



Notch Therapeutics – a new company with a revolutionary allogeneic (“off the shelf”) T cell technology

November 4, 2019 (Toronto, ON) - Notch Therapeutics, a company in the emerging field of gene-modified T cell therapy, has been created to commercialize a revolutionary technology that creates allogeneic (donor) gene-edited T cells from stem cells on an industrial scale, efficiently making T cell therapies that are clinically robust and of a consistently high quality. Notch is actively pursuing industry partnerships.

The founders of Notch - Sunnybrook Health Sciences Centre, University of Toronto (UoT), Toronto Innovation Acceleration Partners (TIAP) and CCRM, with Lumira Ventures as an additional investor - created Notch to provide a vehicle through which to further develop and bring to market the combined pioneering research, nearly ten years underway, from the labs of Drs. Juan Carlos Zúñiga-Pflücker, Senior Scientist in Biological Sciences at Sunnybrook, and Chair of the Department of Immunology at UoT; and of Peter Zandstra, Professor, Institute of Biomaterials and Biomedical Engineering at UoT and Director, School of Biomedical engineering and Michael Smith Laboratories at the University of British Columbia.

“This technology is very promising and might be used to create therapies to treat some of our greatest medical challenges, like cancer, autoimmune diseases and organ transplant rejection. It’s also the first and only method that can reconstitute immune systems,” says Dr. Andy Smith, President and CEO of Sunnybrook Health Sciences Centre. “Finally having options to target these high-impact areas for our patients is what we mean when we say we are inventing the future of health care.”

Jennifer Fraser, Director Innovations at the University of Toronto, comments that “Dr. Zúñiga-Pflücker’s allogeneic T cell therapy was one of the first projects I worked on when I joined UoT. It’s very gratifying to see the technology move toward the clinic”.

Even as the field for these therapies grows rapidly, major challenges have until now prevented wider adoption mainly due to a slow and expensive manufacturing process which yielded variable results. The Notch technology, however, shows promise for surmounting these issues cost-effectively and reliably. Notch, having been incubated at CCRM, will be able to leverage its in-house process development expertise and Good Manufacturing Practices (GMP) facility, located in downtown Toronto. It offers universally enhanced T cell therapies against high-impact diseases, using stem cells as a renewable source to expand treatment options and deliver cost-effective

immunotherapies to patients. The aim of Notch is to generate T cells from multiple sources of stem cells and provide a platform for research and development, and a better way of manufacturing T cells and their applications for treating cancers or immune deficiencies.

“TIAP is pleased that, after many years of nurturing this research and investing in the risky early-stages with our co-founders, we are now seeing a truly ground-breaking new health science technology make its way through development in a very encouraging way. This is yet another example of what can be done through TIAP’s unique ability within the community to bundle technologies across multiple institutions. This is a true collaboration which has resulted in development of a technology that will have significant impact”, says Dr. Rafi Hofstein, President & CEO of TIAP.

“Notch Therapeutics is a star pupil in CCRM’s incubation program,” says Dr. Michael May, President and CEO of CCRM. “By de-risking the technology and designing Proof of Concept studies to appeal to investors, attracting experienced start-up management, and working with our ecosystem partners, we have collectively given Notch every opportunity to succeed”.

Dr. Benjamin Rovinski, Managing Director of Lumira Ventures, states: “Early on, our team recognized Notch’s novel and differentiated platform and its potential to produce safer, more effective, and scalable allogeneic T cell therapies. We are pleased to be part of the financing syndicate. The quality and breadth of science coming out of Canadian universities is phenomenal, and important innovators like Notch are able to access capital, knowledge and the engaged support of Lumira and other investors, to enable the development and commercialization of their technology. We are excited to work with the entire Notch team.”

About TIAP

TIAP is a leading provider of venture building services, early-stage funding, and deal-brokering with industry and private investors. As a member-based organization made up of 14 member institutions – including University of Toronto and affiliated teaching hospitals – TIAP’s mandate is to drive the commercialization of their most promising research breakthroughs. TIAP has an active portfolio of more than 60 companies in sectors such as therapeutics, medical devices and IT/AI, which have raised in excess of CDN\$300M from global investors, and has created more than 1000 direct/indirect jobs.

For more information, please visit www.tiap.ca

Media contact:

Susanne Staer, Manager, Corporate Affairs - sstaer@tiap.ca

About University of Toronto

Founded in 1827, the University of Toronto is Canada’s leading institution of learning, discovery and knowledge creation. U of T is one of the world’s top research-intensive universities, driven to invent and innovate. It is also one of the top five universities in the world for its start-up incubator programs. In the last 10 years, the U of T entrepreneurship community has created over 500 companies and raised over \$1.5 billion in investment capital. www.utoronto.ca

About Sunnybrook Health Sciences Centre

Sunnybrook Health Sciences Centre is inventing the future of health care for the 1.3 million patients the hospital cares for each year through the dedication of its more than 10,000 staff and volunteers. An internationally recognized leader in research and education and a full affiliation with the University of Toronto distinguishes Sunnybrook as one of Canada's premier academic health sciences centres. Sunnybrook specializes in caring for high-risk pregnancies, critically-ill newborns and adults, offering specialized rehabilitation and treating and preventing cancer, cardiovascular disease, neurological and psychiatric disorders, orthopaedic and arthritic conditions and traumatic injuries. The Hospital also has a unique and national leading program for the care of Canada's war veterans. For more information about how Sunnybrook is inventing the future of health care. Please visit us online at www.sunnybrook.ca

Media contact:

Craig DuHamel, VP of Communications and Stakeholder Relations, Craig.DuHamel@sunnybrook.ca

About CCRM

CCRM, a Canadian not-for-profit organization funded by the Government of Canada, the Province of Ontario, and leading academic and industry partners, supports the development of regenerative medicines and associated enabling technologies, with a specific focus on cell and gene therapy. A network of researchers, leading companies, investors and entrepreneurs, CCRM accelerates the translation of scientific discovery into new companies and marketable products for patients, with specialized teams, dedicated funding, and unique infrastructure. CCRM is the commercialization partner of the Ontario Institute for Regenerative Medicine and the University of Toronto's Medicine by Design. CCRM is hosted by the University of Toronto. Visit us at ccrm.ca.

Media contact:

Stacey Johnson, Director, Communications and Marketing, Stacey.johnson@ccrm.ca

About Lumira Ventures

Lumira Ventures is Canada's leading and most active healthcare venture capital firm. Lumira invests in best-in-class North American companies developing innovative therapeutics and medical technologies whose products offer transformative improvements to patient health outcomes and provide meaningful reductions to the overall cost of healthcare delivery. Since inception, Lumira's portfolio companies have brought 50+ new therapies to market, impacting the lives of 1+ billion patients globally, generating \$65+ billion in cumulative revenue.

For more information, please visit www.lumiraventures.com

Investor or Media-Related Inquiries:

Peter van der Velden, Managing General Partner, plv@lumira.vc