

FOR IMMEDIATE RELEASE

Duke-NUS commercialises discovery to encourage healthy brain development for babies and children

Singapore, 8 May 2017 – A discovery made at Duke-NUS Medical School (Duke-NUS) has been licensed to a newly launched Singapore-based company, Babynostics Pte Ltd. Babynostics plans to use the intellectual property (IP) derived from Duke-NUS research to develop diagnostics and nutritional products that encourage normal and healthy brain development in foetuses, and for pre-term infants, babies and children.

The license agreement between Duke-NUS and Babynostics was facilitated by the Centre for Technology and Development (CTeD), a commercialisation office at Duke-NUS. CTeD works directly with Duke-NUS faculty to discover and de-risk advanced technologies in order to prepare them for commercial readiness as part of the ‘Active Translation Model’ developed at Duke-NUS. The Babynostics agreement represents a significant milestone in the development and commercialisation of fundamental biomedical research conducted at Duke-NUS that promises to lead to improved healthcare outcomes.

In 2014, Duke-NUS’ Professor David Silver published research that, for the first time, established the path and transport system that takes docosahexaenoic acid (DHA) to the brain. This research also confirmed that DHA is needed for proper brain development. Babynostics, founded by Dr Michael Shleifer and Mr. Laurent Benissan of SPRIM Ventures, develops cutting-edge nutritional solutions based on these findings from Prof Silver’s lab.

“The pathway we found could be exploited to deliver the DHA necessary for normal brain growth and function, which we thought could be especially important for pre-term babies,” explained Prof Silver, deputy director of the Duke-NUS Cardiovascular and Metabolic Diseases Programme and scientific founder of Babynostics. “One in 10 babies are born premature. When a baby is born pre-term, they typically have not received sufficient DHA during foetal development and run the risk of experiencing brain development problems and other related complications.”

CTeD and Professor Silver have worked together for the past several years to develop and commercialise this important technology.

“We are very excited to have such great Singapore-based expertise now resident in the Babynostics team,” said CTeD Director, Professor David Epstein, whose model is to facilitate start-ups by bringing together Duke-NUS scientists and entrepreneurial partners. “Duke-NUS have found the right partners to take Prof Silver’s work to the next level of clinical application to improve peoples’ health and lives.”

Prof Silver’s research found that LPC-lipids are the chemical form of DHA that are transported to the brain through a transporter protein named Mfsd2a at the blood-brain barrier, which is why measuring and relating their levels to health outcome is needed to ensure sufficient DHA uptake. Babynostics is currently developing diagnostic tests to check lysophosphatidylcholine (LPC)-lipids levels. These tests will be administered to pre-term babies and mothers whose foetuses are at risk of not receiving enough DHA, to determine if they need supplements to increase their LPC levels. In addition, Babynostics is scheduled to launch a medical food product for pregnant mothers that will encourage DHA delivery to their foetuses. PrenatalDHA® is scheduled to go on sale in August 2017 and will be available online at www.dhabenefit.com.

“The licensing of this IP demonstrates Duke-NUS’ dedication to doing impactful science and translating that science to medical solutions,” said Senior Vice Dean of Research, Professor Patrick Casey. “Prof David Silver led a group of dedicated investigators within Duke-NUS to do groundbreaking research on DHA-delivery, and CTed accelerated their progress to commercialisation.”

About Duke-NUS Medical School

The Duke-NUS Medical School (Duke-NUS) was established in 2005 as a strategic collaboration between the Duke University School of Medicine, located in North Carolina, USA, and the National University of Singapore (NUS). Duke-NUS offers a graduate-entry, 4-year MD (Doctor of Medicine) training programme based on the unique Duke model of education, with one year dedicated to independent study and research projects of a basic science or clinical nature. Duke-NUS also offers MD/PhD and PhD programmes. Duke-NUS has five Signature Research Programmes: Cancer and Stem Cell Biology, Neuroscience and Behavioural Disorders, Emerging Infectious Diseases, Cardiovascular and Metabolic Disorders, and Health Services and Systems Research.

Duke-NUS and SingHealth have established a strategic partnership in academic medicine that will guide and promote the future of medicine, tapping on and combining the collective strengths of SingHealth's clinical expertise and Duke-NUS' biomedical sciences research and medical education capabilities.

For more information, please visit www.duke-nus.edu.sg

For more information about the Centre for Technology and Development, please visit: www.duke-nus.edu.sg/cted/

About Babynostics

Babynostics PTE LTD was founded in 2016 and is developing diagnostics and treatment solutions based on the research of Professor David Silver at Duke-NUS on MFSD2a and Lysophosphatidylcholine (LPC) lipids. His key discovery was published in Nature on May 2014: “Mfsd2a is a transporter for the essential omega-3 fatty acid docosahexaenoic acid”.

For more information about Babynostics, please visit www.babynostics.net

About SPRIM Ventures

SPRIM Ventures invests in early stage life science solutions and is supported by SPRIM, a clinical research and innovation company.

SPRIM is a global firm established in 2001 and comprises over 500 professionals determined to work as one team. With 19 offices around the world, SPRIM is a key partner to more than 400 multinational companies in the field of healthcare. SPRIM offers winning health solutions and tangible commercial results to its clients and their patients.

For more information, please visit www.ventures.sprim.com