



# Seahorse XF Users' Meeting and Workshop



11<sup>th</sup> and 12<sup>th</sup> April 2019

## REGISTRATION LOCATION

To register, send an e-mail to [mpuska@hpst.cz](mailto:mpuska@hpst.cz) until 8<sup>th</sup> April. Please, notice, if you can participate in both, workshop and Users' Meeting or only in Users' Meeting.

### Registration fee

Free of charge

### Location

Institute of Physiology  
CAS, Vídeňská 1083,  
Praha 4

### Workshop, 11. April

Building DAI, ground  
floor AND Dep.  
Bioenergetics – 2.floor  
Users' meeting,  
12.April

Cinema hall in the  
main building of the  
Institute of Physiology

## Real-time, live cell metabolic analysis - Measure What's Important

The role of metabolism in cellular and physiological processes is well established, with many diseases now linked to metabolic dysfunction or reprogramming. Agilent [Seahorse XF technology](#) enables to detect discrete changes in cellular bioenergetics using label-free, integrated platform to deliver quantitative cell metabolic data with real-time compound exposure kinetics.

### Seahorse XF Workshop, 11<sup>th</sup> April 2019

Seahorse XF Workshop can introduce you to Seahorse XF technology in a practical and a theoretical way. Practical part will be leaded by dr. Tomáš Mráček, who is a head of Department of Bioenergetics in the Institute of Physiology CAS. Agilent technical support scientist Annika Bagge will be also present for discussion. The number of workshop participants is limited to 20.

### Seahorse XF Users' Meeting, 12<sup>th</sup> April 2019

Please join us for a Seahorse XF Users' Meeting in Physiological Institute AV CR in Prague 4. You can meet other Seahorse XF users there, share your experience with Seahorse XF technology and also get an overview about new results in this field. There is also a great potential to find a new scientific collaboration and start with Seahorse technology.

### Preliminary program Workshop and Users's Meeting (Visit [www.hpst.cz](http://www.hpst.cz) for final version)

#### Workshop, 11th April 2019

- 9:00 – 9:30 Registration
- 9:30 – 9:40 Welcome, introduction and set up (Michaela Pluskalová, Tomáš Mráček)
- 9:40 – 10:00 Introduction to Seahorse XF technology (Michaela Pluskalová)
- 10:00 – 10:30 Setting of experiment in software Wave (Růžena Penížková)
- 10:30 – 12:30 *Seahorse experiment, first part (including coffe-break)*
- 12:30 – 13:00 Standard assays to measure metabolic engines and fuels (M. Pluskalová)
- 13:00 – 14:00 *Lunch (IMG)*
- 14:00 – 14:30 Report Generators (Růžena Penížková)
- 13:00 – 13:30 *Seahorse experiment, second part*
- 13:30 – 14:30 Results and data interpretation (Tomáš Mráček)
- 14:30 – 15:00 *Open discussion and coffee break*

Organized in cooperation with  
FGÚ AV ČR: Program OPK  
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# Seahorse XF Users' Meeting and Workshop



11<sup>th</sup> and 12<sup>th</sup> April 2019

## Seahorse XF Users' Meeting, 12th April 2019

- 9:30 – 9:35 Welcome (Michaela Pluskalová, HPST)
- 9:35 – 9:50 Agilent Cell Analysis News (Annika Bagge, Agilent Technologies)
- 9:50 – 10:20 Alternative assembly of respiratory complex II connects energy stress to metabolic checkpoints (Jakub Rohlena, BIOCEV)
- 10:20 – 10:35 Functional analysis of cellular models of cytochrome c oxidase dysfunction (Alena Pecinová, Institute of Physiology CAS)
- 10:35 – 10:50 Assessment of metabolic profile of primary leukemia cells employing Seahorse XFp Analyzer (Júlia Starková, CLIP, 2<sup>nd</sup> Faculty of Medicine, Charles University)
- 10:50 – 11:20 *Coffee Break*
- 11:20 - 11:50 Data analysis and data quality control (Annika Bagge, Agilent Technologies)
- 11:50 – 12:10 Normalization of Seahorse data across experiments – OCR-Stats are here to help (Eliška Koňářiková, Institute of Physiology CAS)
- 12:10 – 12:25 A year with Seahorse: from coating to counting (Kateřina Váňová, Institute of Physiology CAS)
- 12:25 – 12:40 Analysis of mitochondrial respiration of 2 cell types – Oroboros or Seahorse? (Jitka Kuncová, Faculty of Medicine in Plzeň, Charles University)
- 12:40 – 13:00 Open discussion
- 13:00 – 13:45 *Lunch (IMG)*
- 13:45 – 14:00 Bioenergetic parameters in patients with Congenital Disorders of Glycosylation (Lucie Zdražilová, 1<sup>st</sup> Faculty of Medicine, Charles University and VFN)
- 14:00 – 14:15 Possible association between adhesion signaling and glycolysis (Kateřina Kuželová, Institute of Hematology and Blood Transfusion)
- 14:15 – 14:30 Targeting metabolism – different outcome in vitro in comparison to in vivo conditions (Pavla Strnadová, SOTIO)
- 14:30 – 14:40 3D & Label-free mitochondria visualization
- 14:40 – 14:45 Conclusion
- 14:35 – 15:00 *Discussion and coffee break*

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