Drugs from bugs tops list of LAB282’s first round of grants

Oxford University and Evotec’s drug discovery partnership launched last year to quickly accelerate drugs to market begins making awards.


LAB282, the £13m drug discovery partnership for Oxford University, has made its first wave of awards, backing projects targeting cardiovascular and infectious diseases.

Launched last year as a partnership between the University, Evotec and Oxford Sciences Innovation, LAB282 aids the rapid translation of research outputs into new drug discovery and development programmes. It draws on expertise provided by Evotec and combines that with pre-clinical proof-of-concept grant funding to accelerate projects into a position where they can be commercialised and scaled up efficiently and effectively.

Two research projects were chosen out of a wide range of proposals. The grant winners will be conducting further research into:

- “Drugs from bugs” – a project developing evasins, a potential treatment for cardiovascular and autoimmune diseases derived from the saliva of ticks.
- DarTG - A potential new target for the development of antibiotics that could shut down tuberculosis and several other pathogens.

Shoumo Bhattacharya, British Heart Foundation Chair of Cardiovascular Medicine at Oxford University and lead academic on the evasins project, said:

“The LAB282 funding, which brings Evotec’s world class expertise in the development of peptide therapeutics and in inflammation to the evasin project, will help the development of new therapeutics – ‘drugs from bugs’ - that can treat orphan autoimmune diseases such as myocarditis.”

Carolyn Porter, Deputy Head of Technology Transfer, Oxford University Innovation, added

“The LAB282 partnership was established to accelerate drug discovery at Oxford University. This funding will enable the evasin project to enter the clinic more rapidly for the benefit of patients with cardiovascular
autoimmune disorders for which there is no cure. Through validation of DarTG role in bacterial growth and function, our second funded project could uncover a new strategy for development of antibiotics.”

Thomas Hanke, LAB282 Expert-in-Residence and Head of Academic Partnerships at Evotec, added:

“I am excited and very pleased we were able to select two outstanding and truly translational projects from a panel of high-quality applications for the first round of LAB282 awards. My cordial congratulations go to Prof. Bhattacharya and Dr Ahel and their teams for their excellent work. I am very much looking forward to closely collaborating with the University of Oxford and Evotec teams in accelerating bona fide drug discovery from the awarded projects.”

LAB282 was launched in November 2016, and is a partnership between Oxford University, its research commercialisation company Oxford University Innovation, drug discovery company Evotec, and Oxford Sciences Innovation, the patient capital investor for the University.

The next round of grants are due in June 2017.

ENDS

Additional scientific information

The “drugs from bugs” project will be looking to develop evasins, which are peptides derived from the saliva of ticks. Ticks have been around since the time of the dinosaurs, and have been evolving these peptides to block chemokines, which are proteins in the body that recruit inflammatory cells to the site of injury. The research team led by Professor Shoumo Bhattacharya have developed new “Bug-to-Drug” technology to find these tick peptides in order to treat inflammatory and fibrotic diseases that are currently incurable. In this project, they will use these peptides to target chemokines that cause giant cell myocarditis (GCM), a rare autoimmune disease with no cure. GCM usually affects young adults, progressing rapidly to heart failure and death. There is no specific treatment except for a heart transplant.

The second project, with Doctor Ivan Ahel, looks to validate translational research on DarTG toxin-antitoxin system, a pathway found in tuberculosis. Essentially a back door around tuberculosis’ defences, DarTG could be a potential target for small molecules, which could shut down the bacteria. If the project demonstrates that DarTG is the pathogen’s Achilles’ Heel, it will pave the way for a new class of antibiotics. Aside from offering a potential new therapy for tuberculosis, which will become a greater threat as antibiotic resistance increases, DarTG could also be a weakness in Escherichia coli, superbug Klebsiella pneumonia, and other gram-negative pathogens.

