



Lab internships (Scientific Practice)



WHAT IS A LAB INTERNSHIP?

Master students from study programs “Molecular Biology”, “Molecular Microbiology, Microbial Ecology and Immunobiology” (MMEI) and “Neuroscience” at the University of Vienna must carry out several rotations (internships) in select research labs of their choice. These internships are aimed at **training students in application of scientific method and various research techniques in the context of “real life” research** questions or hypotheses addressed in the research labs active in the general field of molecular life sciences.

Generally, lab internships can be carried out in *any* molecular biology-related research labs at the institutes of Vienna BioCenter campus, research institutes and universities in Vienna and beyond (also internationally) or in R&D laboratories of for-profit industrial partners. There are three important criteria regarding the topic of such internship projects:

- 1) the practical work for the internship is carried out in the environment of active, internationally recognized research group or for-profit partner;
- 2) the overall topic of the internship is congruent with the objectives and subject area of the corresponding Master program (i.e., topic is related to molecular life sciences);
- 3) the overall topic of the internship is primarily research oriented.

The latter criterion means that projects without a clear research objective or working hypothesis (such as e.g., repetitive measurements in clinical labs, technician jobs and the like) are not authorized as topics for lab internships.

Originality or impact are NOT required for successful completion of the lab internships; similarly, it is not expected that such internships result in a publication.



DURATION OF A LAB INTERNSHIP

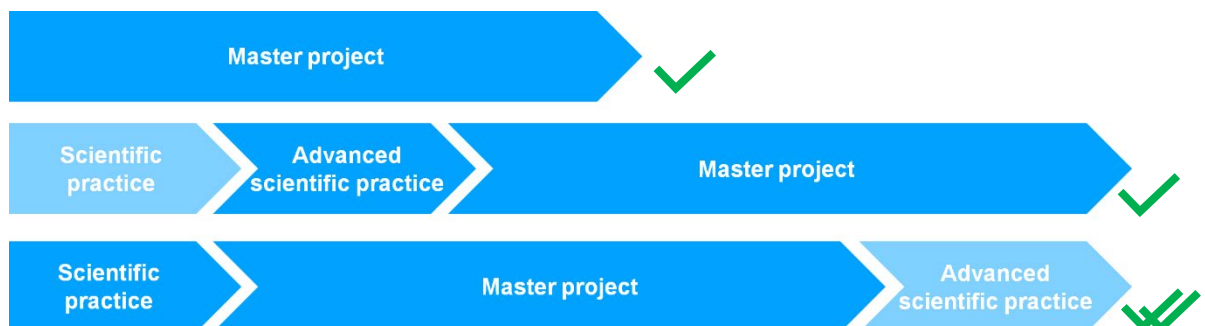
Each of the internship is worth 10 ECTS credits, which *on average* corresponds to 250 working hours (or approximately 2 months' worth of 30 hours/week workload). Exception: *Scientific Practice* internship in Master MMEI is worth 15 ECTS (approximately 3 months).

Question: *Two months is nothing! Can the internship be longer?*

Answer: Well, 6-hours work each day for two months is not that little, either! While it will take 2-3 weeks to train the student in the relevant methods, the remaining time can be well used for a limited-scope project. Further, you could agree with a neighboring or collaborating lab for them to offer the student another 2-months internship: this way, a rotation student may foster cooperation between labs while learning relevant methods.

Question: *Can lab internships be combined with the Master project?*

Answer: Yes! Students may *optionally* choose to extend their 6-months Master with up to two lab internships, thereby extending the time foreseen for the Master project for a total of 10 months. The specific order (internship – Master – internship, etc) is not important (see scheme below), but we suggest starting with the internship: this way, both the student and the potential supervisor will have time to gauge if they fit each other. If not, neither party wastes too much time, and the student gets her/his 10 ECTS credits.



Question: *Ten months is still not enough! Most projects take more than a year – at the very least!*

Answer: Master projects serve to demonstrate a student's ability to independently achieve adequate standards while addressing a specific research topic. Unlike PhD theses, originality and significance (impact) are NOT criteria for successful Master projects or lab internships. It is NOT expected that they should result in a publication, either. Consider limited-scope projects, which can be done within 6-10 months. You may negotiate a somewhat longer time if you offer students salary (which is possible, but not required from the University side). Just ask yourself: how long would *you* be willing to work unpaid?



WHO CAN SUPERVISE LAB INTERNSHIPS?

