# HINFormation

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

February 2003

#### MESSAGE FROM THE DIRECTOR

"March winds and April showers make way for May flowers...." The person who wrote that, sure didn't live in Victoria. What an incredibly mild and short winter we have had!

Spring is the time when we look ahead to new students, new faculty and new programs.

We are just reviewing applications for the new class of HINFers who will be joining us in the fall. We continue to attract highly qualified applicants with a keen interest in health informatics as a career. Dr *Terry Huston* has joined us this term from the School of Business to teach HINF 430

I'm very pleased to let you know that the MSc Informatics proposal was approved by Senate and is now posted on the website of the Ministry of Advanced Education to enable province wide consultation.

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During the next couple of months we will be having several visitors to the School. Chief Information Officers from Western Canada and Mariana Catz, Vice President of Infoway, are participating in the initial offering of Professor Protti's course on the Electronic Health Record. Steven Huesing, Editor of Healthcare Information Management and Communications in Canada, will be honoured for his twenty years of support for the School in March. Reinhold Haux, from the University of Medical Informatics of the Tyrol, will be here in April.

The next few months promise to be full of exciting changes as, along with the May flowers, the School continues to grow.

Patricia Coward

## ALUMNI

Right now I am working at the new (since October 2001) University for Health Informatics and Technology Tyrol in Innsbruck, Austria. The Rector is *Reinhold Haux*. The university was founded because the province of Tyrol saw the need for more experts in the area of health informatics. The main bulk of our research is together with the Innsbruck University Medical Center and the IT department of the TILAK (Tirolean Provincial Hospitals). You can find more information, if you are interested under www.tilak.at or www.umit.at.

My main area of research is the evaluation of health information systems. Presenting at European conferences and writing papers has kept me pretty busy in the last year!

Alongside that I also work on the IMIA Yearbook, the Methods Journal, I do some marketing for the university, help with the development of courses, and I've just hired our first two co-op students from HINF! Alongside work I am just finishing off my Masters degree (done in February) and after that I will be doing my Doctorate degree here too. Beside work and studying I find some time to explore the Alps. Sledding has recently become my new favourite sport (at least it's considered a sport here!).

Frieda Kaiser ('02)



Surrounded by friends and family, Denise Russell ('95) married Brent McMillan on Valentine's Day at McMorran's Beach House. It was an intimate ceremony followed by a reception and dinner. HINF was represented by matron of honour, Rosemary Gray ('95), Marty Mcleod ('96), Nicola Stewart ('96) and Leslie Wood. Denise and Brent will honeymoon in Hawaii on their way to Australia where they will be taking up residence. Congratulations!

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James Haggerstone ('98) has moved to a new and expanded role at the Prince George corporate offices of the Northern Health Authority.

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The travelling bug seems to have hit a lot of people this winter. Serena Birk ('02) is working at Teekay Shipping in Vancouver full-time and just got back from a 4 week trip to India along with short visits to Singapore and Japan. Dr. Pat Coward spent Christmas in Australia and Neelam Sandhu spent 28 days in India over the Christmas holidays.

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Toby Walrod ('97) had a whirlwind tour of Europe from December 31 to January 22. Before getting to his final destination, Malta, he visited London, Belfast, Berlin, Heidelberg and Greifswald. And although he suffered from all the drawbacks that come with travelling these days, suffering delays and lost luggage in almost every plane or train he took, he did some sightseeing with old-time friends and attended a friend's wedding in Belfast. In Malta, where he spent most of his trip, he enjoyed with amazement the heritage of the several people groups who colonized the island over the centuries through its architecture, its language, its cuisine and most of all, through its people. Typical of Toby, he managed to make it back to Canada in time to see the Super Bowl with friends in Victoria.

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Willie Thompson ('02) has taken a position with the VYSTA program of the Vancouver Island Health Authority. The VYSTA program is the part of the IT Department that focuses on putting the Electronic Health Record into Victoria's hospitals and clinics.

