Hamilton, ON, Canada | Göttingen, Germany | January 21, 2025

Extended collaboration with Sartorius powers new biomanufacturing lab at McMaster University, Canada

- State-of-the-art bioprocessing automation lab equipped with Sartorius instruments and solutions
- Training young researchers and emerging talents on highly specialized equipment
- Exploring innovative modelling and predictive control solutions for accelerated biomanufacturing

The life science group Sartorius and McMaster University today opened a new bioprocessing automation lab at the university's Faculty of Engineering in Hamilton, Ontario. The state-of-the-art, 1,600-square-foot research facility was created complementing a substantial contribution of advanced biomanufacturing equipment from Sartorius, a long-standing partner of the university. The lab will serve as a training and development hub, where McMaster students and Sartorius employees work with other industry partners to accelerate developments in bioprocess modelling, simulation, and advanced control.

"The opening of the Sartorius Bioprocess Automation Lab marks a milestone in McMaster's commitment to advancing biomanufacturing capabilities in Canada," says Dr. Heather Sheardown, Dean of the Faculty of Engineering at McMaster University. "This generous contribution will support technological innovations in large-scale biotherapeutics manufacturing that enhance production efficiency and ultimately expand access to life-saving treatments for chronic illnesses such as autoimmune disorders and cancers."

Prof. Dr. Oscar-Werner Reif, Chief Technology Officer of Sartorius, adds, "This partnership enables McMaster University and Sartorius to explore and industrialize innovative bioprocessing solutions together with partners from the biopharmaceutical industry. In this state-of-the-art facility young researchers from academia and the industry will jointly develop innovative modelling and predictive control solutions that help to simplify and accelerate biomanufacturing processes – ultimately driving faster developments of improved therapies that will be accessible to patients around the world."

The funding for the new facility comes via stage two of the Biosciences Research Infrastructure Fund (BRIF) competition, the centerpiece of a $2.2 billion CAD national program developed to build a strong and resilient domestic biomanufacturing and life sciences sector. This makes it the first BRIF-funded facility to open in Canada.

"In the crucial biomanufacturing field, the opening of this lab will help Canadian researchers secure the competitive advantage they need to maintain the prosperity, health and security of our country," said Dr. Sylvain Charbonneau, President and CEO of the Canada Foundation for Innovation. "With public and private sector support, this cutting-edge facility will help prepare the new generation of innovators."

Building on these contributions, a team of McMaster researchers has secured additional Alliance Grant funding from the Natural Sciences and Engineering Research Council of Canada (NSERC) to launch an extensive four-year collaboration with Sartorius.

Dr. David Latulippe, associate professor of chemical engineering and co-director of the Biointerfaces Institute at McMaster University, and the principal investigator on the Alliance Grant, says: "We are deeply grateful to Sartorius for their generosity and vision. Training our graduate and undergraduate students on the highly specialized equipment in the Bioprocessing Automation Lab is critical to the growth of Canada's biomanufacturing economy, which is currently experiencing a severe talent shortage."

The partnership started in 2019, when Sartorius joined the McMaster Advanced Control Consortium (MACC). In 2021, both partners teamed up to improve manufacturing processes of antibody and virus-based treatments for diseases such as COVID-19, cancers, and genetic disorders. Since then, the company has continuously provided valuable training opportunities for students at its research and development facilities in North America and Europe.

A profile of Sartorius

Sartorius is a leading international partner of life sciences research and the biopharmaceutical industry. With innovative laboratory instruments and consumables, the Group's Lab Products & Services Division focuses on laboratories performing research and quality control at pharmaceutical and biopharmaceutical companies as well as academic research institutes. The Bioprocess Solutions Division, with its broad product portfolio focusing on single-use solutions, helps customers manufacture biotech medications, vaccines, and cell and gene therapies safely, rapidly, and economically. The company, based in Göttingen, Germany, has a strong global reach with around 60 production and sales sites worldwide. Sartorius regularly expands its portfolio through the acquisition of complementary technologies. In 2023, the company generated sales revenue of around 3.4 billion euros. Currently, around 14,000 employees are working for customers around the globe.

Visit our Newsroom or follow us on LinkedIn.

A profile of McMaster University

McMaster is a research-intensive university ranked among the best in the world with a bold ambition to advance human and societal health and well-being. Among Canada's top universities for student services, our research excellence is matched by our long history of teaching innovations and commitment to preparing students for an increasingly complex future. Our alumni continue to be among the most employable graduates globally, as they bring the McMaster vision of a brighter world to communities near and far.

Contacts

Leona Malorny
Head of External Communications
+49 551 308 4067
leona.malorny@sartorius.com

Keiko Kataoka
Communications Manager
+1 416 805 1270
kataokak@mcmaster.ca