

focus

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APRIL
2004



trent

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in the news



Peaceful Communities.ca at www.peacefulcommunities.ca profiled Trent's Cultural Outreach event March 13 and 14. For more than a decade, Cultural Outreach has showcased the vibrancy of the diverse culture that is part of the Trent University community. The event was organized by the Trent International Students Association.



Backbone magazine in its January/February 2004 issue featured

an article by renowned alumnus **Don Tapscott** and **David Ticoll**, co-authors of *The Naked Corporation: How the Age of Transparency Will Revolutionize Business*. "Powering Growth: The rise of corporate transparency" was the cover story in this business, technology and lifestyle magazine.

The Port Hope Evening Guide on March 1 profiled the work of **Dr. James Parker**, Trent University researcher and Canada Research Chair in Emotion and Health. The article, "Emotional intelligence study looks at ties to academic achievement," covered Prof. Parker's talk to Kawartha Pine Ridge District School Board trustees. He discussed his study *When Smart Students Fail: Emotional Intelligence and Academic Success*.

forecasting the future of Alzheimer's Disease

BETTER USE OF HEALTH CARE resources, identification of biomarkers, education for patients and their families, treatment trials, early intervention – these are among the benefits of learning more about individuals who are at risk of developing dementia or Alzheimer's disease, benefits Dr. Kevin Peters, of Trent University's Psychology Department, is working to realize.

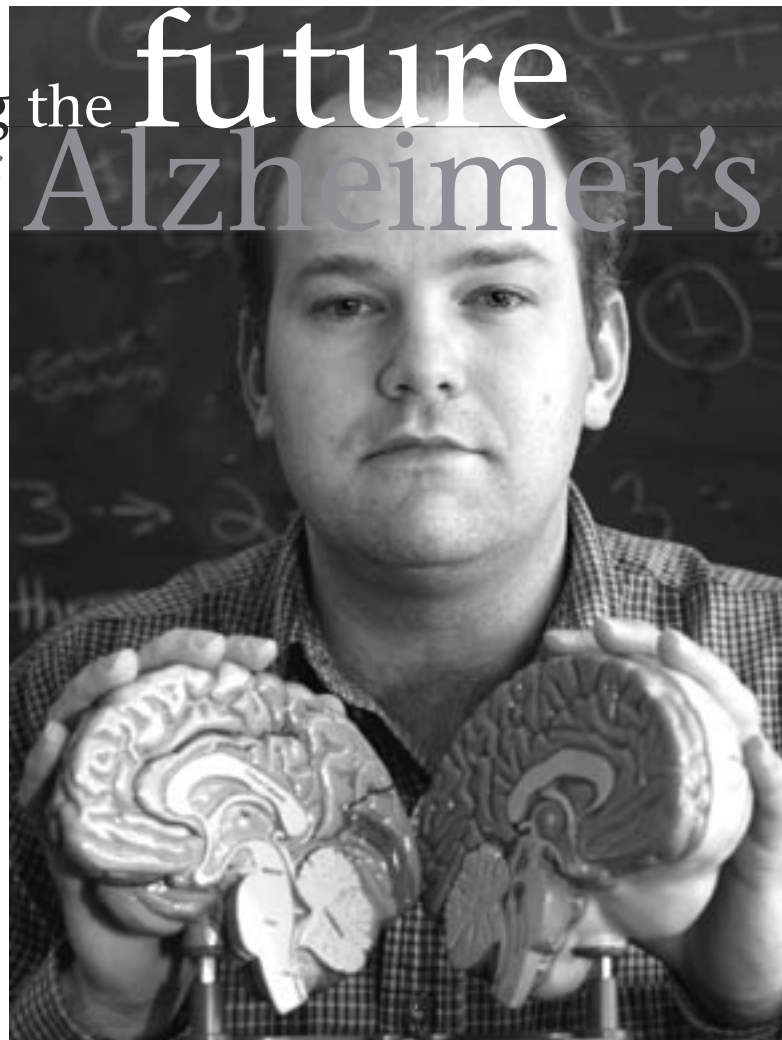
"The key is to identify people early," says Prof. Peters, citing the personal and societal costs of dementia and its related diseases.

In the 1991 *Canadian Study of Health and Aging*, 250,000 individuals over the age of 65 had dementia; and that number was expected to double by 2021 and triple by 2031.

In a separate study started more than four years ago with the University of British Columbia's Clinic for Alzheimer's Disease and Related Disorders, Prof. Peters was looking to learn more about a group of individuals considered to be at risk of developing dementia, of which the most common form is Alzheimer's disease. Within this group; labeled Cognitively-Impaired-Not-Demented (CIND) – some people got better, some people stayed the same and some people got worse; Prof. Peters wanted to know why.

