# inside the inside

A newsletter published for everyone in the Athabasca University community

**VOLUME 4: ISSUE 5**March 25, 2013

## IN THIS ISSUE:

- 2 Digital Media Symposium
- 3 Distance Maternity Training
- 4 Second Annual ARBRI Day
- 4 MORPH
- 5 Fun With Science
- 7 Research Buzz
- 8 New from AU Press
- 9 Phone Upgrades
- 9 Whooo is That?

#### COVER IMAGE »

At Science and Technology Day, a first-time event at Amiskwaciy Academy in Edmonton, several professors from the Faculty of Science and Technology taught students about unmanned aerial vehicles, robots, geology, mobile learning and astronomy. In a full-day workshop on LEGO robots with Dr. Vive Kumar, right, and Dr. Sabine Graf, students learned how to think and work like scientists, engineers and robots, translating plans to final computerized working devices and learning some basics of computer and robot programming. (See page 5)



## AU Symposium to Explore the Rise of Digital Media

IDENTITY, AGENCY AND THE DIGITAL Nexus, an international symposium to be hosted by AU in Edmonton, April 5 to 7, will focus on the transformation of contemporary global society by the proliferation of digital communication technologies.

Organized by MAIS program director Dr. Raphael Foshay, with funding from a SSHERC Connection Grant, the symposium, to be held at the Lister Conference Centre on the University of Alberta campus, will explore the ways in which digital communication technologies are influencing every sector of public and private life.

The rise of the Internet and of multimedia publication and communication, as presciently heralded by Dr. Marshall McLuhan, spelled the end of the print culture monopoly, Foshay said. Digital communication and the Internet, in concert with the globalization of communication and the economies that they enable, are producing new conditions for personal identity, social and political organization, commercial transactions and cultural and artistic expression.

While digital networking and the Internet present a new frontier, Foshay said, they also provide new conditions for the activity of powerful corporate, media and governmental interests. These new conditions have changed the shape of public and personal space and the possibility for social, political and economic agency. The upcoming symposium, he said, will explore strategies for understanding the implications of these changes and for mapping the unfolding territory of global digital network technology and its effects on twenty-first century public and civic life.



Invited symposium participants include Canadian and international scholars representing many disciplines challenged by the impact and implications of digital communication technology and digital networking: social and cultural theory, political science, sociology, media studies, philosophy.

The symposium will feature two plenary public lectures on the philosophy and theory of culture and technology, one by Dr. Andrew Feenburg of the School of Communication at Simon Fraser University, a Canada Research Chair in the philosophy of technology, and the other by Dr. David Gunkel, a professor in the Department of Communication at Northern Illinois University.

AU will be represented Dr. Mark McCutcheon of the Centre for the Humanities, Dr. Lorna Stefanick and Dr. Jay Smith of the Centre for Social Sciences, Dr. George Siemens of the Centre for Distance Education and graduate students Daryl Campbell, Sharone Daniel and Leslie Lindballe.

Other participants will include Dr. Ian Angus and Dr. Roman Onufrijchuk, Simon Fraser University; Dr. Maria Bakardjieva, University of Calgary; Dr. Marcel O'Gorman, University of Waterloo; Dr. Andrew Herman, Wilfrid Laurier University; Dr. Bob Hanke, York University; Dr. Josipa Petrunic, University of Toronto; and Dr. Carolyn Guertin, University of Texas at Arlington.

Lectures and the regular symposia presentations will be open to the public and will be widely advertised both within the universities and across Alberta. While the primary audience is digital media scholars and practitioners, emphasis on the influence of digital media on personal, social and political identity and agency will make the event of interest to scholars in a diversity of other disciplines and to the general public.

The symposium papers, edited by Foshay, will be published in 2014, both in book form and as a free download, possibly by AU Press.

## MDE Students Develop Distance Training Program for Nurses

"Somewhere, sometime a child will be safely delivered because a nurse who took this course realized the mother was in trouble before she knew it herself."

THE RURAL AND REMOTE MATERNITY Education Program, a distance education program in maternity care, developed by MDE students Mariea Spray and Sue Erdman-Burton as an MDDE 605 course project, became a reality in February.



Based at the Meno Ya Win Health Centre in Sioux Lookout, Ont., the program uses distance education to deliver training in high-risk and specialized obstetrical care to registered nurses serving rural and remote communities in northern Ontario. These nurses have trouble accessing best-practice education because of their isolated location: travel, accommodation and course costs to attend a two-day training program in Toronto can total \$2,500.

