

# U of A Scholars Join Ranks of Royal Society

In recognition of their outstanding scholarly and scientific achievement, three University of Alberta researchers have been elected to Canada's most revered scholarly institute: the Royal Society of Canada (RSC). Five more have joined a cohort of next-generation Canadian research leaders as members of the RSC's College of New Scholars, Artists and Scientists.

Congratulations to the following new RSC fellows and members of the College!

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## New fellows:

### Graham Pearson

Graham Pearson is a world-leading expert on the origin of deep continental roots and the diamonds they host. His research has transformed our knowledge of how continents form. Pearson's pioneering work on diamonds has revolutionized our understanding of when and where diamonds form and is leading a new paradigm of where Earth's deep water is stored.

"These awards are also a reflection of what you have achieved using government funding of research and so they could and should document the level of achievement Canadians are attaining with public support," said Pearson, who holds a Canada Excellence Research Chair, one of only three at the U of A and only 26 across the country. "It is important to recognize that, at least in sciences, awards to an individual, such as myself, are very much the result of a lot of collective hard work by a 'research group' and I have to thank all those who have contributed to my group over the years.

"These honours also reflect the impact of what we do—something that is always hard to know for sure without esteemed societies like the RSC bestowing awards."

### Richard Sutton

One of the world's top computing scientists, Richard Sutton laid the groundwork to make reinforcement learning and artificial intelligence a powerful computational tool with impact in computing science, neuroscience and psychology. His temporal differences learning algorithm has been used to create self-learning systems for numerous academic and industrial applications. He was recently found by a study out of Seattle's Allen Institute for Artificial Intelligence to be the 16th most influential computer scientist in the world.

### Bruce Dancik

Research conducted by Bruce Dancik, a professor emeritus, in the population genetics and evolution of woody plants led to the first isolation of a tree gene in 1988, the first proof of maternal inheritance in a conifer in 1987, and the naming and confirmation of new birch species. For more than 30 years, he taught a course in woody plants and from 1980 to 1990, he was editor of the Canadian Journal of Forest Research, leading it from a small quarterly to the top-ranking forestry journal in the world.

## New scholars, artists and scientists:

### Duane Froese

Duane Froese is a recognized leader in the development of new molecular methods applied to samples from ancient permafrost to reconstruct long-term environmental changes in Beringia—the area adjacent to and including the ancient land-bridge that connected North America to Eurasia. His findings have overturned conventional views on the age and stability of permafrost in North America, and revised thinking on the timing of major late-Pleistocene extinction events.

### Lynne-Marie Postovit

An expert in the study of how cancers evade therapy and spread, Postovit has led groundbreaking research in the fight against cancer. Her work has revealed potential therapies and biomarkers for cancer and has demonstrated how cancers hijack stem cell pathways to spread and survive.

### Candace Nykiforuk

Nykiforuk, the U of A's applied public health chair, is an international leader in applied public health and chronic disease prevention. She partners with communities and policy-makers to conduct research on how interactions between people, policy and place can prevent disease and promote lifelong health.

### Zamaneh Kassiri

Kassiri's innovative, high-quality research in cardiology has helped unravel unique functions within the heart and blood vessels, revealing their important role in heart disease, high blood pressure and aortic aneurysm.

### Isabelle Le Breton-Miller

Le Breton-Miller is a senior research fellow at the U of A and holds a research chair with the Département de Management at HEC Montréal. Her acclaimed work in family firm economic performance, strategic conduct, corporate governance and managerial succession have helped to establish family business as a rigorous and vibrant academic discipline.

The Royal Society of Canada named 89 new fellows this year and welcomed 80 new scholars, artists and scientists. Both groups will be inducted in ceremonies on Nov. 18 in Kingston.

-Michael Brown