

**For Immediate Release**

**GlycoNet and Partners Invest $7.7 Million in Canadian Health Innovation**

This investment will support state-of-the-art health research for Canada’s leading diseases, including cancer, diabetes, dementia, muscular dystrophy and universal donor blood.

**EDMONTON, ALBERTA** (April 20, 2022) – GlycoNet, one of the world’s leaders in glycomics research and discovery, announced a $1.73 million investment for 13 glycomics projects across Canada. Industry collaborators, health foundations and business partners are also co-investing $5.97 million, bringing the total funding to $7.7 million. This funding will support research critical to improving the quality of life for patients with chronic diseases, cancer, infectious diseases and neurodegenerative diseases.

“Canada’s leadership in glycomics—the study of carbohydrates—is now driving our work in new diagnostics, therapeutics, technologies and vaccines,” says Elizabeth Nanak, CEO, GlycoNet. “Our funding will further develop domestic research, commercialization and help train highly skilled personnel—a vital part of building a sustainable, knowledge-based bioeconomy.”

One of the funded initiatives is a [Phase I clinical trial investigating the safety of a natural, carbohydrate-based product to slow the breakdown of starch](https://canadianglycomics.ca/new-anti-diabetic-treatment-approved-for-human-trials/) in individuals with type 2 diabetes. This drug candidate, developed by Stephen Withers, Robert Petrella, J.P. Heale and Joerg Bohlmann from the University of British Columbia, is anticipated to have fewer side effects than other drugs of this general class currently available to patients with type 2 diabetes.

Further, this funding will support a project set to develop immune-based protective therapeutics for Alzheimer’s disease, the most common cause of dementia that afflicts more than 400,000 Canadians over the age of 65. The team led by Matthew Macauley at the University of Alberta is studying [how a carbohydrate-binding protein in the brain can potentially provide protective effects](https://canadianglycomics.ca/making-strides-in-alzheimers-research/) against the disease.

“We’ve been making exciting advances in understanding the role of carbohydrates in the brain and how they affect immune cell function,” says Macauley. “Thanks to the support from GlycoNet and our other partners, we’re now developing a potential therapeutic strategy to slow down the progression of Alzheimer’s disease.”

This investment is also funding preclinical trials of a carbohydrate-derived drug to treat Duchenne muscular dystrophy. The team including Sachiko Sato, Masahiko Sato, and Jérôme Frenette at Université Laval is studying how [this drug could reduce tissue damage by as much as 50 per cent](https://canadianglycomics.ca/new-treatment-could-reduce-tissue-damage-in-duchenne-muscular-dystrophy-patients-by-as-much-as-50-per-cent/) and potentially be used to treat other types of muscular dystrophies as well.

This funding also strengthens Canadian collaboration with the glycomics communities in Asia and throughout North America. An international research team led by Ching-Ching Yu (National Chung Cheng University), Chun-Hung Lin (Academia Sinica) and David Kwan (Concordia University) is developing a technology to investigate interactions between carbohydrates and carbohydrate-binding proteins, which play a critical role in inflammation and cell health and could lead to new avenues for drug development.

Through mobilizing knowledge and expertise in the study of carbohydrates, along with strategic investments and partnerships, this funding will enable researchers to develop made-in-Canada solutions to unmet health issues, resulting in new companies, jobs and a positive economic impact.

**Quick Facts**

* Glycomics is the study of glycans (carbohydrates or sugars) in all living organisms.
* Today’s announcement is for $1.73 million in funding for glycomics research and an additional $5.97 million in co-funding from research partners and industry collaborators across Canada.
* The awarded projects fall under four of GlycoNet’s funding streams—strategic initiatives, translational grants, international partnerships and clinical partnerships. This funding will support eight projects within GlycoNet’s Strategic Initiatives Grant, two Translational Grants, two Clinical Partnerships Grants and one International Partnerships Grant.
* Since 2015, GlycoNet has invested $29 million from the federal Network of Centres of Excellence program and leveraged $35 million of partner funding into R&D, trained over 550 highly qualified personnel and has supported the start-up of 5 new Canadian companies.

Learn more [here](https://canadianglycomics.ca/research/recently-announced-projects/) about the projects receiving funding.

**About GlycoNet**

GlycoNet is advancing research, innovation and training in glycomics to improve the quality of life of Canadians. GlycoNet is a one-stop global destination focused on developing new carbohydrate-based drugs, vaccines and diagnostics, in collaboration with academic and industry organizations to address areas of unmet need through applied glycomics research. Funded by the federal Networks of Centres of Excellence (NCE) program and a range of partners, the network includes over 175 researchers across Canada who focus on cancer, chronic diseases, infectious diseases and neurodegenerative diseases. This national platform supports translational research, protection of intellectual property, novel drug development, company formation and training. Learn more about us at [glyconet.ca](https://canadianglycomics.ca/).

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