Spray, who is the staff education and professional practice manager at the health centre, said that their intensive, six-month program costs \$2,000 per person and is delivered almost entirely online. "We also have a practicum of one to two weeks, during which our students receive hands-on training at the health centre, which is itself state-of-the-art with computerized mannequins capable of simulating a woman in labour."

The catalyst for the program was an independent consultant's report identifying the need for First Nations' maternity care that was holistic in approach and culturally sensitive. "We developed the business proposal as part of our course work for MDDE 605, Planning and Management in Distance Education and Training, taught by Dr. Roger Powley," Erdman-Burton said, "and his guidance was invaluable." Success indicators requested by Health Canada were subsequently added and the proposal was ready.

Developed on the Healthstream Learning Center™ LMS, the six-month course has three main modules: Prenatal Care, Labour and Delivery and Post-Natal Care. It provides a comprehensive and intensive training experience for nurses who are

often the only healthcare professionals for hundreds of kilometres.

The project received funding in May 2012 and the first cohort of 16 students started in February of this year. Learners will use a combination of LMS materials, online articles, an interactive blog for questions and discussion. Teleconferencing, video conferencing and webinars featuring presentations from experts in the field will soon be added.

"Somewhere, sometime a child will be safely delivered because a nurse who took this course realized the mother was in trouble before she knew it herself," Erdman-Burton said, "and distance education will have made that possible."

## **Second Annual ARBRI Day**

THE SECOND ANNUAL ARBRI DAY Collaborative Research Conference, organized by the Athabasca River Basin Research Institute and focusing on the innovative research being done in the Athabasca River Basin, will be held at the Coast Edmonton Plaza Hotel on April 26.

With its 94 rivers, 150 creeks and 153 lakes, the Athabasca River Basin is an important ecological resource that provides employment in many sectors, including industry, agriculture and tourism. It is rich in natural resources, including some of the world's largest oilsands deposits. Embracing a tapestry of diverse cultures, the basin has played an important role in the discovery and development of western Canada.

Industrial development, climate change, and other factors now affect both environmental and human elements of the upper and lower Athabasca River Basin and have generated a great deal of research into its sustainability.

ARBRI fosters multidisciplinary research and scholarly activities and encourages collaborative work among researchers working in related areas of study. It also promotes relationships external to AU, including those with other university researchers, all levels of government, nongovernmental organizations, industry and communities.

Researchers, non-profit and commercial organizations, academics and graduate

students involved in research addressing any scientific, social, economic or environmental issue relating to the Athabasca River Basin are invited to participate in this event.

Projects should be recent or ongoing.

Abstracts, 250 words or less and single spaced, must be submitted in English by Friday, March 29. Poster abstracts must be submitted to conference co-ordinator *Jim Sellers*.

The registration deadline for the conference is also Friday, March 29. For more information, contact the conference coordinator. To book a room, contact the *Coast Edmonton Plaza* (phone 780-423-4811). Hotel parking is available for \$9 per day.

## **MORPH Project Receives Funding**

DR. SABINE GRAF, DR. VIVE KUMAR and Dr. Dragan Gasevic of the School of Computing and Information Systems have received funding from the Canada Foundation for Innovation and Alberta Innovates (Alberta Enterprise and Advanced Education) for their research project Multimedia Object Research Platform Host for Adaptive and Mobile Learning.

The aim of the MORPH Project is to implement a novel platform that provides a world-class research environment, enabling researchers to study, in the context of both desktop-based and mobile settings, the emerging generation of flexible and reusable user-generated content and the dynamic interaction patterns of users and software agents for adaptive and personalized learning. This work will result in new ontologies for describing the patterns, metadata for indexing dynamic learning resources, new intelligent agents and web services for enhancing and guiding the actions of both learners and instructors in a personalized and adaptive manner, and a wide range of visualization tools for the human participants.

The proposed platform will host a content management system built on an XML database supported by servers, workstations, mobile devices and ancillary software to facilitate research and development of new techniques and approaches to technology enhanced learning. By using a CMS in addition to a learning environment/system, the content can be separated from its presentation, allowing for the integration of innovative research development strategies that enable advanced adaptivity, personalization, visualization, learner profiling and learner analytics.

