

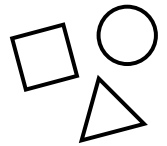
MSC BIOMOLECULAR SCIENCES PROGRAM OUTLINE

Year 1

Sept

Dec Jan

Jun



Sept-Dec

(Re-)solidify the fundamentals

- From Genome to Function
- Protein Science
- Fundamentals of Bioinformatics
- Cell Structures and Function

Unlock
Your
Potential

Jan-Jun

Unlock your potential 1

- 1 course (Topics in Biomolecular Sciences or elective)
- Internship (wetlab project, 30 EC)

Professionalism in Biomolecular Sciences
Workshops throughout the year

MSC BIOMOLECULAR SCIENCES PROGRAM OUTLINE

Year 2

Sept

Oct

Nov

Jun



Sept-Oct Research

- Lifecycle of Research Projects
- 1 course (Topics in Biomolecular Sciences* or elective)

Unlock Your Potential

Nov-Jun

Unlock your potential 2

- 2 courses (Topics in Biomolecular Sciences* or elective)
- Internship (wetlab/bioinformatics project, 33 EC)

Professionalism in Biomolecular Sciences
Workshops throughout the year

TOPICS IN BIOMOLECULAR SCIENCES (6 EC)

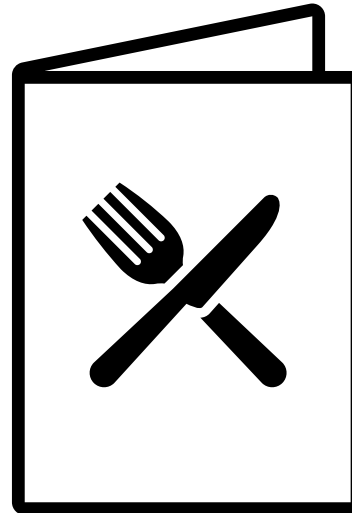
A deep-dive in the literature

Each student chooses *one* topic from the menu

You do this *at a moment of your choice* in the two years

A-la-carte with pre-defined supervisor

- Cellular Protein Trafficking
- RNA Biology
- Molecular Biotechnology
- Protein Structure as Molecular Basis of Disease
- Biophysical techniques
- Topics in Microbial Ecology
- Metabolism



A free topic (find a supervisor)

3 ELECTIVES - CHOOSE ANY FROM 15 OPTIONS

WITHIN 1 INTEREST AREA OR FROM SEVERAL INTEREST AREAS

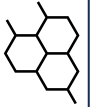
(Systems) Biology

- Introduction to Systems Biology
- Molecular Infection Biology
- The Human Microbiome and Disease
- Basic Models of Biological Networks



(Chemical) Molecules and Toxicology

- Principles of Drug Targets
- Molecular and Cellular Toxicology
- Drug target Biochemistry and Signalling



Tools & Analysis

- Biophotonics
- Statistics with R
- 3Rs of animal experiments applying human cells in culture
- Quantitative Single-cell Biology



Bioinformatics

- Algorithms in Sequence analysis
- Biosystems Data analysis
- Structural Bioinformatics
- Bioinformatics for Translational Medicine

