

General information's to the SS24 and WS 24/25

A Journal Club should be attended each semester. Preferentially it should be the **journal club JC Neuroscience** (following by the specification of the respective semester) **(WS and SS)**. The organization of the JC rotate through different departments and thus ensure a broad education in neuroscience on very diverse topics. Thus, I do recommend attending the journal club "JC Neuroscience".

As a result of the restructure of the Neuroscience Program the lecture Basics of Neuroscience has changed to **860.033 BVO: Basics of Neuroscience II (WS)** the lecture has is only 2 Semester hours and 2 ECTS. Thus for all new students (which have not attended the old 3 Semester hours lecture Basics of Neuroscience) have to attend also the new lecture **860.004 BVO: History of Neuroscience through the Nobel prizes (SS)**.

The "II" indicate that for those who are mathematicians or physics without any neuroscience lecture until now we do recommend to attend any basic Neuroscience lecture e.g. in English "840.011 VO: Introduction to Neuroscience WS Fr 9-10 and Tu. 13-14) or in German "Neurobiologie" (SS on Thursdays 18:30 – 20:00, in Hörsaal D – behind the CBR) or any comparable basic lectures. However, if you are a MD or did attend a Neuroscience Master it will be perfect for you and you will have no problem to follow.

The lab rotation **902.558 TS: Methods and Techniques in Neuroscience (UE)** goes together with the **902.557 BVo: Lecture accompanied to Methods and Techniques in Neuroscience**. Neither the BVo nor the lab rotation can be carried out independently of the other lecture; both together represent a unit. There is a parallel course for "Neuroscience" Master students at the University of Vienna. This course is equivalent (the VO and the UE in the new format VU). Both timetables and program content are at the end of this email. **All students who actively participate in the FENS meeting will be assigned to the first course in the preliminary discussion.** This means there is no overlap between the UE and FENS meetings.

In March we had a get together of all PhD students in the Neuroscience program to learn to know each other better and to get the possibility to ask all questions you may have. The next event will be at the beginning of the winter semester 24/25 in October 2024.

RETREAT: We currently planning to have the "NEUROSCIENCE RETREAT" in November 2024.

860.046 JC Neuroscience: Aspects of Structure-Function relations for Protein-Target Interactions
[https://campus.meduniwien.ac.at/med.campus/pl/ui/\\$ctx/LV.edit?clvnr=360990](https://campus.meduniwien.ac.at/med.campus/pl/ui/$ctx/LV.edit?clvnr=360990)

This semester by Margot Ernst and Markus Kunze (CBR, Pathobiology of the Nervous System)

Content: The interaction of diverse proteins with a wide variety of different targets (small compounds, peptides, proteins) is a central element of neuroscience. However, the mechanistic consequences of these binding events and the conversion into cellular function are rather challenging research questions.

The papers discussed in the Journal Club will deal with structural aspects of these interactions, their mechanistic consequences and the evolutionary conservation of such interactions using examples from the interactions of proteins in the pentameric ligand gated ion channel family, and of proteins involved in protein transport into peroxisomes.

Expected Results of Study and Acquired Competences: Students should be familiarized with different computational and experimental approaches to link structure and function of proteins. Moreover, they should train the presentation of scientific results and the discussion of the results, methods, strengths and limitations of scientific papers.

Questions: Markus.Kunze@meduniwien.ac.at and Margot.Ernst@meduniwien.ac.at

860.004 BVO: History of Neuroscience through the Nobel prizes

[https://campus.meduniwien.ac.at/med.campus/pl/ui/\\$ctx/LV.edit?clvnr=365707](https://campus.meduniwien.ac.at/med.campus/pl/ui/$ctx/LV.edit?clvnr=365707)

Neuroscience is still a rapidly growing field and the ever increasing knowledge forces students to learn more and more factual details. Conversely, timely restrictions limit their ability to learn about the history of neuroscience and the origins of ideas that are at the center of today's knowledge. These historical findings, however, are also excellent learning paradigms to study scientific praxis, which includes carefully studying processes of interest, developing theories, planning experiments or testing and verifying hypotheses.

To offer students an opportunity to engage with the exciting history of neuroscience and to learn from its highlights, we offer a lecture series devoted to the history of neuroscience through the Nobel Prizes. For that purpose we planned a series of sixteen lectures (45 minutes) addressing different Nobel Prizes, ranging from first descriptions of brain structures in 1906 to the elucidation of the circadian rhythm in 2017.

A multidisciplinary team of lecturers from different areas of neuroscience, primarily belonging to the Medical University of Vienna but with support from the University of Vienna and the Konrad Lorenz Institute for Evolution and Cognition Research, have agreed to contribute a lecture. Questions: Markus.Kunze@meduniwien.ac.at

902.558 TS: Methods and Techniques in Neuroscience (UE)

[https://campus.meduniwien.ac.at/med.campus/pl/ui/\\$ctx/LV.edit?clvnr=362545](https://campus.meduniwien.ac.at/med.campus/pl/ui/$ctx/LV.edit?clvnr=362545)

902.557 BVo: Lecture accompanied to Methods and Techniques in Neuroscience

[https://campus.meduniwien.ac.at/med.campus/pl/ui/\\$ctx/LV.edit?clvnr=362544](https://campus.meduniwien.ac.at/med.campus/pl/ui/$ctx/LV.edit?clvnr=362544)

You should have successfully attended (including positive examination) Basics of Neuroscience II in order to attend this lab rotation. The two courses MedUniWien **Methods and Techniques in Neuroscience (BVo + UE)** and UniWien **Advanced Neuroscience (VU)** are exactly the same but are 2.5 days one behind the other. Please find the two programs attached.

Questions: sabine.geisbichler@meduniwien.ac.at