

Faculty and staff at the University of Guelph support SARS-CoV-2 vaccine safety

July 6, 2021

We are a science-based faculty and staff at the University of Guelph who support evidence-based decisions and disagree with misinformation being circulated by a member of the faculty at the Ontario Veterinary College.

COVID-19 is an unprecedented pandemic due to a novel coronavirus. Nearly four million people globally have died as a result, and nearly two hundred million have been reported as infected.¹ Many millions more have suffered and continue to suffer from physical and mental illness associated with the pandemic, isolation, poverty, and the long-term effects of the infection.²

Vaccines for SARS-CoV-2 were designed, tested and produced at an unprecedented speed and on an extraordinary scale. The ability to quickly develop safe and effective vaccines was made possible through remarkable global co-operation and by concurrently running clinical trials, not by cutting corners. Many countries rapidly authorized vaccines for emergency use. Various types of vaccines are available, including those based on mRNA coding for the viral spike (S) protein, vector-based DNA vaccines coding for the S protein, and recombinant S protein particles. Two doses of the vaccines (type-dependent) have dramatically reduced illness and infections in many parts of the world.³ The vaccines are highly effective and have very few adverse effects.⁴ The coordinated effort of scientists, pharmaceutical companies, public health and regulatory agencies to produce effective vaccines against COVID-19 for billions of people in less than a year is an achievement previously unimaginable.

Dr. Byram Bridle has stated on multiple platforms and numerous outlets that COVID-19 vaccines are unsafe. These statements are contrary to overwhelming scientific evidence. The S protein generated by or incorporated into vaccines is an effective immunogen but does not alter DNA, does not induce infertility or pass through breast milk, and is not a toxin.^{5,6} Adverse vaccine effects do occur but at a similar or lower frequency than for routine vaccines.⁴ In the face of this terrible pandemic, widespread vaccination is the best way out of the devastation we currently face. Many people have limited understanding of the complexities of immunization against infectious agents, and rely on scientists in epidemiology and immunology to share their knowledge and experience, especially at times such as these when fear is high. Misinformation spread by individuals such as Dr. Bridle targets uncertainty.

The University of Guelph, including us, supports freedom of expression. However, as scientists and academics we also have a responsibility to counter misinformation, particularly when the misinformation causes harm. A high rate of vaccine acceptance is essential for prevention of SARS-CoV-2 disease and deaths, and for a return to normalcy. In particular, given the high transmissibility of recent variants, very high vaccination rates among people eligible for vaccination are critical. We are very concerned that people who are not seeking vaccination because of misinformation will suffer ill effects from SARS-CoV-2 infection, will infect others, and will slow the return to a more normal life. Academic freedom is important but should not be a license to spread misinformation that has been clearly refuted, including by authors of publications that Dr. Bridle cites in support of his statements.⁷ Some may even consider the University of Guelph complicit by failing to provide a clear and effective response to this misinformation

campaign, which is impacting the reputation of the institution and its faculty. Considering the harmful effects of COVID-19 on individuals and communities, the continued spread of misinformation undermines Canadian public health measures, including our vaccine program, and threatens global health security more broadly.

Therefore, we wish to state publicly that as scientists, faculty, and/or staff of the University of Guelph we stand firmly against the continued spread of factually incorrect and misleading information that is being disseminated by Dr. Bridle. We have confidence that the SARS-CoV-2 vaccines approved for use in Canada are safe and effective, and we wish to reassure the public that as members of the University of Guelph community we fully support evidence-based public health, which includes vaccination against COVID-19.

References

1. <https://www.worldometers.info/coronavirus/>; accessed June 24, 2021
2. <https://www.un.org/development/desa/dspd/everyone-included-covid-19.html>; accessed June 24, 2021
3. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines.html>; accessed June 24, 2021
4. <https://health-infobase.canada.ca/covid-19/vaccine-safety/>; accessed June 24, 2021
5. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006-. COVID-19 vaccines. [Updated 2021 Jun 21]
6. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html>; accessed June 24, 2021
7. <https://www.reuters.com/article/factcheck-vaccine-safe-idUSL2N2NX1J6>; accessed June 24, 2021

Supporting signatures from University of Guelph faculty and staff

Name, Credentials	Title	University of Guelph College
Amy Greer, MSc, PhD	Canada Research Chair in Population Disease Modelling and Associate Professor	Ontario Veterinary College
Dorothee Bienzle, DVM, PhD	Professor of Veterinary Pathology	Ontario Veterinary College
Scott Weese DVM DVSc DACVIM FCAHS	Director, Centre for Public Health and Zoonoses	Ontario Veterinary College
Glen Pyle, PhD	Professor of Biomedical Sciences	Ontario Veterinary College
Sarah Adamowicz, PhD	Associate Professor & Director of Bioinformatics Graduate Program, Integrative Biology	College of Biological Science
Emma Allen-Vercoe, PhD	Professor; Canada Research Chair in Human Gut Microbiome Function and Host Interactions	College of Biological Science