As part of his Ph.D. dissertation, Prof. Peters studied two large samples of CIND individuals. Using a variety of statistical techniques, he identified the same five subgroups in each sample. Each of the subgroups was characterized by a distinct neuropsychological profile, each with predominant dysfunction:

- verbal
- verbal/visuospatial
- memory/verbal
- memory
- visuospatial



"Not much is being done on those who are going to get better, which is why this is important."

– Dr. Kevin Peters

Never before had these profiles been identified in CIND individuals, says Prof. Peters, noting that most researchers focus on predicting decline in individuals with mild memory impairment.

"Not much is being done on those who are going to get better, which is why this is important," he says, adding he was looking to learn more about the differences among individuals identified as CIND.

Prof. Peters examined the outcomes of CIND individuals within each subgroup over periods of two to five years. He learned that those CIND individuals with verbal dysfunction were the



most likely to get better. After a five-year period, close to 26 per cent of those individuals were diagnosed as being not cognitively impaired, while 50 per cent remained CIND and 24 per cent developed dementia.

Meanwhile, those CIND individuals with memory/verbal dysfunction and memory dysfunction were the most likely to have developed dementia after the same five-year period. Fifty-five per cent of those with memory/verbal dysfunction and 65 per cent of those with memory dysfunction had developed dementia.

The study, funded in part by doctoral training grants

from the Natural Sciences and Engineering Research Council of Canada (NSERC), the Alzheimer Society of Canada and Canadian Institutes of Health Research, is slated to be published in *The Clinical Neuropsychologist* and the *Journal of Clinical and Experimental Neuropsychology*.

These outcomes have important implications.

"This kind of information will allow us to offer treatments earlier on and to help patients and their families realize what kind of odds they're facing – 40 per cent of individuals identified as CIND get worse," says Prof. Peters. "In the immediate future, we won't be able to say 'yes you will or no you won't (get dementia),' unless we identify some sort of genetic or biological marker like in Huntington's Disease, but at least we can provide more detailed information."

Prof. Peters also sees the outcomes of the study as being useful in resource allocation and suggests that due to lengthy waiting lists, those at greatest risk of developing dementia be monitored more closely and more frequently than those in the lower risk sub-groups. As well, clinical trials could be undertaken to determine whether different treatments are more effective in some subgroups than in others.

The next step in the study will see Prof. Peters further examine why those individuals with verbal dysfunction are most likely to get better and why those with memory dysfunction are most likely to be later diagnosed with dementia. Prof. Peters will be working with Trent's Dr. Gordon Winocur and his colleagues at the Rotman Research Institute located at the Baycrest Centre for Geriatric Care in Toronto to conduct this next set of studies and hopes to eventually include patients from Peterborough. 🍀

studying 'sneaky' little fish

THERE MAY BE ADVANTAGES for little fish in big ponds – contrary to popular belief.

According to a recent study by Trent University's Dr. Gary Burness, the race goes to the swiftest, at least if you're a sperm. The study, which measured sperm swimming speeds in bluegill sunfish, has been pre-published on-line in the journal *Behavioral Ecology and Sociobiology*.

Prof. Burness chose to study the bluegill because of its bizarre lifestyle. Smaller male bluegill – called "sneakers" – steal fertilizations by cuckolding their larger male counterparts. How the sneakers actually managed to fertilize more eggs was unknown. But by applying techniques developed by hospitals to measure human sperm quality, Prof. Burness and a team of researchers from Queen's University, showed that sneakers compensate for their diminutive size by producing faster swimming sperm. However, these sperm don't swim for as long – they live fast and die young, he says.

"When I was young, and catching these things on my fishing line, I never realized that these tiny fish were actually adults," says Prof. Burness, whose research is at the interface of physiology, ecology and evolutionary biology.

The study's results signify the first time within

a species that two different morphs have been identified as producing sperm with different swimming speeds. But there's no reason to think this isn't the case in other externally fertilizing fish species.

In terms of evolutionary biology, Prof. Burness's specialty, he says it's about survival. The optimal strategy for the sneaker is to stay small, and put energy into sperm production rather than into growth. Prof. Burness started on the project two years ago as an NSERC post-doctoral fellow at Queen's, and having joined Trent's Department of Biology in July 2004, hopes to continue these studies in collaboration with the Ministry of Natural Resources.

Aside from this study, Prof. Burness's primary research is on energy expenditure in animals, particularly birds. This summer, Prof. Burness and his student will study whether tree swallows nesting in areas where there are low amounts of food show higher levels of stress, and overall poorer health, than those birds nesting in food-rich areas. He hopes their findings will be of use to other researchers trying to predict the impact of human disturbance on a bird's health.