# **GRADUATE STUDENTS**

PhD candidate *Yuri Kagolovsky* was the first recipient of the new Michael Miller Scholarship. At the selection committee's request, Yuri's essay is printed below:

#### A POSSIBLE CONTRIBUTION OF THE FIELD OF HEALTH INFORMATICS TO SUICIDE PREVENTION IN PEOPLE WITH BIPOLAR (MANIC-DEPRESSIVE) DISORDER

Suicide has become an epidemic. In the United States it is one of the most common causes of death of people between the ages of 15 and 45 [1]. In 1997 1.7 percent of deaths in Canada were suicides. The same year, Canada's suicide rate was 12 per 100,000, which is higher than the death rate for motor vehicle crashes (10 per 100,000) and the homicide rate (2 per 100,000) [2].

There is always a tragedy in death, the tragedy of suicide is many-fold more. This is so, because the death from suicide involves violence and self-destruction. A suicide is the end of excruciating mental suffering that finally overweighs any hope for relief and return to normal life. Suicide produces a devastating impact on everyone who knew the person. Family members, relatives, friends, colleagues are left to live with feelings of loss, confusion, devastation, and guilt. Any attempts to understand the reasons behind the suicide usually only deepen these feelings.

In 1999 Dr. Kay Redfield Jamison published "Night Falls Fast:
Understanding Suicide," [1] which is considered a major book on suicide in the last quarter century. Dr. Jamison is a Professor of Psychiatry at the John Hopkins University School of Medicine. She is an internationally acknowledged expert on mood disorders, as well as a suicide survivor, who tried to kill herself when she was 28 years old. In this book, Jamison convincingly demonstrates a

connection between mental diseases and suicide: "The most common element in suicide is psychopathology, or mental disease... In all of the major investigations to date, 90 to 95 percent of people who committed suicide had a diagnosable psychiatric illness. High rates of psychopathology have also been found in those who make serious suicide attempts." [1, p.100].

Some of the following kinds of pathology are much more often associated with a risk of suicide: the mood disorders (depression and manic-depression), schizophrenia. borderline and antisocial personality disorders, alcoholism, and drug abuse. It has been demonstrated [1, p.100]. that people with mood disorders were more likely than any other group to attempt suicide: approximately 15-20 times more often than the expected rate in the population. In a case of previous suicide attempts, the risk is almost reaching 40 times more often than in the general population. In comparison, the risk of committing suicide by people with schizophrenia was 8 times, AIDS 6 times, and cancer 2 times higher than in general population [1, p.100].

Recognized suicides account for 9 to 15% of the causes of death in patients with major psychiatric disorders, while 25 to 50% of patients with a form of a mood disorder attempt suicide [3, 4]. Suicide rates average about 6% among people with milder forms of mood disturbance not requiring hospitalization and are more than 20times higher than general population base rates of 0.015% per year [5, 6]. Jamison states that "...nowhere is the danger of suicide more real than in the mood disorders: depression and manicdepression... In fact, some type of depression is almost ubiquitous in those who kill themselves." [1, p.103].

In the United States alone two million adults are affected by manic-depression. Bipolar (manic-depressive) disorder is a mental disease characterized by mood changes from manias (highs) as one extreme to depressions (lows) as another. This change in mood or "mood swing" can last for hours, days,

weeks or months. Bipolar disorder can be a serious and disabling condition. It affects an estimated 1 to 5 percent of adults in developed countries [3].

The exact causation of this disease is unknown. However, it tends to run in families and considered as having a genetic link. Currently there is no cure for bipolar disorder, but it can be managed. Treatment involves moodstabilizers, psychotherapy, and different supportive care (emotional, social, and spiritual). If left untreated, the condition usually worsens. The "swings" of bipolar disorder may last for weeks or months, causing great disturbances in the lives of the affected person, friends and family. One of such "swings" can result in suicide. However, there is good evidence that treatment with effective medications and regular appointments and counselling discussions about coping with the illness reduces the risk of suicide.

While contemplating suicide, the majority of manic-depressive patients present some clues to other people. If at least relatives, friends, and colleagues would know what to do in such situations, a tragic development of events could be prevented. Suicide prevention involves educating patients, and the people around them, about their condition, treatment options, new therapies, and where to look for help. However, such education is difficult.

