

Functional Genetics and Bioinformatics: **Molecular Cell Biology and Genetics**

(2-year Master's program, 120 credits; recommended study plan)

1st Winter Semester

Introduction to Omics & Biotechnology (KMB/921)
Practicals in Omics & Biotechnology (KMB/933)
Seminars in Omics & Biotechnology (KMB/926)
Practical Computing for Biologists (KMB/925)
Bioinformatics for Biologists (KMB/615E)
The New Statistics for Exp. Biologists (KMB/929)
Bioethics (KMB/913)
Masters Thesis Assignment (KMB/885)
Master's English Examination – TOEFL (OJZ/930)

1st Summer Semester

Master thesis, Practical part (KMB/881)
Genetics – Colloquia (KMB/180)
Cell Structure and Function (KMB/914)
Essays in Omics & Biotechnology (KMB/918)

Model Organisms in Biomedical Research (KMB/931)
Epigenetics & Regulation of Gene Expr.n (KMB/618E)
Advanced Methods of Mol. Biology 2 (KMB/602E)
Molecular Physiology and Metabolism (KMB/924)

Thermodynamics of Biomolecular Sys. (UCH/012E)
Structural Biochemistry (UCH/014E)
Evolutionary Genetics (KMB/221E)

2nd Winter Semester

Master thesis, Practical part (KMB/881)

Developmental Biol. - Mol. Perspective (KMB/916)

Bioenergetics (KEBR/631)
Cytogenomics (KMB/935)

2nd Summer Semester

Master thesis, Practical part (KMB/881)
Genetics – Colloquia (KMB/180)

Introduction to Virology (KMB/910)

Core courses (common to all): 75 credits

Obligatory courses: 21 credits

Obligatory elective courses: ≥ 10 credits