The infrastructure will be located in Athabasca and Edmonton. Most physical equipment will be located in the AU library server room (Computing Services) and multi-media production area. The enabling hardware will provide a framework for the development of a research software platform, consisting of an interoperable learning object repository combined with a metalayer of web services capable of capturing the interactions of humans and resources into a large database.

The platform will be housed in Athabasca but will be available to AU researchers through the Internet and for collaborating with their research partners across Canada and overseas. The software will be deployed in a cloud configuration on centralized servers and across a network of devices for adaptive and mobile learning and content capture wherever researchers deploy new services in the extended web-based test environment.

MORPH is intended to be a dynamic and evolving platform and aims to enhance and go beyond the capacities of existing infrastructure. The resulting infrastructure will support research into the development of dynamic pattern analysis algorithms for detecting patterns of navigation and goal achievement, mechanisms for capturing the learning context and situation of learners, ontologies for indexing and describing resources and events, and rule systems for coaching participants and influencing the evolution of e-learning through providing adaptive and personalized experiences.

## Science Takes Flight at Amiskwaciy Academy

AIRCRAFT TOOK OF AGAIN AT THE former terminal of Edmonton's defunct municipal airport on March 13, and the pilots were teenagers who earned their wings in a morning.

The flying session was led by Dr. Frédérique Pivot, of the Centre for Science, who uses unmanned aerial vehicles, also known as drones, to research elements of the cryosphere like snow cover and lake ice. In just a few hours, she readied a small group of students from Amiskwaciy Academy, the aboriginal school that now occupies the former terminal building, to fly four Parrot AR drones in the school's gymnasium. Their cockpits were iPads.

Parrots are technically helicopters, but with a hull that looks like four circles meshed together, they seemed more like flying saucers as they glided slowly through the air and even hovered in one spot to the delight of their young pilots.

Pivot's workshop was one of several hands-on sessions offered during Science and Technology Day, a first-time event for Amiskwaciy Academy. Several professors from AU's Faculty of Science and Technology taught the students about UAVs, robots, geology, mobile learning and astronomy. Science Outreach – Athabasca, which organizes similar activities in the Athabasca area, also chipped in by lending LEGO robotic kits for the event.

The idea for Science and Technology Day originated with the faculty Promotions Committee, said Sonja Purcell, administrative professional officer for the faculty and the lead event organizer for AU. "Science and technology are fun and creative. We wanted to provide students with opportunities to explore the possibilities that exist within science and technology and also to highlight the research of our faculty members who gave of their time to lead the sessions."

The committee worked to identify opportunities to not only profile the Faculty of Science and Technology, but the university as a whole, Purcell said, adding that the event represents a good example of how AU can collaborate at the community level.

Purcell worked with Laurie Sorensen, a teacher and work experience co-ordinator at Amiskwaciy Academy to organize the event. "Science isn't a strong field for a lot of people," Sorensen said, "and even those that are strong in it may not think, 'I want to pursue that.' Plus, look at all the things in science that they might not know about, that maybe they could connect to if they were just exposed to it." The opportunity to expose the students to career possibilities in science and technology, combined with the willingness of AU profs to visit the school in person, made the event a "no-brainer," she said.



An Amiskwaciy Academy teacher holds a hoop as students fly a drone through it using an iPad as a controller.



"A huge thank you to Athabasca. This was such a wonderful opportunity," Sorensen said. "I hope our students look at Athabasca as another alternative for taking classes, because a lot of them will go back to their communities or places where they won't be near a university. If they know they can get access to university from Athabasca, that's fantastic."

THE FOLLOWING PROFESSORS participated in Amiskwaciy Academy's Science and Technology Day:

Dr. Martin Connors, Canada Research Chair in space science, instrumentation and neworking and professor of space science and physics: His research interests include auroras (commonly known as northern lights in the northern hemisphere) and asteroids. In 2011, Connors helped to discover the Earth's first known Trojan asteroid.

*Dr. Sabine Graf*, assistant professor of computing science: Her research interests include adaptive learning systems and learning analytics.

In 2013, Graf was accepted into the Mitacs Elevate Postdoctoral Fellowship Program.

*Dr. Vive Kumar*, associate professor of computing science: His research interests include artificial intelligence in education and human-computer interaction. He has published dozens of articles, supervised over 80 student researchers at the undergraduate and graduate levels, and performed consultant work for the United Nations.

*Dr. Ken Munyikwa*, assistant professor of earth science: His research interests include environmental changes in Western Canada over the last 20,000 years and the migration of humans during this period.

