

Chromatin Biology & Proteomics

Responsible person: Prof. Dr. Petra Beli (p.beli@imb-mainz.de)

Always in winter semester; In English

Module A/C - Lecture series and seminars

Lecture topics: Introduction to chromatin and epigenetics, Principles of mass spectrometry for proteomics, Analysis of protein-protein interactions by mass spectrometry and computational approaches, Posttranslational modifications of proteins, Ubiquitin and proteostasis on chromatin, Protein phosphorylation and phosphoproteomics

Seminars presented by students on papers covering the above-mentioned topics.

Lecturers: Petra Beli, Ji-Xuan Chen, Anton Khmelinskii, Katja Luck, Jan Padeken, Sandra Schick, Christian Renz, Hans-Peter Wollscheid

Type of exam: Written exam and presentation of a research paper during the seminar

Module B - Practical course and lab rotation

Practical course and lab rotation will take place in one of the Lecturer's lab where students will work on a project focusing on Chromatin Biology or Proteomics (depending on their preference).

For example, in the Beli lab students will analyze protein interaction partners of chromatin-associated proteins using co-immunoprecipitation coupled to quantitative mass spectrometry and afterwards analyze their proteomics datasets.

Type of exam: Oral exam (Presentation or poster)

