

Institute of Organic Chemistry and Biochemistry of the CAS

invites you to a practical workshop

Introduction to Structural Biology with Focus on X-ray Crystallography: Become a Crystallographer in One Day

Have you always wondered what is behind the fancy-colored protein structure models? What information can you get out of them? How are they obtained and what are their limitations? How can you use them in your research?

In our one-day intensive workshop, you will learn how to use the Protein Data Bank database (PDB) to search for your favorite protein targets and how to analyze and interpret the retrieved data. We will teach you how to assess critically the AlphaFold generated models. We will also present a brief overview of experimental structure determination by protein X-ray crystallography.

In the practical session in our laboratory, we will introduce you to crystallization robot instrumentation, you will grow your own protein crystals, observe them under microscopes and fish them, and we will set up a diffraction experiment on our home-source X-ray diffractometer.

By the end of the day, you will be able to find, analyze, and interpret published and in silico modeled protein structures and you will have basic hands-on experience with protein crystallography.

The meeting is held under the auspices and with the support by the project National Institute for Cancer Research (Programme EXCELES, ID Project No. LX22NPO5102) – Funded by the European Union – Next Generation EU.



October 24, 2024

9:00–17:00

Organizer: Pavlína Maloy Řezáčová,
Structural biology, IOCB Prague

Contact: Dr. Petr Pachl,
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Location: IOCB Prague,
Flemingovo n. 2, Prague 6

Registration: [registration form](#)

Participation is free and preferably for colleagues from NICR (NÚVR). Number of participants is limited to 20.