

REPUTATIONAL SUCCESSES

Ancient Bones Reveal Cancer

Angela Lieverse (Archaeology) is part of an international research team which has identified evidence of cancer in a skeleton over 4,500 years old. The finding is one of the earliest cases of human cancer in the world and was recently published in the journal PLOS ONE. This work, undertaken as part of the Baikal-Hokkaido Archaeology Project, improves our understanding of cancer by providing details on the history and evolution of the disease. For more information, visit: <http://goo.gl/X0dwew>.

Health Researcher Earns Achievement Award

John Gordon (Medicine) has been awarded the Saskatchewan Health Research Foundation's 2014 SHRF Achievement Award. The annual award honours those individuals in the health research community who demonstrate inspiring drive, leadership, ingenuity, and achievement.

INITIATIVES

GIWS by the Numbers

The Global Institute for Water Security led by Howard Wheeler, Canada Excellence Research Chair in Water Security, has released its annual Progress Report for 2013-14. Highlights of GIWS progress include:

- ❖ **Membership:** 192 members (69 Members, 18 Associate Members, 3 Affiliate Members, and 102 Student Members) from 14 U of S academic units, Environment Canada, and Agriculture and Agri-Food Canada
- ❖ **Research Chairs:** 1 CERC, 5 CRCs and 3 IRCs
- ❖ **Highly Qualified Personnel supported:** 316 graduate students, 98 postdoctoral fellows and scientists, 63 technicians, 121 research assistants, 98 visiting scholars
- ❖ **Funds:** GIWS has leveraged \$47.2 million total funding in addition to the \$30 million CERC base
- ❖ **Publications:** 506 journal articles and 33 books/chapters, 338 conference presentations, delivered 201 plenary, key note and invited lectures
- ❖ To view the complete report, visit: <http://goo.gl/pBqQHm>

OVPR Re-organization

The Office of the Vice-President Research recently completed a budget-neutral organizational restructuring. The changes are the result of continued streamlining efforts to provide improved service delivery to faculty, staff and students. Major changes include:

- ❖ Research Services and Research Ethics have been amalgamated to create the **Research Services and Ethics Office** (RSEO) led by Susan Blum. This change unifies the OVPR's core research administration operations and compliance functions, including grants, contracts, and ethics.
- ❖ The **International Research and Partnerships** unit unifies the OVPR's international research and international protocol functions. The unit will be led by Diane Martz with Darcy Marciniuk assuming the role of Special Advisor, Research and International.
- ❖ The **Strategic Research Initiatives** (SRI) office led by Laura Zink brings together research facilitation, support for national programs, support for large-scale proposals, awards facilitation, and undergraduate research.
- ❖ For more information, visit: <http://research.usask.ca/staff-directory/>

Partnering for Success

The OVPR partnered with NSERC and the AUCC on a Nov. 28th "Partnering for Success" event that drew 75 researchers and their NSERC Engage industrial partners to campus. NSERC's new president Mario Pinto spoke on the outcomes of NSERC's Strategy for Partnerships and Innovation which is celebrating its fifth anniversary. A panel of industry and academic researchers from U of S, University of Regina and Saskatchewan Polytechnic discussed the challenges and opportunities of partnerships. Videos highlighting 12 successful partnerships can be viewed at: <http://goo.gl/bV3RfM>. The event also highlighted the AUCC's partnership focus through its "Big Ideas for Better Business" Open Doors, Open Knowledge campaign.

FYRE in the Halls

Over 400 students from the College of Agriculture and Bioresources participated in the **First-Year Research Experience (FYRE) Poster Symposium** on December 3rd. Ninety-nine student groups presented results following their curriculum-based research experiences organized as part of the Undergraduate Research Initiative. Dr. Murray Drew, FYRE faculty champion, summarized the experience, "I have to say that this was one of the best teaching experiences I have ever had. This program has just astounded me with how well it worked and with such a positive response from the students. I can't wait to do it again next year!" To find out more contact: undergraduate.research@usask.ca

FUNDING SUCCESSES

Support for Postdoctoral Fellows

Seven U of S fellows were successful in receiving a **SHRF Postdoctoral Research Fellowship** of \$100,000 over two years:

- ❖ **Yalena Amador Cañizares** (Lead Supervisor: Joyce Wilson, Microbio. and Immunology) for "*Mechanistic Analysis of miR-122 promotion of HCV replication.*"
- ❖ **Lei An** (Lead Supervisor: John Howland, Physiology) for "*Effects of maternal immune activation during pregnancy on patterns of brain activity in the offspring: implications for schizophrenia.*"
- ❖ **Wubin Cheng** (Lead Supervisor: James Johnston, Mechanical Engineering) for "*Revealing the role of mechanical factors on bone remodelling: a longitudinal study linking in vivo fatigue loading, advanced imaging and finite element modelling.*"
- ❖ **Amanda Froehlich Chow** (Lead Supervisor: Louise Humbert, Kinesiology) for "*Increasing Early Childhood Educator Self-Efficacy to Promote Physical Literacy and Physical Activity among Children in Rural Childcare Centres.*"
- ❖ **Jonathan Pasternak** (Lead Supervisor: Heather Wilson, VIDO-InterVac) for "*Development of an Oral*

Vaccine Platform for Neonates."

