LDC Teams up with Canadian McGill University in $1 Million Translational Drug Discovery Project

First research project to be funded under the Canada/Germany Program

Dortmund, June 7, 2016 – Researchers from the Lead Discovery Center (LDC) in Dortmund, Germany led by Dr. Bert Klebl and McGill University in Montréal, Canada led by Dr. David Y. Thomas will work closely together to identify novel tools for protein trafficking and folding diseases drug discovery. The 3-years research initiative between LDC and McGill University will be funded for a total of $1M.

The project is the first to be funded under the Canada/Germany Program, a joint collaboration between the German Federal Ministry for Economic Affairs and Energy (BMWi), through its ZIM Program, and the CQDM consortium in Canada. Falling under the broader Canada/Europe initiative, the Canada/Germany Program aims to support novel and potentially transformative next-generation technologies with the potential to improve, enhance or accelerate the state of the art and drug development process.

“We are proud of the fruits that bear our partnership with BMWi. The creative and innovative aspects of this project are the reasons we fulfill our missions and organize international funding programs,” said Diane Gosselin, President and CEO at CQDM. “This public-private partnership is willing to develop new expertise and to expand into new markets, and these collaborative efforts will certainly strengthen research in Canada and Germany.”

“This project is the outcome of a great collaboration with LDC scientists on an important research topic. The project aims at addressing a need in biopharmaceutical research that is still understudied and unmet. ER stress is implicated in many diseases and Dr. Klebl and I will work at developing new tools for its study thanks to the funding initiative of CQDM and ZIM,” said Dr. David Y. Thomas at McGill University.

“We are very excited to embark on this international collaboration together with Dr. Thomas from McGill University. It truly is a team effort that draws its strength from our complementary expertise and deep insights into the biology,” said Dr. Bert Klebl, CEO at LDC. “This public-private partnership pulls together multidisciplinary scientific resources and may lead to the discovery of new targets, a better understanding of off targets of known drugs and eventually to the identification of novel drug candidates for protein trafficking diseases.”
About the Project: Protein trafficking and misfolding under scrutiny

One third of the proteins encoded in our DNA transit through the endoplasmic reticulum (ER) inside cells. The ER has several distinct mechanisms to check the integrity and proper folding of these proteins. Some protein trafficking respiratory diseases result from an overzealous quality control system that recognizes mutant proteins that are otherwise functional and tags them for degradation before they reach their correct location. This complex quality control system is achieved through a network of interacting enzymes called kinases. ER quality control is an understudied field of biology and could represent a goldmine of new targets to treat many diseases including neurodegenerative disorders, diabetes and cancer. We have shown that inhibitors of some of these kinases affect the accuracy of the ER quality control system and are able to correct trafficking defects responsible in some diseases. The aim of this project is to generate a platform to study the most important players responsible for the proper trafficking of proteins. This collaborative project will leverage the expertise of each researcher to generate a set of validated tools and chemical probes to interrogate the protein kinases involved in protein trafficking which could allow to identify new targets for the development of novel ER related diseases therapies.

About the LDC

The Lead Discovery Center (LDC) was established in 2008 by the technology transfer organization Max Planck Innovation, as a novel approach to capitalize on the potential of excellent basic research for the discovery of new therapies for diseases with high medical need.

The LDC takes on promising early-stage projects from academia and transforms them into innovative pharmaceutical leads that reach initial proof-of-concept in animals. In close collaboration with high-profile partners from academia and industry, the LDC is building a strong and growing portfolio of small molecule programs with exceptional medical and commercial potential.

The LDC sustains a preferred partnership with the Max Planck Society and has formed alliances with AstraZeneca, Bayer, Boehringer Ingelheim, Merck, Daiichi Sankyo, Qurient, Johnson & Johnson Innovation, Infinity Pharmaceuticals and Roche as well as leading translational drug discovery centers around the globe.

For more information: www.lead-discovery.de
About CQDM

CQDM is a pharma-based consortium active in early research whose mission is to fund the development of innovative tools and technologies to accelerate drug discovery. Unique in the world, CQDM’s business model is based on a collaborative approach where all stakeholders share the costs of biopharmaceutical research and benefit from its results. CQDM also provides a common meeting ground where academia, governments, and the pharmaceutical and biotechnology industries converge to address numerous complex medical challenges. CQDM receives financial support from Merck, Pfizer, AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline, Eli Lilly Canada, Janssen, Novartis Pharma Canada, Sanofi Canada, as well as from Quebec’s Ministry of Economy, Science and Innovation (MESI) and from the Government of Canada under the Business-Led Networks of Centres of Excellence Program (BL-NCE).

For more information: www.cqdm.org

Contact

Thomas Hegendörfer
T. +49.231.97 42 70 02
E. hegendoerfer@lead-discovery.de

Lead Discovery Center GmbH
Otto-Hahn-Straße 15
44227 Dortmund
GERMANY