

Course: Practical Genetics

credits: 5

Course code BOVH24MDPRGEN
Name Practical Genetics
Study year 2026-2027
ECTS credits 5
Language Dutch, with parts in English
Coordinator W. ter Veer

Modes of delivery Practical / Training
Assessments Praktijk Genetica - Other assessment

Learning outcomes

You understand and independently perform several important molecular techniques within the genetic field, including FISH and (real-time) PCR as a basis of general laboratory skills within genetics.

You independently prepare a plan to develop, perform and optimize a PCR using bioinformatics tools.

You analyze and interpret the results of different molecular techniques and report them in a logbook according to the applicable guidelines.

You independently process the results of a genetic study in a report according to the applicable reporting guidelines, placing the results in the broader medical context and describing the relevance for medical diagnostics.

Content

This theme focuses on common diagnostics within the field of medical genetics. During the practical days, you will perform various molecular techniques, including RNA isolation, quantitative real-time PCR and fluorescent in situ hybridization (FISH). Among other things, you will set up your own PCR, optimize it by developing primers, and detect chromosomal abnormalities with FISH and real-time PCR.

Included in programme(s)

Major Medical Diagnostics

School(s)

Engineering, Life Sciences & ICT