- ❖ **Juan-Nicolas Pena-Sanchez** (Lead Supervisor: Jennifer Jones, Medicine) for "*Assessing quality of care for patients with inflammatory bowel diseases (IBD) and evaluating the impact of the Multidisciplinary IBD Clinic in Saskatchewan: a population-based cohort study using administrative data.*"
- ❖ **Sachin Singh**, (Lead Supervisor: John Gordon, Medicine) for "*Optimizing tolerogenic dendritic cells for immunotherapy.*"

Partnership to Research Mining Safety

Valery Chirkov (Psychology) and Lyle Grant (Sask. Polytechnic) are co-leaders on a two-year collaborative project researching how to enhance safety cultures and employee safety behaviours in the minerals industry. Funding of almost \$786,000 is being provided by project partner the **International Minerals Innovation Institute (IMI)**, the Saskatchewan government, and six major mining companies: Agrium, BHP Billiton, Cameco, K+S Potash Canada, Mosaic, and Potash Corp.

SHRF Names Establishment Grant Recipients

Twenty-two U of S researchers were successful in receiving a **SHRF Establishment Grant**:

- ❖ **Darryl Adamko** (Pediatrics) and co-investigator Anas El-Aneed (Pharmacy) were awarded \$120,000 for "*Metabolomic analysis of urine: Improving the diagnosis of asthma and COPD.*"
- ❖ **G. Camelia Adams** (Psychiatry) and co-investigators Scott Napper (VIDO-InterVac) and Rudy Bowen (Psychiatry) were awarded \$110,393 for "*Nature and nurture: A biopsychosocial exploration of the relationship between childhood trauma, adult attachment, and severity of depression and social anxiety in Saskatchewan.*"
- ❖ **Lane Bekar** (Pharmacology) was awarded \$120,000 for "*Glucocorticoid effects on acute neuroinflammation and chronic neurodegeneration.*"
- ❖ **Hector Caruncho** (Pharmacy) was awarded \$118,890 for "*Analysis of membrane protein clustering in lymphocytes as a putative biomarker of therapeutic efficacy in mood disorders.*"
- ❖ **Sharyle Fowler** (Medicine) and co-investigators Jennifer Jones (Medicine), Janet Hill (Veterinary Microbiology) and Jane Alcorn (Pharmacy) were awarded \$120,000 for "*The impact of chronic inflammation and its treatment on determinants of health in women with inflammatory bowel disease and their offspring.*"
- ❖ **Stephan Milosavljevic** (Physical Therapy) and co-investigators Brenna Bath (Physical Therapy), Catherine Trask (Canadian Centre for Health and Safety in Agriculture) and Erika Penz (Medicine) were awarded \$119,889 for "*Walking away from low back pain: One step at a time.*"
- ❖ **Shelley Peacock** (Nursing) and co-investigators Lorraine Holtslander (Nursing), Megan O'Connell (Psychology) and Genevieve Thompson (Nursing, University of Manitoba) were awarded \$87,096 for "*A psychosocial intervention for bereaved spousal caregivers of persons with dementia: Adapting the 'Finding Balance' tool.*"

- ❖ **Erika Penz** (Medicine) was awarded \$119,817 for "*Cost Effectiveness of Lung Cancer Screening in Saskatchewan - Applying Microsimulation Modeling and Saskatchewan-specific Costs of Lung Cancer Diagnosis and Management.*"
- ❖ **Ian Stavness** (Computer Science) and co-investigators Joel Lanovaz (Kinesiology) and Alison Oates (Kinesiology) were awarded \$120,000 for "*Simulation-based assessment and experimental evaluation of movement retraining to improve stability during walking.*"

High School Conflict Prevention Partnership

Steve Wormith and **Carolyn Camman** (Centre for Forensic Behavioural Science and Justice Studies) have been awarded funding by the **Saskatoon Restorative Action Program** for the continuing project to evaluate and monitor the Restorative Action Program (RAP). RAP is an initiative of the Saskatoon Rotary Clubs together with the Saskatoon Catholic and Saskatoon Public school systems. The program operates in Saskatoon high schools to deal with bullying and assist with conflict prevention and resolution. The U of S Centre for Forensic Behavioural Science and Justice Studies has been undertaking research and evaluation work with RAP since 2012. For more information on the program, visit <http://www.rapsaskatoon.org/index.html>

SHRF Supports Five Research Events

Five U of S researchers were successful in receiving a **SHRF Research Connections Grant**:

- ❖ **James Dosman** (Canadian Centre for Health & Safety in Agriculture) and co-investigator Shelley Kirychuk were awarded \$7,000 to assist with the symposium "*The Built Environment and First Nations Health: Addressing & Redressing the Issues. Establishing a Blueprint for Canada*" held October 21, 2014 in Saskatoon, SK.
- ❖ **Joshua Lawson** (Canadian Centre for Health and Safety in Agriculture) was awarded \$8,000 for "*Development of an international research initiative in childhood asthma*" to assist with the 7th International Symposium "Safety and Health in Agricultural and Rural Populations: Global Perspectives" held October 19-22, 2014 in Saskatoon, SK.
- ❖ **Helen Nichol** (Anatomy and Cell Biology) and co-investigator Ingrid Pickering (Geological Sciences) were awarded \$3,000 to assist with the CLS Open House event "*Seeing the Light*," held October 18, 2014 on the U of S campus.
- ❖ **Catherine Trask** (Medicine) was awarded \$10,000 to assist with the "*7th International Symposium: Safety & Health in Agricultural & Rural Populations: Global Perspectives (SHARP)*" held October 19-22, 2014 in Saskatoon, SK.
- ❖ **Hassanali Vatanparast** (Nutrition and Dietetics) and co-investigators Susan Whiting (Nutrition and Dietetics) and Rachel Engler-Stringer (Community Health and Epidemiology) were awarded \$4,147 to assist with the "*Saskatchewan Public Health Nutrition Research Network Symposium*" held October 16-17, 2014 in Saskatoon, SK.