

Sanofi joins Open Targets

Cambridge, 29th October 2018

Open Targets announced today that Sanofi has joined its pioneering public-private collaboration to transform drug discovery by improving the success rate for developing new medicines. Sanofi's expertise in immunology, oncology, neurosciences and diabetes will complement the offerings of the current partners GSK, Biogen, Takeda, Celgene, the Wellcome Sanger Institute and EMBL's European Bioinformatics Institute (EMBL-EBI).

Most compounds that enter clinical trials never make it to the market, often failing because the biological target chosen is not well understood. To address this challenge Open Targets aims to systematically improve the identification and prioritisation of drug targets for safe and effective medicines.

The consortium is a unique, pre-competitive partnership between companies and not-for-profit research institutes. Open Targets combines the skills, knowledge and technologies of its partner organisations, offering a critical mass of expertise that does not exist in any single institution. Large-scale genomic experiments (Sanger Institute) and computational techniques (EMBL-EBI) developed in the public domain are blended with formal pharmaceutical R&D approaches to identify causal links between targets, pathways and diseases. This enables the partners to systematically identify drug targets and prioritise them for further exploration.

The freely available Open Targets Platform (www.targetvalidation.org) makes it easy for researchers working in many disciplines to identify and prioritise therapeutic targets for new medicines. The platform features over 21,000 targets associated with more than 10,000 diseases and receives around 1000 unique visits each week.

"Open Targets presents an exciting opportunity to deepen our understanding of human disease biology and its complex molecular network. We look forward to working alongside our academic and industry partners to leverage these genomic insights to deliver better options for people suffering from serious unmet medical needs. We are pleased to bring Sanofi's scientific and clinical expertise to the table, together with other partners, harnessing cutting-edge data science techniques to accelerate the discovery of new biological targets and develop transformative medicines in immunology, oncology, neurological and metabolic diseases," commented Yong-Jun Liu, Global Head of Research, Senior Vice President R&D, Sanofi.

"Collaboration is essential for innovation, and few initiatives illustrate this as clearly as Open Targets," says Rolf Apweiler, Interim Director of Open Targets. "We welcome Sanofi into Open Targets, and look forward to the exchange of insight, expertise and skills to enhance our research programme. Through collaboration we can improve target identification and prioritisation for safe and effective new medicines, which we can we share openly with the scientific community."

Open Targets covers all aspects of human health and disease. The cornerstone of the collaboration is an agreement that experimental data and information gathered within the initiative will be shared openly, to benefit the broader scientific community.

Open Targets welcomes new interest from companies and academic institutions that wish to accelerate the discovery of drug targets through open innovation.

Discover more

Sanofi

Sanofi is dedicated to supporting people through their health challenges. We are a global biopharmaceutical company focused on human health. We prevent illness with vaccines, provide innovative treatments to fight pain and ease suffering. We stand by the few who suffer from rare diseases and the millions with long-term chronic conditions.

With more than 100,000 people in 100 countries, Sanofi is transforming scientific innovation into healthcare solutions around the globe.

Sanofi, Empowering Life

www.sanofi.com

EMBL's European Bioinformatics Institute (EMBL-EBI)

EMBL's European Bioinformatics Institute (EMBL-EBI) is a global leader in the storage, analysis and dissemination of large biological datasets. EMBL-EBI helps scientists realise the potential of 'big data' by enhancing their ability to exploit complex information to make discoveries that benefit humankind.

EMBL-EBI is at the forefront of computational biology research, with work spanning sequence analysis methods, multi-dimensional statistical analysis and data-driven biological discovery, from plant biology to mammalian development and disease.

We are part of the European Molecular Biology Laboratory (EMBL), an international, innovative and interdisciplinary research organisation funded by 25 member states and two associate member states, and are located on the Wellcome Genome Campus, one of the world's largest concentrations of scientific and technical expertise in genomics.

www.ebi.ac.uk

The Wellcome Sanger Institute

The Wellcome Sanger Institute is one of the world's leading genome centres. Through its ability to conduct research at scale, it is able to engage in bold and long-term exploratory projects that are designed to influence and empower medical science globally. Institute research findings, generated through its own research programmes and through its leading role in international consortia, are being used to develop new diagnostics and treatments for human disease.

To celebrate its 25th year in 2018, the Institute is sequencing 25 new genomes of species in the UK.

www.sanger.ac.uk

GSK

GSK - a science-led global healthcare company with a special purpose: to help people do more, feel better, live longer. We have 3 global businesses that research, develop and manufacture innovative medicines, vaccines and consumer healthcare products. We aim to bring differentiated, high-quality and needed healthcare products to as many people as possible using our scientific and technical know-how.

In 2014 GSK became one of the founding members of Open Targets to systematically improve the identification and prioritisation of drug targets that could lead to safe and effective medicines. For further information please visit www.gsk.com

Biogen

At Biogen, our mission is clear: we are pioneers in neuroscience. Biogen discovers, develops and delivers worldwide innovative therapies for people living with serious neurological and neurodegenerative diseases. Founded in 1978 as one of the world's first global biotechnology companies by Charles Weissman, Heinz Schaller, Kenneth Murray and Nobel Prize winners Walter Gilbert and Phillip Sharp, today Biogen has the leading portfolio of medicines to treat multiple sclerosis; has introduced the first and only approved treatment for spinal muscular atrophy; and is focused on advancing neuroscience research programs in Alzheimer's disease and dementia, neuroimmunology, movement disorders, neuromuscular disorders, pain, ophthalmology, neuropsychiatry, and acute neurology. Biogen also manufactures and commercializes biosimilars of advanced biologics.

www.biogen.com

Takeda Pharmaceutical Company Limited

Takeda Pharmaceutical Company Limited is a global, research and development-driven pharmaceutical company committed to bringing better health and a brighter future to patients by translating science into life-changing medicines. Takeda focuses its R&D efforts on oncology, gastroenterology and neuroscience therapeutic areas plus vaccines. Takeda conducts R&D both internally and with partners to stay at the leading edge of innovation. Innovative products, especially in oncology and gastroenterology, as well as Takeda's presence in emerging markets, are currently fueling the growth of Takeda. Approximately, 30,000 Takeda employees are committed to improving quality of life for patients, working with Takeda's partners in health care in more than 70 countries.

For more information, visit www.takeda.com/newsroom/

Celgene

Celgene Corporation, headquartered in Summit, New Jersey, is an integrated global biopharmaceutical company engaged primarily in the discovery, development and commercialization of innovative therapies for the treatment of cancer and inflammatory diseases through next-generation solutions in protein homeostasis, immuno-oncology, epigenetics, immunology and neuro-inflammation.

http://www.celgene.com