More information on these projects are available on the OUI website, and can be provided upon request.
Notes to Editor

About LAB282

LAB282, initiated in November 2016, is a new £13 m partnership between the University of Oxford, Oxford University Innovation Ltd, Oxford Sciences Innovation plc and Evotec AG created to identify and develop new approaches to treating serious diseases, which originate from the University of Oxford. The goal is to accelerate the achievement of pre-clinical proof of concept for new drugs and to generate new spinout companies. The name derived from the pantone colour code of “Oxford Blue”. For more information, please visit [www.lab282.org](http://www.lab282.org).

About Oxford University’s Medical Sciences Division

The Division is one of the largest biomedical research centres in Europe, with over 2,500 people involved in research and more than 2,800 students. The University is rated the best in the world for medicine, and it is home to the UK’s top-ranked medical school.

From the genetic and molecular basis of disease to the latest advances in neuroscience, Oxford is at the forefront of medical research. It has one of the largest clinical trial portfolios in the UK and great expertise in taking discoveries from the lab into the clinic. Partnerships with the local NHS Trusts enable patients to benefit from close links between medical research and healthcare delivery.

A great strength of Oxford medicine is its long-standing network of clinical research units in Asia and Africa, enabling world-leading research on the most pressing global health challenges such as malaria, TB, HIV/AIDS and flu. Oxford is also renowned for its large-scale studies which examine the role of factors such as smoking, alcohol and diet on cancer, heart disease and other conditions.

About Oxford Sciences Innovation
Oxford Sciences Innovation plc is the world’s largest IP investment company dedicated to a single university. Founded in May 2015, we help turn Oxford University’s world-leading scientific discovery into innovative science and technology companies that can have a positive impact on society. We provide capital and expertise to businesses driven by intellectual property developed in Oxford’s Mathematical, Physical, Life Sciences Division and Medical Sciences Divisions. We are guided and powered by some of the world’s leading organisations, including Invesco, Woodford Investment Management, the Wellcome Trust and Lansdowne Partners.

About Oxford University Innovation

Oxford University Innovation supports innovation activities across all University Divisions, managing technology transfer and consulting activities, and providing an innovation management service to clients around the world.

We provide access to technology from Oxford researchers through intellectual property licensing, spinout company formation and material sales, and to academic expertise through our Consulting Services team. The New Venture Support & Funding team supports investors or donors with an interest in early-stage ventures, and manages the Oxford Angels Network.

Our Startup Incubator supports members and ex-members of the University who wish to start or grow entrepreneur-driven ventures that are not University spinouts.

Oxford University Innovation is the highest university patent filer in the UK and is ranked 1st in the UK for university spin-outs, having created over 140 new companies in 25 years. In the last reported financial year we completed 529 licenses and consulting agreements. Isis Enterprise, our innovation management consultancy, works with university, government and industrial clients from offices around the world.

For updates on innovations from Oxford, follow Oxford University Innovation on LinkedIn and Twitter or subscribe at http://innovation.ox.ac.uk/about/contact-us/#enquiry

About Evotec AG

Evotec is a drug discovery alliance and development partnership company focused on rapidly progressing
innovative product approaches with leading pharmaceutical and biotechnology companies, academics, patient advocacy groups and venture capitalists. We operate worldwide providing the highest quality stand-alone and integrated drug discovery solutions, covering all activities from target-to-clinic to meet the industry’s need for innovation and efficiency in drug discovery (EVT Execute). The Company has established a unique position by assembling top-class scientific experts and integrating state-of-the-art technologies as well as substantial experience and expertise in key therapeutic areas including neuroscience, diabetes and complications of diabetes, pain and inflammation, oncology and infectious diseases. On this basis, Evotec has built a broad and deep pipeline of more than 70 partnered product opportunities at clinical, pre-clinical and discovery stages (EVT Innovate). Evotec has established multiple long-term discovery alliances with partners including Bayer, CHDI, Sanofi or UCB and development partnerships with e.g. Janssen Pharmaceuticals in the field of Alzheimer’s disease, with Sanofi in the field of diabetes, with Pfizer in the field of tissue fibrosis and Celgene in the field of neurodegenerative diseases. For additional information please go to www.evotec.com.