One of the problems is related to a heavy negative stigma attached to the problem of mental illnesses, and suicide in our society. Jamison tells a story of Allison Kent, the founder of the Harvard-Radcliffe Mental Health Awareness and Advocacy Group (MHAAG) at Harvard University. The group sponsors lectures on mental health issues, work with psychiatry department, and runs a support group for students who suffer from mental disease. As a student at Harvard with mental disease. Allison was trying to find a support group addressing issues of mental health. Not only were there no such groups, but Allison also found that "...the stigma that mental illnesses have in society was just as prevalent

and pervasive... in Harvard." [1, p.263]

Because of this negative stigma, it is very important to ensure a possibility of confidentiality and anonymity for people searching for mental health information. Communication technologies such as the Internet and telephone have the capacity to create an environment that is more convenient, and one in which people can feel more secure in asking for information, spiritual and emotional support, as well as medical advice. Although the telephone has a longer history of use for emergency services, development of the Internet as a communication medium has resulted in one of the major changes in the way people look for information, establish contacts, exchange ideas and experiences, and support each other. Specialized mental health related Web sites, newsgroups, and mailing lists can serve as valuable tools for people who search for information and advice regarding their own condition, or the conditions of their relatives and friends.

Another problem of mental health education is related to finding reliable and up-to-date information. The Internet serves as a medium for organizing and presenting such information. The University's Web site could serve as an entry point for high quality mental health information for students, faculty, staff, and community members. Although both the University of Victoria Counselling Services and Health Services provide emotional support and medical help to people with different mental disorders (for example, depression), there is no information about suicide prevention on their Web sites.

I propose to create a Web page that will provide links to information related to mood disorders (depression and manic-depression) and suicide prevention. Such information will help patients; their family members and friends to better understand the nature of mood disorders, their treatment, and suicide prevention. People would be able to refer to reliable and up-to-date resources for information, as well as

emotional and spiritual support. I have conducted Web searches for such resources, and a series of interviews and meetings with representatives of different organizations and services on and outside the campus

This information, as well as additional resources, could be posted on the Web site of the University's Counselling Services. Another possibility would be to have some of the emergency numbers related to mental health and suicide prevention printed on fridge magnets that can be given to students, faculty and staff of the University. Gathering such information, evaluating its reliability, and presenting it to the community can be considered as a valuable contribution of the field of health informatics.

Yuri Kagolovsky

References

- 1. Jamison KR. Night Falls Fast: Understanding Suicide. 1st ed. New York: Vintage Books; 2000.
- 2. Suicide Information and Education Centre. Available at: http://www.suicideinfo.ca. Accessed: January 2, 2003.
- 3. Goodwin FK, Jamison KR. Manic-Depressive Illness. New York: Oxford University Press; 1990.
- 4. Jamison KR. Suicide and bipolar disorder. J Clin Psychiatry 2000;61(suppl 9):47-51.
- 5. Simpson SG, Jamison KR. The risk of suicide in patients with bipolar disorders. J Clin Psychiatry 1999;60(suppl 2):53-56 [see discussion pp.75-76, 113-116].
- 6. Tondo L, Baldessarini RJ. Suicide: an overview. Psychiatry Clinical Management Modules, vol. 3. Available at: http://www.medscape.com/Medscape/psychiatry/ClinicalMgmt/CM.v03/public/index-CM.v03.html. Accessed: January 2, 2003.

The results of this research are compiled into a document available from Yuri by emailing him at ykagolov@uvic.ca.

#### **STUDENTS**

Mike Cleghorn is in Europe for his second work term. He spent a few days in Amsterdam where he took a boat tour of the Amsterdam canals, visited the Van Gogh Museum, toured the Heineken Brewery and celebrated New Years Eve. He has now settled in to his home for the next four months in Munster, Germany, where he will be working at the Westfalian Wilheims University of Munster.

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Congratulations to *Falizah Remu*, the recipient of the James Coward Memorial Award for 2002.

#### **FACULTY & STAFF**

Taking a break from teaching HINF 340 this year, *Rob Tornack* spent the first two weeks of the year in Hong Kong where he spoke at the Sau Po Center on Ageing, University of Hong Kong. The seminar was a historical overview of the provincial home and community care system; business process model; the planning for and implementation of the international acclaimed assessment instruments in residential and community settings; application of data arising from these tools to support evidence based decision making at clinical and managerial levels; and the accreditation processes for residential settings. He will be returning to Hong Kong for the month of July to do more teaching.

#### New instructors

HINF 340 is being co-taught this year by alumna *Sylvia Robinson* ('87), Adjunct Professor *Richard Stanwick*, and *Victoria Barr* all from the Vancouver Island Health Authority.

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*Terry Huston* from the Faculty of Business is teaching the new HINF 430 course.

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fter 5 ½ years as Systems Coordinator, *Jim McDaniel* has left the School to work full-time for the Canadian Society for International Health. Although no longer on staff at the School he has not abandoned us completely. He continues to be an Adjunct Assistant Professor and is on the supervisory committee for several graduate students.

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With Jim's departure, *Ross Gibbs* is teaching the HINF 445 lab this spring. Ross is currently studying for his MSc in Computer Science when he is not chasing his chickens around the back yard.

#### **MISCELLANEOUS**

The following is a portion of an email I received recently from the CFO of a large Canadian health care region. I think it exemplifies the value that many employers place on our graduates. I have stripped the identifying names out of the message -- the sentiments expressed could be from any organization and about many of our alumni:

"Just thinking about you as in 10 days I will be in front of our Board to approve second year of three year IT clinical plan (xxx a grad from your program did most of the key writing). We finished yesterday our last payroll merger so business systems (yyy from your program is a lead player) are done except for accounts receivable and the clean up. We are moving reasonable well on clinical phase 1 and infrastructure improvements. Merged IT department and hired additional people. Hired Director of Strategic Information (zzz who is another former student of your program starts Feb 4/03) and have already hired 5

people reporting to that position. Interestingly I rejected additional IT projects because of risk of so much change even though users and funding available as believe we are hurtling along as fast as possible.

"Interesting juggling corporate information needs, clinical needs, transaction needs, and accountability needs. How does one judge success? By checking the rear-view mirror? Hopefully by hiring grad's from your program we can pull off this exceedingly tough assignment; one year down two to go!"

From the perspective of one who has taught each of the named alumni, I cannot help but feel proud of the progress they are making on their career paths and the contributions they are making to the Canadian health care system.

Denis Protti

#### Changes to calendar

Effective September 2003, the UVic calendar will state, "Enrollment in certain Health Information Science courses is limited. Enrollment in HINF 171, 180, 215 and 240 is on a first come, first served basis. For admission to other Health Information Science courses, a minimum grade of B- in the prerequisite course is required."

# HINF 430: IT Security and Privacy Course

A new course concerning information technology security and privacy is being offered this spring term for the first time in the School of Health Information Science. Thirty-four undergraduate students are presently enrolled in this course. The course provides a basic background for protecting the information assets of an organization and covers a variety of topics designed to assist in providing a secure environment for the information technology infrastructure. The topics emphasize the importance of an overall organizational strategy and

vision as well as policies and procedures to minimize the risk of compromising the integrity of the information assets contained in the organization, especially in light of the modern day electronic as well as legislative environment.

This course is being taught by *Terry Huston*, who is a full time faculty member in UVic's Faculty of Business. Dr. Huston was originally trained as an optometrist and has clinical, administrative, and hospitalbased experience. After completing his optometric training, he spent time with the United States Air Force and was stationed at air bases in California, Germany, and The Netherlands. While stationed with NATO forces in Europe he was introduced to the area of security as part of his military job requirement. After completing his stint in the military, he experienced various forms of private practice and administration, including working for other optometrists, managing his own solo private practice, and working at the level of a vice president in a regional optical corporation in the States. He then returned to graduate school to earn an MBA degree as well as a PhD degree in management information systems with a major in artificial intelligence and a minor in telecommunications. He has spent the last 10 years teaching full time at the university level and has been at the University of Victoria Faculty of Business for the past three and a half years. Terry has published several health care related papers, most recently covering the topics of telemedicine as well as security issues pertaining to the electronic health record in Communications of the ACM.

