

Placement in “Pharmacy”

Procedure for applying for placements:

Students are nominated by a partner university through our website by the 15th of May or 15th of October. The nomination is then reviewed and either approved or declined. If approved, the student will receive information about the further application process.

In the Learning Agreement that needs to be included in the application form, information about the placement is required, such as the desired fields, number of hours, hours per day, evaluation, etc. After this information is provided, a detailed placement plan will be arranged with the hospitals and healthcare centers.

The Faculty of Pharmacy of RSU offers exchange students the opportunity to acquire experience in laboratory Research Work in Riga.

Placement could be arranged based on the specialty of a student training programme.

• Laboratory of Finished Dosage Forms

(<https://www.rsu.lv/en/laboratory-finished-dosage-forms>) is part of the Faculty of Pharmacy at Rīga Stradiņš University (RSU, Latvia). The Lab is composed of a multidisciplinary team of researchers, PhD students, pharmacists, chemists, and engineers. It provides a wide range of research opportunities for scientists, academic staff, young researchers, and students. The Lab's primary focus is on the research and development of pharmaceutical formulations and drug delivery systems for oral solid dosage forms, as well as the development of corresponding characterization methods. Equipped with state-of-the-art analytical and technological facilities

(<https://science.rsu.lv/en/equipments/?organisationIds=db418107-3e59-46ef-8e2b-e0eb8d7d5ab3&nofollow=true>), the Lab is actively involved in the education and training of highly qualified professionals for the pharmaceutical field. It serves as a foundation for pharmacy student training and research, contributing to both local and international research projects.

Supervisor: Head of the Laboratory Konstantins Logviss, email: Konstantins.Logviss@rsu.lv

• Laboratory of Pharmaceutical Pharmacology

Latvian Institute of Organic Synthesis

Students will be introduced to the experimental methods of drug discovery research in academic and industry collaboration projects. This will include demonstrations of ex vivo (mitochondrial respiration) and in vitro models (cell culture). Biochemical analysis of enzyme and transporter activity, as well as techniques for determination of protein expression (RT-PCR, Western blot), will be part of the project plan. The study project will be related to the investigation of molecular mechanisms of cellular energy metabolism pathways and biomarkers of cardiometabolic diseases.

Supervisor: Professor Maija Dambrova; e-mail: Maija.Dambrova@rsu.lv

• **Laboratories in the Department of Applied Pharmacy**

Students can learn how to prepare various kinds of samples (active pharmaceutical ingredients, herbal extracts, etc.) for chromatographic (HPLC, TLC) and spectroscopic (FTIR, UV/VIS, RAMAN, XRD) analysis and analyze the obtained data. Students can master the basic principles of nanoparticle, hydrogel, and other drug delivery system synthesis and characterization. Knowledge and skills on dissolution tests of tablets can be obtained. The researchers will teach the fundamental principles of the research process and provide students with the opportunity to conduct their own studies within the scope of the research groups' projects.

Supervisor: Assistant professor Agnese Brangule, research group leader; email:

Agnese.Brangule@rsu.lv

• **A traineeship opportunity:** a traineeship with Dr. Valentyn Mohylyuk can be arranged through a preliminary negotiated scientific topic. Please contact via email: Valentyn.Mohylyuk@rsu.lv