Unlike Master projects, lab internships may be supervised by PhD students, postdocs, senior scientists, group leaders and generally anyone with relevant expertise.



ORGANIZATION OF LAB INTERNSHIPS

REGISTRATION: EACH lab internship must be registered with the internship coordinator before beginning. This registration serves as approval of the internship and – especially in case of internships outside of the University of Vienna research labs – as a proof of course relevant to the study program (necessary for insurance, see below). The filled-in and signed registration form must be sent via email to the internship coordinator.

WRITTEN REPORT: at the end of EACH lab internship a short written report as described at <https://molekularebiologie.univie.ac.at/en/lab-internships/scientific-practice/> must be prepared. The project report should follow the usual IMRaD (Introduction, Methods, Results and Discussion) structure and include explicitly formulated research question(s) or working hypothesis, description of the empirical findings and conservative conclusions. Other aspects of the report (length, level of details, reference format, etc) should be done according to the criteria and instructions set up by the project supervisor. The report should be drawn within a maximum of two months after the completion of the experimental work and handed in to the supervising group leader for feedback, including suggestions for improving. The pdf of the project report must be submitted to the internship coordinator, together with the filled-in registration form including the grade suggested by the supervisor. The internship coordinator and the SPL may additionally request assessment of the written report from subject experts and/or submit it for analysis of text similarity. Usage of generative AI tools in preparation of the report is expressly forbidden.

INSURANCE: students of the University of Vienna are insured for accidents and third-party liability through the Students' Union (ÖH) on the way to and from and during the courses or activities (e.g., lab internships, Master project) *directly related to the study program*. The insurance coverage starts at the beginning of each semester, in which the student pays their Students' Union (ÖH) fee. Please notice that ÖH provides only subsidiary insurance that only applies if the personal student's insurance does not cover the claim. For internships or Master projects performed abroad, restrictions apply (accident insurance: on the way to the institution, on the way back home from the institution, at the institution; liability insurance: only if the liability occurred during the internship or Master project); there is NO liability insurance in USA, Canada and Australia. Additional personal insurance coverage is recommended when performing internships or Master projects abroad. For details, please refer to the ÖH Insurance (<https://www.oeh.ac.at/en/service/oeh-insurance/>).

GOOD SCIENTIFIC PRACTICE: both the student and the supervisor agree to adhere to the Guidelines for Good Scientific Practice of the University of Vienna and the Austrian Agency for Scientific Integrity (ÖAWI). All conflicts and infractions must be promptly reported to the study program director (SPL) and resolved in accordance with the ÖAWI Guidelines, Statutes of the University of Vienna and the corresponding Austrian legislation.



IP PROTECTION: All rights to data, publications, patents, etc. generated during the internship(s) remain with the original contributors. Local and international data protection legislation are to be observed. Any non-disclosure agreements imposed onto the student cannot hinder the student or the internship coordinator(s) from being able to independently evaluating data quality and/or admissibility nor evaluating the student's skills and knowledge.

PRACTICAL PART: the supervisor provides regular direct, in-person on-site training of the student on the scientific and methodological aspects of the project, ensures necessary safety training, discusses and supervises student's experimental work, collection, processing and analysis of the experimental and/or computational data, promptly provides specific feedback on student's performance and on the drafts of the written report. The supervisor's lab and/or Department provides the student with the materials (reagents, consumables, model systems, etc), computer code and/or data, necessary infrastructure (including IT), personal protective equipment, waste management facilities and/or other resources required to conduct the practical part of the Master project and/or internship(s).

SPECIAL CASE: CAN MULTIPLE STUDENTS WORK ON A SAME TOPIC? Yes, it is possible provided that the performance of individual students can be assessed independently. Each student must write their written report independently; each report must include an additional note indicating the joint character of the project and specifying individual contribution to the group work.

FURTHER INFORMATION ABOUT INTERNSHIPS, MASTER PROJECTS, STUDY LAW AND RELATED TOPICS IS AVAILABLE FROM THE WEBSITE OF MAX PERUTZ LABS (FORMELY CENTER FOR MOLECULAR BIOLOGY – <https://molekularebiologie.univie.ac.at/en/master-studies/master-project/>), OFFICE OF STUDY LAW (BÜRO STUDIENPRÄSES – <https://studienpraeses.univie.ac.at/>) AND/OR FROM THE STUDY PROGRAM DIRECTORATE (SPL31).

This is not an official document; the information provided is for orientation purposes only. Current Austrian legislation and Statutes of the University of Vienna apply.
