

Research News

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Research program celebrates 10 years

BY SUSAN PARKER

Communications Coordinator,
Faculty of Nursing

A homegrown research collaboration, the Deer Lodge Centre Interdisciplinary Summer Research Institute Program (ISRP) recently celebrated its tenth anniversary. It started as a pilot project in 1996, when four students from different faculties were brought together to assist Lorna Guse, Nursing, with three different research projects. Resources were limited and students worked on a part-time basis, but the experience proved to be an extremely positive one for Deer Lodge Centre, and the ISRP gained wide recognition.

Now the ISRP typically employs four or five full-time research assistants, each from a different discipline, from mid-May to mid-August. Research assistants are trained in the research process while conducting a group project.

"Many of the research assistants go on to complete graduate studies and work with older adults," Guse said. "They work in a variety of settings, such as personal care home and hospitals, and in various roles such as nurses, social workers, recreation therapists, occupational or physical therapists, and speech and language specialists."

The program provides an opportunity for students to develop research,



Photo by Susan Parker

From left, research assistants Claire Button and Janelle Curtis, Nursing associate professor Lorna Guse, and research assistants Lucy Trotta and Trish Farkas.

clinical and academic knowledge, and has proven to be an excellent training ground for budding researchers and clinicians. There is keen competition to participate in the ISRP, and the calibre of students participating is exceptional. Projects to date have investigated staff and resident perceptions of quality-of-life in long term-care, strength training in the frail elderly, falls in the long-term care setting, and the development and use of life albums in long-term care.

Each project builds on the knowledge and data collected the previous year.

Research assistants for the 2006 ISRP included: Claire Button, Faculty of Graduate Studies – Kinesiology; Janelle Curtis, Faculty of Human Ecology; Trish Farkas, Faculty of Nursing; and Lucy Trotta, Faculty of Graduate Studies – Social Work. This year, research assistants attended several conferences and events, and participated in seminars

conducted by community, clinician and academic leaders on topics such as spiritual care approach to personhood, labeling issues in Alzheimer's Disease, and excess disability in long-term care. The focus of this year's ISRP was to develop a better understanding of personhood with long-term residents. The creation of a life album is a way to present the lives of residents with the expectation of contributing to future research on preventing and managing aggressive behaviour.

"The ISRP has provided me many opportunities for academic and professional growth," said Trish Farkas. "The seminars were a great way to explore different concepts and theories regarding long-term care, and working with the residents offered immense practical application. I have greatly enjoyed this experience."

Guse said the ISRP is an excellent example of university and community partnership, and that Deer Lodge Centre staff members and residents have contributed greatly to the success and longevity of the program. She added that the ISRP would not have been possible without the strong support it has received from Deer Lodge Centre of the Winnipeg Regional Health Authority, the Deer Lodge Foundation, Human Resources Development Canada, and the Faculty of Nursing at the University of Manitoba.

In Brief

ORS new address

Effective July 31st, 2006 the Office of Research Services (ORS) has relocated to the 5th floor of Machray Hall. The phone and fax numbers for all ORS staff remain the same. The new address is:

Office of Research Services
540 Machray Hall
186 Dysart Road
R3T 2N2

NSERC Information Session

A Program Officer from the Natural Sciences and Engineering Research Council of Canada (NSERC) and a member of the Grant Selection Committee will be at the Fort Garry campus to provide information on the *Discovery Grant Program* and application procedures. Everyone is welcome. Administrative assistants who process NSERC applications are sure to find this session beneficial.

Tuesday, September 12
9 - 11:30 am
138 Agriculture Building

For more information, contact:
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Composing in the digital age

BY FRANK NOLAN

Research Promotion Officer

Virtually every piece of music recorded in the last 15 years has been touched by computer technology. But while computers have become essential production tools for today's musicians and producers, can they be used to compose the music itself?

"There is a long history of computer-aided composition," said Örjan Sandred, Music. "In the 1950s, people were interested in probability, which was in fashion in those days. Today, we can use computers to apply other mathematical techniques to find new ways to structure our compositions."

Earlier this summer, Sandred was awarded new funding from the Canada Foundation for Innovation (CFI) and the Manitoba Research and Innovation Fund (MRIF) to establish a state-of-the-art computer music research studio. Tentatively named "Studio Flat," the facility will be used to study ways in which computer technology can be applied to music composition. One of the program's goals will be the creation of new music compositions that will be performed at the university and elsewhere in the world, giving non-experts a chance to listen to the outcome.

Traditionally, Sandred said, some composers have resisted using anything



Photo by Frank Nolan

Örjan Sandred, Faculty of Music.

other than their own intuition for creating music.

"When I was a student, I had a teacher who said we should not even use a piano when composing music, just a pen and paper. But there is no right or wrong way to create art, and the idea of how a composer should work is changing. If you want to find something unexpected that is not already in your brain, then you need some other input, and a computer can be a good tool for doing that."

Sandred works with a branch of artificial intelligence called expert systems, in which the computer controls the evolution of specific musical parameters.

"You can give the computer rules

like, 'I want the melody to follow a certain pattern,' and 'I do not allow dissonances on downbeats'. It's very interesting, because rules interact, and changing one small element can have a great effect."

Rhythm is a major focus of Sandred's work, and he uses computer technology to try to understand how small changes in rhythm can affect a composition.

"Rhythm is more abstract because it involves time," he said. "You can talk about pitch outside of time, but not rhythm, and we can experience the same amount of time very differently, depending on whether we are very involved in what we're doing, whether we're bored, and so on."

Sandred is also interested in using interactive computer technology for music performance, including live concerts in which computers would play alongside musicians and respond to nuances in the musician's performance.

"Of course, there is an esthetic layer to music that is very human, very personal, and very hard to structure," he said. "But music depends on structure, and computers are great tools for helping us understand all of the different elements involved, and to get closer to the true essence of music."

Bringing Research To Life

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