His work in this area was featured in the cover article for the November 2011 issue of Scientific American.

**Dr. Frédérique Pivot**, assistant professor of physical geography: Her research interests include the dynamics of snow and ice and the emerging field of remote sensing with unmanned aerial vehicles. She is currently tailoring a UAV for her research on the cryosphere.

*Dr. Qing Tan*, associate professor of computing science. His research interests include cloud computing and e-commerce. He developed the Mobile Virtual Campus, an app that helps students share educational content on their smartphones.

### Research Buzz

#### **Research Grants**

MAIS program director Dr. Raphael Foshay has received funding through the SSHRC Connection Program to support the symposium Identity, Agency, and the Digital Nexus (See page 2).

Dr. Sabine Graf, Dr. Vive Kumar and Dr. Dragan Gasevic of the School of Computing and Information Systems have received Canada Foundation for Innovation and Alberta Innovates funding for their project Multimedia Object Research Platform Host for Adaptive and Mobile Learning (See page 4).

#### **Publications**

"Sensory Alterations," a chapter written by Dr. Pamela Hawranik, dean of the Faculty of Graduate Studies appears in Potter & Perry Fundamentals of Nursing (fifth edition). The new edition of the textbook, used by many undergraduate nursing programs in Canada, was recently published by Elsevier in Toronto.

#### New Researcher Rates

Those working on a grant application, should make note of the new research assistant and researcher rates, posted at *HR Payroll Schedules*, toward the bottom of the webpage under Research Assistant Researcher Salaries (July 2012).

#### **Deadlines**

For upcoming grant application deadlines, please visit the *Research Centre website*. For internal deadlines and processes, please contact *Jill Calliou*.

#### **Upcoming Events**

#### INTERNATIONAL GRADUATE RESEARCH WORKSHOP, ADAPTIVITY AND PERSONALIZATION IN INFORMATICS

(Edmonton, March 23 to 24): IGRW 2013 aims to provide learning and networking opportunities to advance research on the innovative paradigms, architectures and implementations of wireless applications and systems for individualized and adaptive learning. Topics covered in the workshop will include adaptivity and personalization concepts and approaches, advanced learning analytics, context aware learning systems and technologies, mobile and ubiquitous learning, and social interaction technologies. More information is available on the Research Centre's *Upcoming Events web page*.

#### COLLABORATIVE RESEARCH FORUM SEMINAR

(AU St. Albert and via teleconference, Friday, April 5): Presentation 1: Dr. Eloisa Perez, assistant professor, accounting and finance, Grant MacEwan University School of Business, "Environmental Jolts, Board Governance Practices and Firm Value: Evidence from the 2008 Financial Crisis."

Presentation 2: Dr. Jacob Musila, program director and associate professor of financial economics, AU Faculty of Business, "Does Trading Partner Matter for Economic Growth? Evidence from OECD Countries." Teleconference for audio: Edmonton 780-421-1483, Calgary 403-232-0994, all other participants 1-877-385-4099, participant code 21671. Adobe Link for visuals.

#### 2013 RESEARCH FORUM

(Holiday Inn Express - Downtown, 10010 104 Street NW, Edmonton, April 25): The registration deadline has been extended to Friday, March 29 at 4:30 p.m.). Contact *Alice Tieulie*, secretary of the Academic Research Committee, to register.

#### EDTECH INNOVATION

(Calgary, May 1 to 3): This national conference, to be hosted by AU in Calgary, will bring together start-ups, researchers and technology purchasers and venture capitalists and profile innovative research being conducted in Canadian universities and start-ups that are developing new technologies, products and services. Connecting researchers with start-ups will enable new forms of innovation and partnership opportunities in Canada's growing educational ecosystem. Two hundred attendees are expected. An open trade show will allow the general public to see new educational tools and techniques. For more information and to register, go to the conference website.

#### ISLAND STUDIES: WEST COAST CANADA AND BEYOND: CALL FOR PROPOSALS

(The Haven, Gabriola Island, B.C., May 10 to 12): For more information, contact Gloria Filax [gloriaf@athabascau.ca].

## Research Ethics FAQ #2

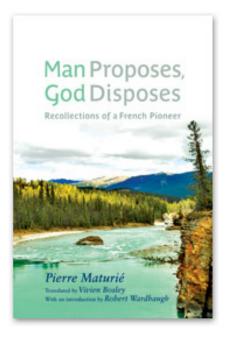
What should I do if I am not sure whether my research project requires ethics review?

