

## PROGRAMME

### 1st Student Conference in Structural Biology 2 - 3 June 2021

Organized by the Czech Society for Structural Biology  
and the Institute of Biotechnology of the Czech Academy of Sciences

#### Wednesday, June 2

13:00 - 13:05 Introduction **Jan Dohnálek**

Chairperson: **Vladimír Sklenář**

13:05 - 13:20

**Kristýna Adámková** (Institute of Biotechnology, Czech Academy of Sciences)

Structures of S1 nuclease complexes at atomic resolution reveal details of RNA interaction with enzyme in spite of multiple crystal defects

13:20 - 13:35

**Stefan Djukic** (Institute of Organic Chemistry and Biochemistry, Czech Academy of Sciences)

Structure-assisted drug discovery: purine nucleoside phosphorylases

13:35 - 13:50

**Barbora Kaščáková** (Institute of Chemistry, University of South Bohemia)

*Ixodes ricinus* Serpins

13:50 - 14:05

**Filip Melicher** (CEITEC, Masaryk University)

Structural determination of lectins from *Photorhabdus* spp.

14:05 - 14:20

**Pavel Pohl** (Institute of Physiology, Czech Academy of Sciences)

Structural glimpse into 14-3-3 protein dependent regulation of ubiquitin ligase Nedd4-2

14:20 - 14:35

**Elżbieta Wątor** (Małopolska Centre of Biotechnology, Jagiellonian University)

Half way to hypusine. Structural characterization of human deoxyhypusine synthase

14:35 - 15:05 Break

Chairperson: **Jiří Pavlíček**

15:05 - 15:20

**Darya Peramotava** (University of South Bohemia in v České Budějovice)

Initial characterization of small protease inhibitors from *Ixodes ricinus*

15:20 - 15:35

**Petra Havlíčková** (Faculty of Science, University of South Bohemia in České Budějovice)

Production of TBEV NS5 protein for structural and functional studies

15:35 - 15:50

**Katarína Hešková** (Slovak Academy of Sciences, Institute of Neuroimmunology)

Flexible platform for production of proteins of a quality and quantity suitable for structural studies.

15:50 - 16:05

**Aditya Chaudhari** (Institute of Biotechnology, Czech Academy of Sciences)

In solution site-specific time-resolved structural biology of the light sensitive transcription factor EL222 monitored by infrared spectroscopy with vibrational probes

16:05 - 16:20

**Raju Mandal** (Faculty of Science, Charles University)

Structural basis of interaction between Forkhead box O4 (FOXO4) and p53

16:20 - 16:35

**Karolína Honzejková** (Faculty of Science, Charles University)

Role of thioredoxin in regulation of Apoptosis signal-regulating kinase 1 (ASK1)

## Thursday, June 3

Chairperson: **Tomáš Obšil**

13:00 - 13:15

**Martin Malý** (*Institute of Biotechnology, Czech Academy of Sciences*)

Looking for the optimal resolution cutoff with PAIREF GUI

13:15 - 13:30

**Ondřej Schindler** (*Faculty of Science, Masaryk University*)

Partial atomic charges for proteins

13:30 - 13:45

**Aliaksei Charehneu** (*CEITEC, Masaryk University*)

NChRDB: Solving the puzzle of structure-function relationships to clarify the allostery of nicotinic acetylcholine receptors (nAChRs)

13:45 - 14:00

**Zhengyue Zhang** (*CEITEC, Masaryk University*)

Understanding Physical Effects of Phosphorothiation in RNA Context with Computational Methods

14:00 - 14:15

**Marco Klepoch** (*Institute of Biotechnology, Czech Academy of Sciences*)

Towards data standardization for biophysical data

14:15 - 14:30

**Francesco L. Falginella** (*CEITEC, Masaryk University*)

A multifaceted computational study to unravel the role of the C-terminal DEP domain of Dishevelled protein in Wnt signalling pathway

14:30 - 15:00 Break

Chairperson: **Jan Dohnálek**

15:00 - 15:15

**Lucie Valentová** (*CEITEC, Masaryk University*)

Structure of *Pseudomonas aeruginosa* infecting bacteriophage JBD30 solved by cryo-electron microscopy

15:15 - 15:30

**Zuzana Trebichalská** (*CEITEC, Masaryk University*)

Elucidating the life cycle of human enteroviruses *in situ*

15:30 - 15:45

**Ján Biňovský** (*CEITEC, Masaryk University*)

Baseplate structure of bacteriophage phi812 reveals mechanism of cell wall binding and penetration

15:45 - 16:00

**Marta Šiborová** (*CEITEC, Masaryk University*)

Virion structure and mechanism of genome delivery of bacteriophage SU10 from the family *Podoviridae*

16:00 - 16:30 Break

16:30

Evaluation of student presentations, announcement of prizes

General assembly of CSSB