## 2<sup>nd</sup> Hands-on Computational Enzyme Design Course

The Hands-on Computational Enzyme Design Course is a highly practical and interactive course meant primarily for protein and metabolic engineers with no prior experience in computer modelling and bioinformatics. Other experts willing to broaden their current computational protein design toolbox can also benefit from this course. A team of experts and software developers provide training on how to operate several software tools devoted to different aspect of enzyme engineering, and how to properly interpret the results. Four main topics covered are: (i) Mining and analysis of novel enzymes, (ii) Engineering protein stability, (iii) Engineering enzyme activity and specificity, and (iv) Engineering protein solubility. The theoretical background and practical exercises are provided in a dynamic discussion environment.

The first edition of this course was carried out in the classical on-site format for 3.5 days, in Brno, Czech Republic, in February 2020. The course was organized by the Loschmidt Laboratories, Department of Experimental Biology and RECETOX, Faculty of Science, Masaryk University and International Clinical Research Center, St. Anne's University Hospital Brno. Due to the COVID-19 pandemic, the second edition of the course was performed on-line in May 2021. Both editions were fully booked and the feedback from the participants was very positive. The great majority of the participants was highly satisfied and would recommend the course to a colleague. The 2<sup>nd</sup> edition was fully booked after only 2 weeks, with participants from 16 countries and 4 continents, 12% of them coming from industry. Our experience shows that: (i) by running an on-line edition we shortened distances, allowing participants from farther regions of the globe to join, (ii) the demand for training on computational enzyme design tools is high, and (iii) the reputation of the Loschmidt Laboratories as providers of valuable tools and training is growing. We plan to run in the future both on-site and on-line versions of the course. If you are interested in participating in the next edition, you can access the course website to our newsletters tuned: sign stay https://loschmidt.chemi.muni.cz/academy/



