JOB OFFER

Position in the project:	PhD student
Scientific discipline:	systems biology
Job type (employment contract/stipend):	scholarship
Number of job offers:	1
Remuneration/stipend amount/month *("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):*	2500 PLN
Position starts on:	01.09.2021
Maximum period of contract/stipend agreement:	2 years
Institution:	Institute of Fundamental Technological Research, Polish Academy of Sciences
Project leader:	Dr. Michał Komorowski
Project title:	*Deciphering of biochemical signaling to inform more efficient therapeutic strategies* *Project is carried out within the First Team grant of the Foundation for Polish Science*
Project description:	The overall molecular and biochemical mechanisms how individual cells transduce signals to effectors are widely understood. Biochemical descriptions, however, do not directly lead to understanding how the stimuli are translated into distinct responses as cellular signaling processes are immensely complex. The main goal of this project is to improve our understanding of how cellular signaling processes can derive a variety of distinct outputs from complex inputs. To achieve this, we will use an integrative approach that links tailored experiments with mathematical analysis. We will use interferon signaling as a model system to challenge the conventional concept of distinct signaling pathways that link signals with specific cellular responses. Further, we will explore our findings to examine how the interferon pathway can be therapeutically exploited in the context of anticancer therapies. The project is performed in collaboration with researchers at Weizmann Institute (Israel), Oxford University (UK), and University of Veterinary Medicine, Vienna (Austria).
Key responsibilities include:	1. Performing research in the area of Systems Biology 2. Development of mathematical models of cellular signal processing 3. Development of computational and statistical tools for data analysis 4. Computer-aided design of experiments 5. Image analysis and processing 6. Manuscripts preparation
Profile of candidates/requirements:	1. Involvemnt in a PhD school graduate program 2. MSc in mathematics, computer science, engineering or related field 3. Basic (high-school) knowledge of cell biology 4. Good programming skills (R, Python or Matlab) 5. Motivation for scientific work 6. Scientific mindset

	7. Excellent writing and science communication skills
Required documents:	1. Motivation letter 2. CV including list of publications 3. MSc certificate 4. Confirmation of involvement in PhD school graduate program
We offer:	1. International collaborations 2. Support to develop new skills 3. Participation in international conferences and workshops 4. Support in application for additional funding and scholarships 5. Creative, innovative and friendly work environment **6.** Scholarship 2500 PLN/month for up to 2 years
Please submit the following documents to:	contact@sysbiosig.org
Application deadline:	27.08.2021
For more details about the position please visit (website/webpage address):	sysbiosig.org or email m.komorowski@sysbiosig.org
Euraxess job/stipend offer (in case of PhD and postdoc positions):	

Please include in your offer: