# HINFormation

A Newsletter of the School of Health Information Science University of Victoria October 2016



# MESSAGE FROM THE DIRECTOR

Now that fall is officially here and Thanksgiving over, I hope you have all had a chance to check out the new School of Health Information Science website. It was launched in early September and we would welcome any suggestions or comments.

The School will be celebrating its 35<sup>th</sup> anniversary next year. As part of the celebrations we will be hosting an anniversary event following the conclusion of ITCH 2017. Watch your emails and the School's website for details. You can email <a href="mailto:itch@uvic.ca">itch@uvic.ca</a> to be put on our mailing list or follow us on twitter @ITCH2017

We will be hosting ITCH 2017 once again at the Inn at Laurel Point, February 16 – 19, 2017 and are extremely pleased with our three illustrious keynote speakers, the many varied workshops, and the full slate of papers to be presented over three days. Full details about the conference can be found at

#### http://www.uvic.ca/hsd/itch/.

The Call for Student Posters is on the final page of this newsletter, and I encourage all students to consider entering the contest. The three student winners will receive a complimentary full registration for the conference. Student registration is still only \$250 which includes a full day of workshops, three days of paper presentations, a choice of panels on Sunday and all breaks and lunches plus the welcome reception.

In addition, alumni, faculty and working professionals can submit posters about their work to ITCH 2017 (submissions for all posters are due Nov. 1). We hope you can come to ITCH 2017 as this is truly a unique opportunity to meet some of the best of the best in your chosen field.

Over the past term, the School has hosted a number of successful open houses with the purpose of exposing potential students to our educational programs (at both the undergraduate and graduates levels) and this has created a lot of interest. We plan to expand our recruitment efforts over the coming year to create greater exposure of our School, its programs and its contribution to health care in Canada and internationally.

Finally, please let others know about the great learning and degree opportunities (from Bachelor degrees to graduate degrees) available from the School and the excellent career opportunities that await them if they choose to study with us. Stay tuned for more information about upcoming open houses, alumni drives and other events aimed to increase awareness of our School and the importance of health informatics. Have a good rest of the fall term!

Andre Kushniruk, Director, School of Health Information Science andrek@uvic.ca

#### **ALUMNI**

#### **Mowafa Househ**

Mowafa Househ (PhD '09) was promoted in March to Associate Professor at King Saud Bin Abdulaziz University for Health Sciences. King Saud bin Abdulaziz University for Health Sciences is the first public university in the Kingdom of Saudi Arabia and the Middle East region specialized in health sciences. Its headquarters is in the main campus in Riyadh, the capital of Saudi Arabia.



Craig Kuziemsky and Jeanette Carlson

After re-connecting over a beer in Ottawa where they were both living, two former HINF graduates, Craig Kuziemsky (PhD '06) and Jeanette Carlson (BSc '04), were married on August 5, 2016 at the Inn at Laurel Point in Victoria. It was a beautiful sunny day that was shared with family and friends. After a short honeymoon driving from Seattle to Napa the newlyweds returned to their Ottawa home: Craig to his position as Associate Professor and University Research Chair in Healthcare Innovation and Jeanette to her position as a JD/MBA student, both at the University of Ottawa. Craig quips: "We finally found interoperable love," to which Jeanette rolls her eyes and ponders the intricacies of family law.

#### **New Research Chair**

The University of Ottawa has awarded Professor Craig Kuziemsky (PhD '06) a University Research Chair in Healthcare Innovation. Professor Kuziemsky's research program will centre on the creation of a data-driven framework supporting healthcare innovation driven by collaborative interprofessional teams.

Professor Kuziemsky explained that the challenges associated with rising healthcare costs, an aging population and the emergence of personalized medicine have created an unparalleled opportunity to create value for patients and society by focusing on the business of healthcare.

"The business of healthcare refers to how the system coordinates clinical services, tracks patient pathways and illnesses over time, and shares information and data across different providers," noted Professor Kuziemsky. "In Canada, we've made excellent strides at clinical innovation but we fall short in regards to business of healthcare innovation. This holds back transformative initiatives like collaborative care delivery, chronic disease management, and patient-centered care. We require innovative solutions to redefine the rules of how healthcare is managed to support these new paradigms."

The central theme of Kuziemsky's research is the move from individual workflows characterized by providercentered practices into a patientcentered collaborative teamwork. As increasing complexity in patient care demands the involvement of multiple providers across multiple clinical sites, a lack of coordination has been identified as a core issue hampering healthcare reform. "We need to innovate to break silos down and make collaborative teams of providers work successfully. The provision of safe and efficient patient-centered care requires individuals to step outside their silos and become integrated into collaborative teams."

Getting there will require an understanding of how providers and clinical processes interact with information, Professor Kuziemsky cautioned, highlighting the interdisciplinary character of his research. "Business of healthcare concerns relating to patient safety, collaborative care delivery, and the inclusion of best evidence into everyday practice are not technical issues per se. These problems cannot be solved just with technology; they call for change management and a multifaceted approach."

Over the past few years, the Telfer School has expanded its health systems management group and strengthened the involvement of primary and tertiary care organizations in research and teaching. Dr. Kuziemsky's vision combined with his health practitioner focus exemplifies this approach. His

appointment puts the Telfer School at the centre of a dynamic research ecosystem that will generate evidence-based healthcare innovation in support of the business of healthcare. "Sustainable healthcare in the 21st century isn't strictly a medicine challenge, but neither is it purely an analytics or information-science challenge," notes Kuziemsky. "The business of healthcare really requires that management insight: taking what we know from business, and using it in an innovative way to provide better health at a better value for Canadians."

--Published: June 17, 2016, Telfer School website.

## **Patrick Ewing**



Patrick Ewing

My HINF ('92) and Law ('98) degrees from UVic have been very valuable in my care, including helping me get my first permanent positions in the public service in 1998 -- as a research officer in BC's Tobacco Enforcement Program in 1998, and then in 2000 as the manager in charge of the program. I was

in the Premier's Office (Intergovernmental Relations Secretariat) supporting the work that led to the 2004 health accord and am currently the Director of Fiscal Arrangements, supporting the Finance Ministry's involvement in negotiating the next health accord. I am also the provincial lead on the federal/provincial/territorial committee that does technical work on Equalization - including work on how to capture provincial differences in expenditure need in relation to health care. So I've definitely moved away from the information technology side of HINF and strongly to the public policy side as an end-user of health information.

In my spare time, I have spent almost 25 years now in volunteer work supporting children's wellbeing (injury/disease prevention, health promotion, literacy, etc.). I am currently serving on two global organizations: Kiwanis International (a non-profit) and Kiwanis Youth Programs Inc. (a charity focusing on programs for K-12 students). I have also been very involved in a global program to eradicate maternal/neonatal tetanus. So my health information training has contributed to my volunteer activities as well as my career.

Patrick Ewing

## **Stacey Slager**



Stacey Slager

Stacey Slager (MSc, '09) has recently graduated with a second Master's degree in Biomedical Informatics from the University of Utah. Upon graduation, she accepted a position as IT Project Manager with the Department of Epidemiology at the University of Utah with a joint appointment to the Salt Lake City Veteran's Administration. At VA she is on a team called BASIC: Biosurveillance, Antibiotic Stewardship, and Infection Control. This team develops surveillance tools for national partners within US federal agencies, and Stacey is the usability lead on this team.

Stacey also continues to be involved in qualitative research and is currently studying Utah's multi drug resistant organism (MDRO) Collaborative as well as provider-provider communication between surgeons and primary care providers.

## Sonia Pagliaroli



Sonia Pagliaroli

Sonia Pagliaroli, a graduate of the Masters of Health Informatics program at University of Victoria has recently joined Cerner as the Healthcare Executive for Cerner Canada. Her role is to ensure Canadian needs are being met and to support clients as they embark on the journey of clinical transformation through the enablement of health information technology. To this role she brings experience as a registered nurse as well as: 19 years at NYGH leading the Clinical Informatics journey, MSc in Health Informatics from the University of Victoria, Director of Membership at Canadian Nursing Informatics Association (CNIA), co-author of the Canadian CPOE Implementation Guide, and participation in developing the RNAO eHealth Best Practice Guidelines.

Here are links to some of her work:

Referenced in- "Nurses drive 'closed loop medication administration' success" Canadian Healthcare Technology, July 07, 2016

http://www.canhealth.com/blog/ nurses-drive-nyghs-closed-loop-

#### medication-administrationsuccess/

NYGH Canadian CPOE Implementation Guide - ISBN: 978-0-9916952-1-8 https://www.cpoe-toolkit.ca/

"North York General Hospital Sets HIMSS Stage 7 Certification in Its Sights" Canadian Healthcare Technology, February, 2013

http://www.canhealth.com/em
ags/cht1301/

"Leverage Technology To Reduce Medication Errors And Improve Workflow" Canadian Healthcare Technology, November, 2011

http://www.healthcaretechnologyonline.com/doc.mvc/LeverageTechReduceMedErrorsRubbermaid-0001

#### **STUDENTS**

#### **Kudos to Volunteers**

Once again HINF students have shown they have what it takes.

Marbie Alura, from
International Conference
Services, was the Volunteer
Manager for the e-Health 2016
conference. Following the
conference she sent the following
message to the HINF office:

"I had the pleasure of meeting some of the students and graduates of your program who volunteered at the E-Health 2016 Conference that was taking place in Vancouver this week. I was the Volunteer Manager & Exhibit Manager for the conference, and I hope UVic is proud of how they represented your school and faculty – I've never experienced working with volunteers who

were as self-motivated as this group.

"I'm glad they found the conference valuable in making the connections to further their careers – I have no doubts that they will be successful in their endeavours. I hope I see more of them at the E-Health 2017 Conference in Toronto."

# GRADUATE STUDENTS



Mike Barron (Former COACH President & CEO), Gurprit K. Randhawa, and Elaine Huesing, Daughter of Steven Huesing and Executive Director at ITAC Health

# HINF Student wins National Health Informatics Award

Gurprit K. Randhawa, PhD
Candidate in Health Informatics,
was awarded the Steven Huesing
Scholarship and Award at the
Canadian Health Informatics
Awards (CHIA) Gala and eHealth
2016 Conference on June 7, 2016
in Vancouver. The Steven
Huesing Scholarship is a
prestigious national award given
annually to a Health Informatics
student reflecting "the spirit,
dedication and innovation that
the Founding President brought

to the field of health informatics (HI)."

In her award acceptance speech, Gurprit thanked all of the HINF faculty and staff who have helped guide and shape her learning and critical thinking in Health Informatics.

Gurprit is also the recipient of the 2010 COACH Founding President's Award for her "likelihood of making a major contribution to the advancement of information technology in the Canadian health care system."

At this year's eHealth
Conference, Gurprit's PhD
research poster was selected
amongst the "Top 10 e-Posters."
Following adjudication by a panel
of judges and voting by conference participants, her poster
and presentation also won the
"Best Overall e-Poster" Award.

Gurprit is a two-time alumna (BSc and MSc Health Information Science) of the School. Since 2012 she has been working as a Coordinator for the Regional Support Program for family physicians in the Department of Integrated Primary and Community Care at Island Health.

As of August 2016, Gurprit is the Manager of Clinical Improvements and Informatics (Computerized Provider Order Entry) at Island Health.

# FACULTY AND STAFF

#### Dr. Alex Kuo

Dr. Alex Kuo has been invited as an international renowned speaker at the Health 2.0 Asia 2016 International Summit on Smarter Healthcare & Great Health Industry, Nanjing, China, Nov. 9-10 (http://www.bitcongress.com/HE ALTH2016/).

The conference will bring together industry leaders, stakeholders and innovators from all over the world in an effort to support the rapidly-expanding healthcare market. The event is the platform to see cutting-edge innovation that's currently transforming health and health care, plus the best minds sharing their insights on compelling panel discussions, keynotes, breakout sessions, and workshops.

#### **Conference Highlights**

- High-level presentations covering unique and hot topics in the healthcare industry
- Project matchmaking fair on bio-medicine, health industry professionals
- Opportunity to join high-end experts' talk proposed by the nobel prize laureate
- Promotion activities to be provided for smart healthcare and the latest technology in the medical and health industry
- Paralleled with popular science fair

#### Dr. Elizabeth Borycki

Dr. Elizabeth Borycki was promoted to Full Professor in July of 2016 at the School of Health Information Science. She was also appointed to be the Director of the Social Dimensions of Health Program and Director of the Health and Society Program as of July 1, 2016 in the Office of Interdisciplinary Studies at the University of Victoria.

#### Dr. Andre Kushniruk

Dr. Andre Kushniruk, Professor and Director of the School of Health Information Science, was the opening keynote for the Medical Informatics Europe (MIE)/HEC 2016 - Health -Exploring Complexity: An **Interdisciplinary Systems** Approach Conference help in Munich, Germany from August 28th to September 2, 2016. The conference was well attended by over 800 registrants from across the European Union and internationally. Dr. Kushniruk's keynote was entitled: Usability and Healthcare: A Reality Check on the Usability and Safety of our Systems. The focus of the talk was on how usability issues are being reported worldwide and how work towards possible solutions that could be applied at multiple levels and globally is necessary in the current health care environment as many issues are similar throughout the world. In the work Dr. Kushniruk outlined how human factors and usability engineering methods in healthcare can be applied from across the systems development life cycle, from system procurement, to design and

implementation. However, the application of these methods has not been universal and vendor, governmental, regulatory and educational barriers exist to their widespread use. See http://hec2016.eu/andre-kushniruk.html for more details.

# Recent Faculty Publications

- 1: Martinez K, Borycki E, Courtney KL. Bring Your Own Device and Nurse Managers' Decision Making. Comput Inform Nurs. 2016 Sep 8. [Epub ahead of print] PubMed PMID: 27606788.
- 2: Borycki EM, Griffith J, Kushniruk AW. Integrating Electronic Health Record Competencies into Undergraduate Health Informatics Education. Stud Health Technol Inform. 2016;228:634-7. PubMed PMID: 27577461.
- 3: Shachak A, Elamrousy S, Borycki EM, Domb S, Kushniruk AW. Towards Educational Electronic Health Records (EHRs): A Design Process for Integrating EHRs, Simulation, and Video Tutorials. Stud Health Technol Inform. 2016;228:624-8. PubMed PMID: 27577459.
- 4: Borycki EM, Kushniruk AW, Turner P, Kaipio J, Cummings E. Educational Requirements for Mobile Applications in Nursing: Applying the User-Task-Context Matrix to Identify User Classes and Contexts of Use. Stud Health Technol Inform. 2016;225:339-43. PubMed PMID: 27332218.

- 5: Jensen S, Borycki EM. Clinical Simulation in the Development of eHealth: In-Situ and Laboratory Simulation. Stud Health Technol Inform. 2016;225:247-51. PubMed PMID: 27332200.
- 6: Kivekäs E, Enlund H, Borycki E, Saranto K. General practitioners' attitudes towards electronic prescribing and the use of the national prescription centre. J Eval Clin Pract. 2016 Oct;22(5):816-25. doi: 10.1111/jep.12548. Epub 2016 Apr 27. PubMed PMID: 27121026.
- 7: Kushniruk AW, Borycki EM, Solvoll T, Hullin C. Human Factors for Nursing: From In-Situ Testing to Mobile Usability Engineering. Stud Health Technol Inform. 2016;225:689-91. PubMed PMID: 27332306.
- 8: Kushniruk A, Nøhr C. Participatory Design, User Involvement and Health IT Evaluation. Stud Health Technol Inform. 2016;222:139-51. PubMed PMID: 27198099.
- 9: Nohr C, Wong MC, Turner P, Almond H, Parv L, Gilstad H, Koch S, Harðardóttir GA, Hyppönen H, Marcilly R, Sheik A, Day K, Kushniruk A. Citizens' Access to Their Digital Health Data in Eleven Countries A Comparative Study. Stud Health Technol Inform. 2016;228:685-9. PubMed PMID: 27577472.
- 10: Georgsson M, Kushniruk A. Mediating the Cognitive Walkthrough with Patient Groups to achieve Personalized Health in Chronic Disease Self-Management System Evaluation.

Stud Health Technol Inform. 2016;224:146-51. PubMed PMID: 27225570.

# MedInfo 2017 – HINF Faculty Co Scientific Program Committee Chair



Dr. Elizabeth Borycki, Professor in the School of Health Information Science has been appointed as the co-Scientific Program Committee Chair for the International Medical Informatics Association 16<sup>th</sup> World Congress on Medical and Health Informatics: Precision Healthcare through Informatics - MedInfo2017 - in Xiamen, China to be held August 21<sup>st</sup>-25<sup>th</sup>, 2017 (see

http://medinfo2017.medmeeting.org/en).

The deadline for submission for Full Papers, Student Papers, Vision Papers and Poster Submissions is Dec. 1, 2016.



# **MISCELLANEOUS**

#### **Research Seminars**

Links to past sessions, posters about the individual seminars, and links to join live to future seminars can all be found at <a href="http://www.uvic.ca/hsd/hinf/home/news/index.php">http://www.uvic.ca/hsd/hinf/home/news/index.php</a> Be sure to check the website frequently for updates on any future research seminars.

#### **Past Research Seminars**

July 26	Dr. Tracey O'Sullivan	"Social Participation as an Upstream Strategy in Disaster Risk Reduction"
September 28	Dr. Jeremy Wyatt	"The Past, Present & Future of Clinical Decision Support
October 5	Dr. John Chelsom	"Open Source Software in Health Informatics"
October 12	Liz Loewen	"Business Intelligence (BI) in the Health Care Sector

#### **Future Research Seminars**

November 2	Dr. Aziz Shiek	"Towards the Creation of Learning Health Systems"
November 16	Selena Davis	"Shared Decision Making Using Personal Health Record Technology: A Scoping Review at The Crossroads"

Please remember to send in news about yourself and colleagues to <a href="www.lwood@uvic.ca">lwood@uvic.ca</a> for the next newsletter!



#### BUILDING CAPACITY FOR HEALTH INFORMATICS IN THE FUTURE

February 16 – 19, 2017 Inn at Laurel Point, Victoria, BC, Canada

An international conference addressing *Information Technology and Communications in Health* (ITCH)

# CALL FOR STUDENT POSTERS

Information Technology and Communications in Health (ITCH) conferences have made it a tradition to provide students with the opportunity to present their work, to exchange ideas and research results with each other and with health care, informatics and computer professionals. Poster content can be based on course work, co-op experience, literature reviews or research.

Students registered full-time in related undergraduate or graduate programs are invited to take part in a student poster contest. An independent panel will judge the posters. First, second and third place winners will receive cash prizes (\$500, \$300 and \$200) and a complimentary FULL registration to the conference. Only the lead author on a team poster will receive the cash prize and complimentary registration.

#### Deadline for the Student Poster Contest: November 1, 2016.

Student submissions should address the role of information technology and communications in one of the following areas:

- Electronic health records
- Personal health records and patient portals
- Human factors and usability engineering
- National & international strategies and policy
- Nursing informatics
- Public health informatics
- Ethics, privacy and cyber security
- Mobile technologies and telehealth
- Clinical decision support systems
- Clinical guidelines and protocols

- System safety and quality assurance
- Human-computer interaction
- Evaluation studies
- E-learning, education and training
- Consumer informatics
- Healthcare modeling and simulation
- Big data and data mining
- Interoperability
- Social media in healthcare
- Standards, terminologies and ontologies

#### **ENTRY REQUIREMENTS and DEADLINES**

An abstract, no longer than 500 words, that describes each poster presentation must be submitted for review by **November 1, 2016.** Submit the abstract in a file that is Microsoft Word for Windows attached to an e-mail message addressed to <a href="itch@uvic.ca">itch@uvic.ca</a>. The body of the e-mail must contain the title of the abstract, and the name, institutional affiliation, e-mail address, and voice telephone number of the contact author. A *completed registration form and full payment must be received by November 10, 2016.* The abstracts will be included in the conference CD-Rom proceedings.

Student authors will be expected to construct posters for presentation during the ITCH conference and be available to address inquiries related to content immediately prior to the opening reception. A 30" x 40" backing board will be provided for displays. Further details will be provided upon receipt of the poster entry.



http://www.uvic.ca/hsd/itch/ 1982 – 2017 Celebrating 35 Years of Excellence