To facilitate learning and communication, the courseware Blackboard is being utilized in HINF 430. With Blackboard the students can observe, download, and/or print all documents relating to course material. They also electronically submit all written assignments via Blackboard's digital drop box. After screening by the instructor, all assignments may then be viewed by all students in the class to facilitate peer-to-peer learning.

Blackboard has a built-in discussion board, virtual chat areas, email and document transfer facilities to foster interaction within assigned groups, creating an additional environment for members of groups to communicate with each other without necessarily meeting face to face. Among other capabilities, students may also observe their current status in the course through the online digital gradebook.

# The Steven Huesing Scholarship

The Steven Huesing Scholarship was established in 1999 in recognition of Founding President Steven Huesing's contribution to COACH, Canada's Health Informatics Association. The Scholarship was developed to reflect the spirit, dedication and innovation that COACH's Founding President has brought to the field of healthcare informatics.

The scholarship is awarded annually at the National Conference and is not necessarily limited to one recipient per year.

The Scholarship consist of the following: a cash honorarium of \$500.00; complimentary student membership to COACH for one year; complimentary student registration to COACH's National Conference, e-Health 2003 in Toronto, ON (May 24 - 27); and, a certificate of the award, presented by the COACH President.

The deadline to apply is April 11, 2003. The application forms can be found at http://www.coachorg.com/

[This scholarship is not to be confused with the Coach Founding President's Award offered to HINF students only. For details about this and other awards available for HINF students consult the School's web site: http://hinf.uvic.ca/sinfo/awards.htm]

Research seminars are again underway every Friday afternoon. Details of upcoming presentations are on our web site under "What's New" and a current listing is on the back page of this newsletter. On March 7, 4<sup>th</sup> year student *Neelam Sandhu* will share her experiences of a month in India and give us a look at India's health care system compared to Canada's.

Gerry Bliss ('87) will be giving a special research seminar at noon on Wednesday, March 19 entitled, "Privacy Legislation Proliferation: Status, Outcome, Strategy".

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By now everyone should have had a chance to look at the new School web site. Any comments or suggestions are welcome. In particular, we encourage everyone to keep an eye on the "What's New" page. Not only are the weekly research seminars listed, but also any teaching opportunities will be listed there each term.

As HINFormation is now available on the web site, please let us know if you wish to continue receiving it in the mail. Your request to be taken off the HINFormation mailing list can be sent to lwood@uvic.ca

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Students are reminded that they have access to post messages to the list serv set up by the course union. You can subscribe to the HINFCU list the same as any course list serv. This is the appropriate list serv to use to seek roommates, sublet your apartment, set up parties, etc. Messages should be sent to hinfcu@uvvm.uvic.ca

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### **RESEARCH SEMINARS**

Date	Time	Place	Speaker	Title
Mar. 7	2:00 - 4:00	HSD A250	Neelam Sandhu, 4th Year HINF student	INDIA: A Personal Outlook on Medical Practices in the Third World
Mar. 14	2:00 - 4:00	HSD A250	Steven Huesing, Executive Director IMIA	Innovation: The Old, The Bold, and The Brave
Mar. 19	Noon - 2:00	CIT 116	Gerry Bliss, Privacy Consultant	Privacy Legislation Proliferation: Status, Outcome, Strategy
Mar. 21	2:00 - 4:00	HSD A250	Blair Marshall	Physician Attitudes Towards Primary Care Renewal Interview
Mar. 28	2:00 - 4:00	HSD A250	Jochen Moehr Professor	tba
Apr. 4	2:00 - 4:00	HSD A250	Elizabeth Tidman, MSc candidate	tba
Apr. 11			No research seminar	
Apr. 18			No research seminar	
Apr. 25	2:00 - 4:00	HSD A250	Craig Kuziemsky PhD candidate	tba
May 2	2:00 – 4:00	CIT 116	tba	
May 9	2:00 – 4:00	CIT 116	tba	
May 16	2:00 – 4:00	CIT 116	tba	
May 23	2:00 – 4:00	CIT 116	tba	
May 30	2:00 – 4:00	CIT 116	tba	