TranSYS: Personalised Medicine at the Interface of Translational Research and Systems

Description

TranSYS will recruit 15 ESRs to highly skilled jobs in the new area of Systems Health developing tools and approaches to exploit large and complex datasets, to advance Precision (Personalised) Medicine in several disease areas. The training programme and experience of different international research environments cuts across traditional data and life sciences silos. The emphasis on translational research will support new collaborations between academics and the pharma and health analytics sectors. Our ESR projects will advance the state of the art on biomarker discovery, improve understanding of disease-specific molecular mechanism and target identification for optimal diagnostics, disease risk and treatment management, refine data generation and their management (including warehousing, disease specific and standardised approaches for data processing, visualisation and model development) leading to improved clinical study design, clinical sampling and more targeted therapeutics.

This ETN will internationalise participants, and leverage EC and industry sponsorship, to structure and expand the unique training programme and advance emerging research areas, combining wet-lab, clinical and Big Data resources with computational and modelling know-how. To achieve a paradigm shift in research training this ETN brings together international leaders in Preclinical Science & Molecular Medicine, Systems Analytics, and Targeted Therapeutics, from academia and industry. These experts are ideally positioned to develop the proposed training programme and deliver a highly-trained workforce of next generation scientists, with the right mindset,knowledge and skills, at the interface of Translational and Systems Medicine. The TranSYS training programme is designed to address a critical skills gap that is currently a bottle neck to advancing Precision Medicine.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación