

JANSSEN RESEARCH GLOBAL COLLABORATIONS MEDIA BACKGROUNDER

Johnson & Johnson Innovation Centers

As part of Johnson & Johnson's global innovation strategy to advance human health by collaborating with the world's leading scientists and entrepreneurs, Johnson & Johnson has established four regional hubs in the world's leading innovation hotspots that are London, Boston, San Francisco and Shanghai. The goal of the Johnson & Johnson innovation centers is to accelerate the best early stage science in the world and to advance the development of new healthcare solutions by catalyzing collaborations in science and technology between regional innovators and the Johnson & Johnson Family of Companies across a diverse spectrum of early stage innovation.

Janssen Healthcare Innovation

Janssen Healthcare Innovation - <http://www.janssenhealthcareinnovation.com/> - is a team within Janssen Research & Development, LLC which is expanding the company's offerings of healthcare services and solutions by acquiring companies and programs, and establishing partnerships and collaborations both internally and externally. The goal is to empower healthcare consumers and modernize healthcare delivery.

Janssen Healthcare Innovation is entrepreneurial in the pursuit of new and unique business models. Currently, Janssen Healthcare Innovation has commercial trials (commercial trials are learning pilot programs where data is gathered to assess scalability for future applications) running in areas such as personal genomics, virtual medicine and mobile health. The portfolio of projects is designed to identify technologies and platforms that help consumers to better understand their own health, manage health information, make healthy lifestyle choices, better adhere to treatment regimens and improve their overall healthcare experience.

Janssen Healthcare Innovation is leveraging the deep understanding of the Janssen Family of Companies consumer's needs, as well as its global consumer product, pharmaceutical, biotechnology and medical device development infrastructure to lead the transformation of the healthcare industry.

Janssen Labs, Life science innovation center

Janssen Labs is a new life science innovation center created by Janssen Research & Development, LLC (JRD) at its La Jolla-based West Coast Research Center (California, USA). By providing emerging healthcare companies with many big company advantages, Janssen Labs gives companies the opportunity to invest their capital in research instead of infrastructure and to focus resources on progressing science instead of day-to-day operations.

RESEARCH INITIATIVES IN WHICH JANSSEN PARTICIPATES

MEDIA BACKGROUNDER

Transcelerate Biopharma

In September 2012, ten leading pharmaceutical companies including Janssen formed the non-profit organisation TransCelerate BioPharma Inc. (TransCelerate) - <http://transceleratebiopharmainc.com> - with a focus on accelerating the development of new medicines – initially by identifying ways to make the clinical trial process more efficient.

TransCelerate seeks to advance innovation in research and development (R&D), identify and solve common R&D challenges and further improve patient safety, with the goal of delivering more high quality medicines to patients. TransCelerate will seek to accomplish these objectives through its focus on identifying and capturing efficiencies in the clinical trial process, which will reduce costs, increase speed to market, and enhance quality, innovation and patient safety.

Innovative Medicines Initiative

The Innovative Medicines Initiative (IMI) is Europe's largest public-private initiative aiming to speed up the development of better and safer medicines for patients. IMI supports collaborative research projects and builds networks of industrial and academic experts in order to boost pharmaceutical innovation in Europe. IMI is a joint undertaking between the European Union and the pharmaceutical industry association EFPIA.

Since the IMI creation, Janssen has supported more than 20 IMI projects including the European patient's Academy on Therapeutic Innovation (EUPATI) and the European Medical Information Framework (EMIF).

The EUPATI project is a patient-led initiative that aims to develop the first European Patients' Academy on Therapeutic Innovation, with training courses, educational material and an online public library that

will empower patients to engage more effectively in the development and approval of new treatments and become true partners in pharmaceutical R&D.

The EMIF project aims to develop a common information framework of patient-level data that will link up and facilitate access to diverse medical and research data sources, opening up new avenues of research for scientists. To provide a focus and guidance for the development of the framework, the project will focus initially on questions relating to obesity and Alzheimer's disease.

Global CEO Initiative on Alzheimer Disease

The CEO Initiative on Alzheimer Disease represents robust public - private partnerships between public authorities, domestically and internationally, and the private sector to stop Alzheimer's disease and dementia. By working together and in partnership with leading non-governmental organizations and governments, the CEO Initiative will identify and pursue research, therapy development, financing, and public awareness projects of the highest priority that, when achieved, can transform the global fight to stop Alzheimer's disease.

Within the scope of the CEO Initiatives Janssen Pharmaceuticals and the Critical Path Institute's Coalition Against Major Diseases (CAMD) lead the Pipeline Compression group that is focusing on ways to reduce the time, cost and risk in developing therapies and treatments. To do that the group looks at establishing common data standards to facilitate scientific collaborations and accelerate FDA review of drug applications; achieving breakthroughs in developing and qualifying Alzheimer's disease biomarkers; developing robust patient registries to accelerate clinical trial recruitment; and expanding access to clinical trial data to prevent duplicative research, reduce unnecessary costs, risks and accelerate the pace of development of therapies and treatments.

Initiative in neglected diseases

Johnson & Johnson together with 12 other pharmaceutical companies, the Bill & Melinda Gates Foundation, the U.S. and U.K. governments, the World Bank, and officials from endemic countries committed in a new, coordinated push to eliminate or control 10 neglected tropical diseases (NTDs) that affect more than a billion people in the world by 2020.

Johnson & Johnson will work with its partners on pre-clinical research and clinical development of flubendazole, a potential new treatment against parasites that cause lymphatic filariasis (elephantiasis) and onchocerciasis (river blindness), two debilitating diseases for which current treatments do not eradicate the parasites. Elephantiasis and river blindness are among the most difficult to treat tropical diseases and afflict hundreds of millions around the world in Southeast Asia, sub-Saharan Africa, Central and South America and other tropical countries. The infections are transmitted by insect bites and caused by adult worms that lodge in the body and lay millions of larvae in the lymphatic system, blood and tissues. Current treatments effectively kill only the larvae, not adult worms, and have serious side effects.

Collaboration with the Global TB Alliance

The Global Alliance for TB Drug Development (TB Alliance) is a not-for-profit, product development partnership accelerating the discovery and development of new TB drugs that will shorten treatment, be effective against susceptible and resistant strains, be compatible with antiretroviral therapies for those HIV-TB patients currently on such therapies, and improve treatment of latent infection.

Working with public and private partners worldwide, the TB Alliance is leading the development of the most comprehensive portfolio of TB drug candidates in history. It is committed to ensuring that approved new regimens are affordable, adopted and available to those who need them.

Janssen and the TB Alliance will share their expertise and resources in the development of Bedaquiline, which will be the first TB drug with a new mechanism of action in 40 years. The collaboration maximizes the expertise and resources from both the public and private sectors with the intent to improve the treatment of one of the world's oldest and most deadly diseases. Increased efforts and resources to develop new and improved TB drugs are sorely needed. Among infectious diseases, tuberculosis is the second most common cause of adult deaths worldwide¹.

The TB Alliance operates with funding from the Bill & Melinda Gates Foundation, the Netherlands Ministry of Foreign Affairs (DGIS), the United Kingdom Department for International Development

¹ World Health Organization. "TBHIV Facts at a Glance." Accessed from <http://www.who.int/tb/challenges/hiv/facts/en/index.html>

(DFID), and the United States Agency for International Development (USAID). For more information on TB drug development and the TB Alliance, please visit www.tballiance.org

COLLABORATION ON DENGUE

Janssen is joining forces with the Wellcome Trust and the University of Leuven (KU Leuven) for the development of dengue antiviral drugs. The Dengue virus is endemic in almost all tropical and subtropical areas of the world. The virus is transmitted by mosquitoes and causes a severe and debilitating fever, rash, and muscle and joint pain, sometimes referred to as 'breakbone fever'. In some cases, infection can lead to internal haemorrhage and can be fatal.

The collaboration is built on the discovery of a series of chemical compounds that are highly potent in preventing the replication of dengue virus. The compounds, which have yet to be tested in clinical trials, are active against all four types of the virus and have been shown to work in animal tests.

For more information on this collaboration, please visit <http://www.wellcome.ac.uk>