Research News

umanitoba.ca/research

In Brief

International recognition for Aftab Mufti

Aftab Mufti, Civil Engineering, has received the Lifetime Achievement Award from the International Institute of FRP (fibre-reinforced polymers) in Construction (IIFC). Mufti is President of the ISIS Canada Research Network (intelligent sensing for innovative structures), one of Canada's Networks of Centres of Excellence, which is based at the University of Manitoba.

Mufti has earned an international reputation as a leader in the areas of structural health monitoring and advanced building materials, and the IIFC Lifetime Achievement Award cites his outstanding contributions to the field of fibre-reinforced polymer composites for construction. He was presented with the award on December 14, during the Composites in Civil Engineering 2006 conference in Miami.

The IIFC was established in 2003 to advance the understanding and application of FRP composites in civil infrastructure, and its membership includes top civil engineers from around the world.

Upcoming

This Lunch Hour has 33 Minutes Speaker Series

12 p.m., Wednesday, January 24
University Club
Admission $4 RSVP 474-9020

Jane Ursel, Sociology, is director of RESOLVE, a prairie-based network that co-ordinates and supports research on family violence. On January 24, Ursel will present an overview of her findings and data collected during a 16-year study of the Winnipeg Family Violence Court.

Space is limited. To reserve a seat contact Kimberley Stefaniuk at 474-9020 or kim_stefaniuk@umanitoba.ca.

TECHMED Manitoba

Thursday, March 29
204 Marshall McLuhan Hall
University Centre

TECHMED 2007 will showcase the latest in innovative technologies and research, and highlight the collaboration and licensing opportunities available to industry partners in the medical and assistive technology sector. For more information contact Fred Munson at 474-6689.

U of M part of $88M network

A groundbreaking $88 million federal investment in national high performance computing (HPC) resources will give University of Manitoba researchers access to powerful new computing tools and allow them to share ideas with their colleagues across the country.

The University of Manitoba is a partner in WestGrid, one of Canada's seven major HPC consortia that together are creating a nationwide network of HPC facilities. New funding for this unified HPC strategy was announced on December 21 in Toronto by representatives from the Government of Canada, the Canada Foundation for Innovation (CFI), and the Natural Sciences and Engineering Research Council of Canada (NSERC). CFI will provide $78 million for the new network, and NSERC will provide an additional $10 million. Matching funds from provincial and industry sources are expected to bring total funding to nearly $180 million.

"Today's announcement is a historic day for Canadian research," said Jonathan Schaeffer, a WestGrid co-principal investigator who led WestGrid's participation in the project. "When combined with provincial and industry matching funds, WestGrid will acquire more than $50 million of computing infrastructure to support research in areas such as climate modeling and prediction, deciphering the human genome and solving compelling problems in science and engineering."

"This investment will give Manitoba researchers better access to powerful computing resources, allowing them to compete on a level playing field with the rest of the world," said University of Manitoba physics professor Byron Southern, a member of WestGrid's Executive Committee, and project leader for the U of M. "This national network will not only be a great new tool for individual research programs, it will also open the door to new collaborations between researchers at different institutions."

The new investment marks the first time CFI has identified a specific research infrastructure of strategic priority for the country and brought together all stakeholders — universities, provincial and federal funding agencies — to collaborate on the development of a purposefully shared pan-Canadian resource. The University of Manitoba is one of more than 60 partners across Canada.

The process leading up to the announcement mobilized Canada's entire HPC community — previously operating as separate regional consortia competing for resources — to work together on the development of a unified HPC strategy for Canada.

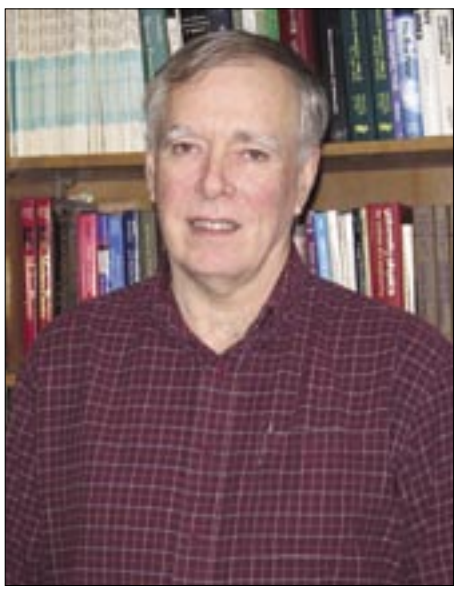

Photo by Frank Nolan

Byron Southern, Physics and Astronomy, is project leader for the University of Manitoba.

This major investment will ultimately benefit more than 6,000 investigators performing intensive computationally-based research at more than 60 institutions across the country.

"This represents a major leap forward for Canada's HPC community," said Eliot Phillipson, President and CEO of CFI. "This investment will provide researchers with the tools to solve large-scale computational problems that we could not even have imagined tackling 10 years ago."

Getting to the bottom of things

Roman graves reveal clues about ancient life

BY FRANK NOLAN
Research Promotion

Submitted Photo

Lea Stirling, Classics, Canada Research Chair in Roman archaeology.

What can graves in Tunisia tell us about everyday life in an ancient Roman city? Quite a lot, if you know what to look for.

Lea Stirling, Classics, has been excavating sites in the Roman city of Leptiminus, Tunisia, for more than a decade. For the past three summers, her work has been focused on a cemetery that was used from the second to the sixth centuries AD.

"It's quite exciting, because it has such a long period of continuity," said Stirling, who holds a Canada Research Chair in Roman archaeology. "It covers one of the big changes in Roman burial practices, when there was a movement away from cremating people to burying them. The cemetery also shows the transition from pagan burial rituals to Christian ones."

Stirling leads an international team of 20 researchers, including graduate students from the University of Manitoba and other universities in Canada, the US and Tunisia. The team has excavated a number of graves in the ancient cemetery, and has recovered a variety of artifacts, including statuettes of Venus, fragments of burial shrouds, and the remnants of food offerings.

"These things give us real insight into burial practices, and the food offerings are particularly fascinating," Stirling said. "What the people gave their dead in terms of food can tell us something about their belief in the afterlife, and it can tie into things like local cults and religions."

Stirling's team is also examining how the graves were constructed, which can give clues about a deceased person's wealth and social stature.

"We found one rock-cut tomb that was plastered on the inside, and included paintings of a ship," she said. "We have also recovered a set of early Christian mosaics from an underground crypt that has stone walls and a vaulted ceiling. This would have taken some time to build, since the bedrock would have to be excavated by hand, so it likely belonged to a prominent citizen."

Stirling will be presenting her research on January 23, as part of the ***Get to Know Research at Your University*** speaker series. Her presentation will outline her team's findings over the last three years, and it will also reveal what life is like for an archaeological team working for weeks at a time under the hot Mediterranean sun.The presentation begins at 7:00 pm in the Smartpark boardroom at 135 Innovation Drive. Admission is free, and everyone is invited to attend. For more information, please call Kimberley at 474-9020.

Bringing Research To Life

Research News is Published
by the Office of the Vice-President (Research)
Comments, submissions and event listings to:
stefaniu@ms.umanitoba.ca
Phone: (204) 474-9020 Fax (204) 261-3475