Basic genomic research to biomedical research to translational medicine to medical applications

It is widely recognized that there is a gap between basic biomedical research and medical applications. This gap derives from the need of a process of technology transfer to private companies that will eventually exploit those applications. Such process is complex and involves a number of players, i.e., scientists, technology transfer officers, legal advisors and business people so it can take from months to years. Also, there is an increasing concern about the fact that many scientists concentrate most of their efforts in publishing papers in order to be more competitive, so that in the next grant application their research group will receive a new grant. All these facts bring the obvious result, i.e., biomedical research is normally not translated into the practical applications that should bring the expected benefit for patients, despite the large investment that many countries make in basic research. A clear example of this problem is the small number of new drugs that have been developed in the last decade, despite the promise that, after sequencing the first draft of the human genome, a wave of new therapies would be developed. Similarly, more than a decade after the first draft of the human genome was obtained thousands of human genetic diseases still do not have a known molecular basis. In this talk the author will present my personal experience in translating basic knowledge in genetics and genomics into medical applications through entrepreneurship in science, mainly in two fields: Medical Genetics and Drug Discovery. Also, he will present the Spanish Association of Entrepreneurs in Science and the need to create the European Association of Entrepreneurs in Science.

Biography

Manuel Pérez Alonso has a degree in Biology and PhD in Molecular Genetics. He is Genetics Professor at the University of Valencia. He participated in five international genome sequencing consortia and (as PI) in a number of basic research projects. He is promoter and founding partner in four biomedical companies: Valentia BioPharma, The Institute of Genomic Medicine, GenAGen and Genera Biotech all of them located at the University of Valencia Science Park. His research is now focused in the development of genomics tools for genetic testing. He also contributes to biopharmaceutical research through the study of the pathways leading to rare genetic disease. He is President of the Valencia BioRegion (BIOVAL) and President of the Spanish Association of Entrepreneurs in Science.

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