For the answer, go to Research Centre FAQs.

### **New from AU Press**

"From the edge of the plateau there was a splendid view: the Athabasca, flowing from the east, made a great curve in front of us and carried on towards the village. . . . At the moment we stopped, we could see lines of 10 or 15 sledges gliding on the trail made in the ice on the river. The view was so panoramic both to our right and our left, and also over the undulations descending towards the bank, that we took the decision right there and then to plant our flag on the spot, like explorers in an unknown land and to build our house there."

#### **MAN PROPOSES, GOD DISPOSES:** RECOLLECTIONS OF A FRENCH PIONEER



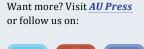
IN 1910, YOUNG PIERRE MATURIÉ bid farewell to his comfortable bourgeois existence in rural France and travelled to northern Alberta in search of independence, adventure and newfound prosperity. Some 60 years later, he wrote of the four years he spent in Canada before he returned to France in 1914 to fight in the First World War.

Like that of so many youthful pioneers, his story is one of adventure and hardship: perilous journeys, railroad construction in the Rockies, panning for gold in swiftflowing streams and transporting goods along the Athabasca River for the Hudson's Bay Company. Blessed with the rare gifts of a natural storyteller, Maturié conveys his abiding nostalgia for a country he loved deeply yet ultimately had to abandon.

Maturié's memoir, Man Proposes, God Disposes, appeared to a warm reception in France in 1972. Now, in a deft and

marvelously empathetic translation by Vivien Bosley, a professor emeritus of French at the University of Alberta, it is at long last available in English. As a portrait of pioneer life in northern Alberta, as a window onto the French experience in Canada and, above all, as an irresistible story, it will continue to find a place in the

hearts of readers for years to come.









## Telax Phone Service Upgraded

AU'S FRONTLINE TELAX PHONE services, including the main 1-800 phone menu and operations in the Information Centre, the CS Helpdesk, the Faculty of Business Student Support Centre, Learner Support Services Advising, AU Edmonton/AU Calgary Exam Services and the Faculty of Business Graduate Centre have been upgraded.

The 1-800 phone menu options have been revised to allow more streamlined caller access to frontline service departments and personnel. Unused menu options have been removed, and call flows have been redeveloped to better support caller use patterns. These changes will help to ensure that AU phone services are responsive and can continue to support a high quality and positive service experience.

In keeping with AU's service commitment, all calls originating from a Telax phone connection are now being recorded (since Tuesday, March 12) and may be monitored for service quality or training purposes. This change applies to all calls originating with one of the units listed above and will include the portion of a call following a transfer to another AU extension. For example, a call received by the Info Centre and transferred to a staff member in another non-Telax service department will be recorded for its duration (until the caller hangs up).

Call recordings are maintained on secure Telax servers for 180 days and are accessible by a limited number of Telax unit managers in compliance with FOIP regulations, existing AU policies relating to the creation, use and disclosure of student records, and AU staff use-ofsystems agreement guidelines.

Call recording is an important valueadded enhancement to AU's student service tool set. For more information on this service, contact student relationship management co-ordinator *Heidi Bizon Schreiner*.

## **Space Science is a Hoot**



Dr. Martin Connors of the Centre for Science took this photograph of a great grey owl near the new AU Geophysical Observatory.

Native to the boreal forest, these owls are the largest in Canada. They are also known as Phantoms of the North.

The CBC recently carried an *item* on an Alberta family that has befriended a great grey owl.

Dr. Martin Connors of the Centre for Science took this photograph of a great grey owl near the new AU Geophysical Observatory

## FOLLOW US B YOU TUBE







Athabasca University's Facebook page has more than 3,200 fans. Check it out at facebook.com/Athabasca. *University*. If you would like something posted onto the AU Facebook page, please contact Michael Shouldice.



The Insider is published for AU faculty and staff members and other members of the AU community by the Advancement Office.

Please send any information or photographs for inclusion to the co-ordinator. If a photo opportunity presents itself, please contact Blaise MacMullin. Due to FOIP regulations, a release form must accompany all photos. Please contact *The Insider* co-ordinator for a copy of the release form.

The next issue of The Insider will be published on March 25. Deadline for submissions is March 15, 2013.

Posted on The Landing: https://landing.athabascau.ca

Athabasca University