https://sano.science/

# Sano Computational Medicine Seminars

**Monday, 19 April 2021, 13:00-14:30 (CEST)**

Join us via Zoom: https://seminar.sano.science/


**Patryk Orzechowski**

Institute for Biomedical Informatics (IBI)

Perelman School of Medicine

University of Pennsylvania


## Data science and translational bioinformatics


**Abstract**

We live in the era of big data. In recent years both the volume and availability of data has surged. According to IORG 90% of online data has been created in the last 2 years. The growing amount of biomedical data delivers a better understanding of the biology, risk factors and backgrounds of the common diseases and allows rapid development of new personalized treatments. It also brings challenges, especially in the domain of data integration and data analytics. Can machine learning and artificial intelligence live up to their hype and create innovations that would drive clinical research and drug discovery? This presentation will provide broad overview on the recent trends in machine learning in context of their translation to medical and clinical insight. It will also touch on the aspects of development of scalable machine learning methods and benchmarking.


**Dr. Patryk Orzechowski** holds a PhD in computer science and an MSc in automatics and robotics, and computer science from AGH University of Science and Technology, Krakow, Poland. He works as a staff data scientist at the Institute for Biomedical Informatics, Perelman School of Medicine, University of Pennsylvania, USA. His research focuses on machine learning, artificial intelligence, and their application to big biomedical data. His recent interests include automated machine learning (AutoML), benchmarking, precision medicine, and deriving knowledge from electronic health record (EHR). He is also one of the leading experts on biclustering, an unsupervised machine learning technique of detecting meaningful patterns in subsets of rows and columns.


Horizon 2020 · Fundusze Europejskie Inteligentny Rozwój · Rzeczpospolita Polska · FNP Fundacja na rzecz Nauki Polskiej · Unia Europejska Europejski Fundusz Rozwoju Regionalnego