Trudeau scientists publish a collaborative study in the journal *Vaccine* showing Adjuvanted Influenza Vaccine Enhances Protective Immunity in Aging Mice.

Elderly individuals have impaired immunity, rendering them highly susceptible to influenza virus infection. In addition, they fail to develop strong immunity to current influenza vaccines. A team of scientists led by Dr. Marcia Blackman at Trudeau Institute have studied ways to enhance the response of the elderly to influenza vaccines. A new study has addressed protection elicited by a novel vaccination regimen administered to young and aged mice. The vaccine consisted of an influenza virus protein administered in conjunction with a novel adjuvant developed by IDRI, termed SLA-SE (second-generation lipid adjuvant formulated in a squalene-based oil-in-water emulsion). The study showed the vaccine elicited enhanced protective immunity in aged mice in response to subsequent infection with influenza virus. Pre-clinical studies in mice are a first step in validating advance of experimental vaccines to clinical trials in humans.

The results of the study are reported in a paper “Vaccination of aged mice with adjuvanted recombinant influenza nucleoprotein enhances protective immunity” in the journal *Vaccine*. The collaborative study, carried out at Trudeau Institute, was led by Trudeau scientists Tres Cookenham, Kathleen Lanzer, Dr. William Reiley and Dr. Marcia Blackman. The study involved collaborations with Dr. Laura Haynes and Erica Lorenzo at the University of Connecticut and Dr. Darrick Carter, Dr. Susan Baldwin, Dr. Rhea Coler and Emily Gage at the Infectious Diseases Research Institute (IDRI), in Seattle. The study was funded by the National Institutes of Health, Trudeau Institute, and the European Union.


*Vaccine* is the pre-eminent journal for those interested in vaccines and vaccination. It is the official journal of The Edward Jenner Society and The Japanese Society for Vaccinology and is published by Elsevier [www.elsevier.com/locate/vaccine](http://www.elsevier.com/locate/vaccine).

**About Trudeau Institute**: Trudeau Institute is a not-for-profit biomedical research enterprise dedicated to immunology and infectious disease research, focusing on deadly pathogens such
as tuberculosis, influenza virus and Zika virus. Scientists at Trudeau work as part of Trudeau Research Network, empowering partnerships in academia, government and industry for rapid response to confront some of the world’s most urgent public health crises. For further information about the Trudeau Institute, go to www.trudeauinstitute.org.