

## Congratulations / Félicitations

Eleanor N. Fish, Ph.D., University of Toronto The 2015 CSI – Hardy Cinader Award Recipient Presentation: "The Art Behind Going Viral"

Professor, Department of Immunology, University of Toronto; Director, Arthritis & Autoimmunity Research Centre, University Health Network; Senior Scientist Division of Advanced Diagnostics, Toronto General Research Institute.

Dr. Fish is the Tier 1 Canada Research Chair in Women's Health & Immunobiology, a McLaughlin Scholar and was elected as a Fellow to the American Academy of Microbiologists. In 2010 Dr. Fish was awarded the prestigious Vivian & Seymour Milstein Award, recognizing her exceptional contributions to interferon and cytokine research that have led to advancements in human health. This Milstein Award represents the pinnacle of scientific achievement in interferon and cytokine research. In 2012 Dr. Fish received the Canadian Society for Immunology Investigator Award. Dr. Fish received her undergraduate B.Sc. degree in Biological Chemistry from the University of Manchester, England, and her Master of Philosophy in Virology from King's College, University of London, England. She received her Ph.D. in Cell Biology from the Institute of Medical Science at the University of Toronto, Canada. Dr. Fish is a member of several societies, including the American Society for Microbiology, the Canadian Society for Immunology, and the International Cytokine and Interferon Society, for which she is Past President (2008-2010). She is on the editorial boards for the Journal of Interferon and Cytokine Research, Viruses, and Arthritis & Rheumatology. Her work has been published in many scientific journals, including the Journal of Immunology, Experimental Hematology, Circulation, Blood, Nature, PNAS, JAMA, Journal of Experimental Medicine, Journal of Virology, Journal of Leukocyte Biology, PLoS One and the Journal of Biological Chemistry. Dr. Fish studies the interactions of cytokines, specifically interferons and chemokines, with their receptors in normal and diseased tissues and cells. A focus of Dr. Fish's research is the investigation of host-pathogen interactions at the cellular and molecular level, specifically in the context of viruses and interferons. During the 2003 outbreak of SARS in Toronto, she initiated studies to investigate the therapeutic potential of interferon in SARS patients. Encouraging results have directed her group's efforts toward examining interferon activity against a number of emerging infectious diseases, such as avian H5N1 and pandemic H1N1 influenza viruses. Most recently, her studies have focused on investigating the therapeutic effectiveness of interferon treatment for Ebola virus disease, with a clinical trial in Guinea. Dr. Fish is a member of a WHO Working Group to evaluate the therapeutic effectiveness of different vaccine and antiviral interventions against Ebola virus. Another focus of her work relates to understanding the immune mechanisms that drive autoimmunity, related to rheumatoid arthritis and multiple sclerosis. Most recently, Dr. Fish has initiated research studies in breast cancer, within the context of understanding how chemokine-driven alterations to metabolism influence the growth and metastasis of breast tumors. Another facet related to Dr. Fish's research activities involves global outreach, specifically to resource poor regions. For many years Dr. Fish, as Visiting Professor, has been involved in curriculum development and mentoring both Faculty and students in the Department of Immunology at Moi University in Kenya. This extends now to the ongoing development of basic science courses with relevance for trainee MDs, nurses and dentists. She has made these courses available to different institutions across Kenya. In addition, she has established an international initiative - Beyond Science Initiative - that sees undergraduate and graduate students from the University of Toronto communicating with students around the globe as mentors as well as activists in the area of social justice; To foster partnerships among the next generation of global scientific leaders who will appreciate cultural sensitivities and global responsibilities. Finally, Dr. Fish has a keen interest in the arts, focusing her creative side on non-objective art. She has exhibited her work locally in Toronto.