Luis G. Arroyo, Lic. Vet Med. DVSc, PhD, DACVIM	Associate Professor, Clinical Studies	Ontario Veterinary College
Daniel Ashlock, PhD	Professor and Chair, Mathematics and Statistics	College of Physical and Engineering Sciences
France-Isabelle Auzanneau, PhD	Professor, Chemistry	College of Engineering and Physical Sciences
John Baird, BVSc, PhD	Professor Emeritus, Clinical Studies	Ontario Veterinary College
Ian K. Barker DVM PhD	Professor Emeritus, Pathobiology	Ontario Veterinary College
Cathy Bauman, DVM, MPH, PhD	Assistant Professor, Population Medicine	Ontario Veterinary College
Janet Beeler-Marfisi, BA, DVM, DVSc, DACVP	Assistant Professor, Pathobiology	Ontario Veterinary College
Olaf Berke, PhD	Associate Professor, Statistical Epidemiology, Population Medicine	Ontario Veterinary College
Shauna Blois, DVM, DVSc, DACVIM	Associate Professor, Clinical Studies	Ontario Veterinary College
P. Suzanne Carman DVM, Dip SAMed, PhD	Diagnostic Virologist, Retired	Animal Health Laboratory
Catherine Carstairs, PhD	Professor, History	College of Arts
Christina Caruso, PhD	Associate Professor, Integrative Biology	College of Biological Science
Katie M. Clow, DVM, PhD	Assistant Professor, Population Medicine	Ontario Veterinary College
Joseph Colasanti, PhD	Associate Professor; Molecular and Cellular Biology	College of Biological Sciences
Marc Coppolino, PhD	Associate Professor, Molecular and Cellular Biology	College of Biological Science
Georgina Cox, PhD	Assistant Professor, Molecular and Cellular Biology	College of Biological Science
Teresa Crease, PhD	Professor, Integrative Biology	College of Biological Science
Nicola Cribb, MA VetMB DVSc DACVS	Assistant Professor, Clinical Studies	Ontario Veterinary College
John Dawson, PhD	Professor, Molecular and Cellular Biology	College of Biological

		Science
Giannina Descalzi, PhD	Assistant Professor, Biomedical Sciences	Ontario Veterinary College
Todd Duffield, DVM, DVSc	Professor and Chair, Population Medicine	Ontario Veterinary College
John Fryxell, PhD	Professore, Integrative Biology	College of Biological Science
Dan Gillis, PhD	Associate Professor & Statistician, School of Computer Science	College of Engineering & Physical Sciences
Lawrence Goodridge, PhD	Professor and Director, Canadian Research Institute for Food Safety	Ontario Agricultural College
T. Ryan Gregory, PhD	Professor and Chair, Integrative Biology	College of Biological Science
Steffen Graether, PhD	Professor, Molecular and Cellular Biology	College of Biological Science
Carlton Gyles, DVM, PhD, FCAHS	Professor emeritus, Pathobiology	Ontario Veterinary College
Jutta Hammermueller PhD	Staff, Pathobiology	Ontario Veterinary College
Brad Hanna, BSc, DVM, MSc, PhD	Associate Professor, Biomedical Sciences	Ontario Veterinary College
George Harauz, PhD	Professor Emeritus, Molecular and Cellular Biology	College of Biological Science
Tony Hayes BVSc PhD	Professor Emeritus, Pathobiology	Ontario Veterinary College
Paul Hebert PhD, FRSC	Professor & Canada Research Chair in Molecular Biodiversity	College of Biological Science
Stephen Henighan, PhD	Professor, School of Languages and Literature	College of Arts
Shoshanah Jacobs, PhD	Associate Professor, Integrative Biology	College of Biological Science
Fiona James, DVM, DVSc, Dipl ACVIM	Associate Professor, Clinical Studies	OVC
Claire Jardine, DVM, PhD	Associate Professor, Pathobiology	Ontario Veterinary College
Andria Jones-Bitton, DVM, PhD	Associate Professor, Epidemiology Director of Well-Being Programming, Ontario Veterinary College	Ontario Veterinary College

