

Review of the Research Pooling Initiative by SICSA Reader Alexey Goltsov, PhD, DSc, Abertay University, Dundee

In 2010 I got a post of a SICSA Reader in Abertay University, Dundee funded by the SFC research pooling initiative. Before I worked in the Centre for Systems Biology at Edinburgh (CSBE), and my main area of expertise is Computational Systems Biology. Our collaboration with West General Hospital pioneered translation of Computational Systems Biology to research in cancer therapy and clinical trials. Funding of my post in the Abertay University by the SRC significantly strengthened my research in this emerging scientific field and enhanced collaboration between Abertay University and experimental groups in Edinburgh, St Andrews, Aston Universities, Moscow State and Kansas Universities. The multidisciplinary research of this collaboration aimed at the incorporation of new systems approaches and computational tools into experimental research in personalised cancer therapy. The results of the joint work have been published in 15+ papers in high impact journals, 5+ book chapters, and multiple conference proceedings that contributed significantly to Abertay University's research outcomes. In 2009, I earned the Doctor of Science research degree in the Moscow State University as a result of successful public defence of my dissertation based on the obtained result in this project.

This funding also impacted significantly on my teaching at the Abertay University. It helped the development of new modules such as "Systems biology" and "Computational Pharmacogenomic" and planning a new module "Mobile medical device and their integration in health monitoring". In these modules, students get experience in applying of modern computer tools and methods in biomedical science. As a result of a joint teaching and research activity, computer-aided environment and framework were created in the Abertay University to enhance teaching, learning and research involvement of the biomedical students.

The success of this research pooling initiative in my case is likely to result from the targeting of the emerging area and emerging collaboration among Scottish Universities working on the interdisciplinary fields in pharmaceutical research which underwent the fast transformation from scientific discipline to promising tools in cancer research and drug development. Thanks to this funding, our collaboration contributed significantly to this transformation of the scientific landscape in cancer research. So, I think that supporting and investing in the researches and collaborations which ensure fast transforming of the research/development areas and reshape scientific environment are a promising strategy of the SFC research pooling initiative.

