional information
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### Referred to in LPO I
(examination regulations for teaching-degree programmes)

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### Module appears in
Bachelor’ degree (1 major) Biomedicine (2020)