David Kelton, DVM, PhD	Professor of Epidemiology and Dairy Farmers of Ontario Research Chair in Dairy Cattle Health	Ontario Veterinary College
Cezar Khursigara, PhD	Associate Professor, Molecular and Cellular Biology	College of Biological Science
Judith Koenig, DVM DVSc, DAVCS	Associate Professor, Clinical Studies	Ontario Veterinary College
Jasmin Lalonde, PhD	Assistant Professor, Molecular and Cellular Biology	College of Biological Science
Mark Lipton, PhD	School of English and Theatre Studies	College of Arts
Ray Lu, PhD	Associate Professor, Molecular and Cellular Biology	College of Biological Science
Karol Mathews DVM, DVSc, DACVECC	Professor Emerita, Clinical Studies	Ontario Veterinary College
Judi McCuaig, PhD	Associate Professor, School of Computer Science	College of Engineering and Physical Sciences
Rob McLaughlin, PhD	Associate Professor and Partnership for Ecosystem Research and Management Scientist, Integrative Biology	College of Biological Science
Jennifer Murray, PhD	Associate Professor, Psychology	College of Arts
Lucy Mutharia, PhD	Adjunct Associate Professor, Molecular and Cellular Biology	College of Biological Sciences
Eva Nagy DVM, PhD, DSc	Professor Emerita, Pathobiology	Ontario Veterinary College
Annette Nassuth, PhD	Associate Professor, Molecular and Cellular Biology	College of Biological Sciences
Lee Niel, PhD	Associate Professor, Population Medicine	Ontario Veterinary College
Ryan Norris, PhD	Associate Professor, Integrative Biology	College of Biological Sciences
Anthony Ogg, DVM, DVSc, DACVIM	Professor, Clinical Studies	Ontario Veterinary College
Andrew Papadopoulos, PhD	Professor, Population Medicine	Ontario Veterinary College
Jane Parmley, DVM, PhD	Associate Professor, Population Medicine	Ontario Veterinary College
Andrew Peregrine, BVMS,	Associate Professor, Pathobiology	Ontario Veterinary College

PhD, DVM, DEVPC, DACVM		
Melissa Perreault, PhD	Associate Professor, Biomedical Sciences	Ontario Veterinary College
Zvonimir Poljak, DVM, PhD	Associate Professor, Population Medicine	Ontario Veterinary College
John Prescott VetMB PhD FCAHS	Professor Emeritus, Pathobiology	Ontario Veterinary College
Katherine Preuss, PhD	Professor, Research Leadership Chair, and Chair of Chemistry	College of Engineering and Physical Science
David Renaud, DVM, PhD	Assistant Professor, Population Medicine	Ontario Veterinary College
Beren Robinson, PhD	Professor, Integrative Biology	College of Biological Science
Michael A. Rogers PhD	Associate Professor and Canada Research Chair in Food Nanotechnology	Ontario Agricultural College
Tarek Saleh, PhD	Professor and Chair, Biomedical Sciences	Ontario Veterinary College
Shaun Sanders, PhD	Assistant Professor, Molecular and Cellular Biology	College of Biological Science
Jan M. Sargeant, PhD	Professor of Epidemiology, Population Medicine	Ontario Veterinary College
Stephen Seah, PhD	Associate Professor; Molecular and Cellular Biology	College of Biological Science
Rebecca Shapiro, PhD	Assistant Professor, Molecular and Cellular Biology	College of Biological Sciences
Patricia Shewen DVM PhD	Professor Emerita, Pathobiology	Ontario Veterinary College
Paul Sibley, PhD	Interim Director, School of Environmental Sciences	Ontario Agricultural College
Jeremy Simpson, PhD	Associate Professor, Human Health and Nutrition	College of Biological Sciences
Ameet Singh, DVM, DVSc, DACVS	Professor, Clinical Studies	Ontario Veterinary College
Kelsey Spence, PhD	Assistant Professor, Population Medicine	Ontario Veterinary College
Patricia V Turner MS, DVM, DVSc, DACLAM, DABT, DECAWBM	Professor Emerita, Pathobiology	Ontario Veterinary College

Siavash Vahidi, PhD	Assistant Professor, Molecular and Cellular Biology	College of Biological Science
Alexander Valverde, DVM, DVSc	Professor, Clinical Studies	Ontario Veterinary College
George van der Merwe, PhD	Associate Professor; Molecular and Cellular Biology	College of Biological Science
Matthew Vickaryous, PhD	Associate Professor, Biomedical Sciences	Ontario Veterinary College
Laurent Viel, DVM, PhD	Professor Emeritus, Clinical Studies	Ontario Veterinary College
Chris Whitfield PhD FRSC	Professor and Canada Research in Microbial Cell Biology, Molecular and Cellular Biology	College of Biological Sciences
Charlotte Winder, DVM, DVSc	Assistant Professor, Population Medicine	Ontario Veterinary College
Alex zur Linden, DVM, DACVR	Associate Professor, Clinical Studies	Ontario Veterinary College