Dr. Gary Burness of Trent's Department of Biology



In addition to his work on tree swallows, Prof. Burness is interested in understanding why different animal species have evolved to spend energy at very different rates. He points out that while some species appear frugal in their use of energy, other species live lifestyles that appear energetically extravagant.

To understand how such differences between species may have evolved, Prof. Burness plans to study zebra finches, a small bird available in pet stores. By following the lead of farmers, who have selectively bred chickens for egg laying ability, Prof. Burness plans to selectively breed finches for differences in metabolism and energy use. Over a few years of selective breeding, he hopes to generate a strain of fast-

metabolism zebra finches. Such a strain of birds will allow his students to begin to unravel why species differ in energy use.

He acknowledges that selective breeding will not create hummingbirds from finches, but it will provide clues as to how a fast-metabolism species could have evolved from a slower-metabolism ancestor. "That," Prof. Burness says, "would be very exciting." 🌱

athletic achievements

TRENT UNIVERSITY'S DEPARTMENT of Athletics and Recreation celebrated athletic achievements and honoured its top athletes on March 25 at the 35th annual Athletic Awards Ceremony.

Ten students were honoured with the University Athletic Award, presented to third- and fourth-year students who have demonstrated a significant contribution to the varsity and campus recreation programs, while another 24 varsity athletes were honoured for outstanding commitment and dedication to their respective sports.

Stephen Dunbar and Julianna Stonehouse were awarded the Arthur Cup, the University's most prestigious award for graduates who have demonstrated outstanding contribution, sportsmanship, participation, and leadership in athletic programs.

Mr. Dunbar, who hails



Arthur Cup winners Stephen Dunbar and Julianna Stonehouse with Athletic Director Bill Byrick.

from Yellowknife, Northwest Territories, has been an active athlete, coach and leader in the University's varsity and campus recreation programs. During his first two years at Trent, he competed with

and coached the Nordic Skiing team in Ontario University Athletic (OUA) competitions, and this past year, formed and coached the junior varsity team to train new competitive skiers.

He has worked tirelessly as president of the Nordic Ski Club to run fundraising events, introductory clinics, and campus recreation events; he is regarded by his peers as an enthusiastic and dedicated athlete and leader. Mr. Dunbar also competed on the varsity rowing team for two years, as a rower, cox and coach. He will graduate this spring with an honours degree in politics and history.

Ms. Stonehouse, who holds a BSc (Biology) and will graduate this spring with a BA (English) has become a well-recognized ambassador for rowing during her years at the University. As a contender at provincial and national competitions, she has earned numerous medals, and holds the distinction of being the most decorated

female rower to represent the University. She competed in the Canada Games and rowed in the Team Canada trials in 2002. Ms. Stonehouse is well respected by her peers as an individual who is truly dedicated to the sport of rowing, acting as the University Rowing Club president and convening the popular intramural rowing program to introduce her fellow students to the sport. Ms. Stonehouse, who hails from Dartmouth, Nova Scotia, is regarded as a leader and an athlete who sets a high standard of athleticism and dedication.

Rower Peter van Rooijen, skier and cross-country runner Stephen Hart, and swimmer Alex Babaris each received five honours during the ceremony. 🌱

A FOURTH-YEAR BUSINESS administration student worked to implement a sexual harassment policy to protect women in a Kenyan workplace, while a group of four others collected medical and school supplies to send to the impoverished villages of Honduras. Another group of two students worked to send close to 200 books to Pakistan. Another three students raised funds for an orphanage in Zimbabwe, while yet another pair purchased uniforms to send to a school for street children in Nicaragua.

These initiatives don't sound like the results of a typical business administration assignment... simply because they're not. These are the results of a Workplace Diversity course assignment that requires the use of skills the students have developed throughout the four-year program, as well as a social conscience. This is the second year Dr. Maeve Quaid has assigned the International Consulting Project and Documentary and for the second time, the response has been resoundingly positive.

"They love it, they say it's very meaningful. They're involving their families, their friends, their community, and their neighbours in global healing," she says. "It's not a traditional business school activity, but it encompasses traditional skills. It's typical of the Trent University business administration program to have such a creative, socially responsible project."

The students were assigned to open a business in a non-

an assignment with a conscience

English speaking country or conduct a humanitarian aid project for a developing country. They were to search out a non-profit organization that was of interest to them and find a way to provide assistance that would be of value to that organization. The next step was to obtain those items and shepherd their delivery. The project was to be presented in the form of a television documentary.

"In creating the documentary, the students not only have the opportunity to learn themselves, but to share what they've learned," says Prof. Quaid, adding the audiovisual skills they acquire will be a bonus to them in the working world.

International student Burton Maina Muhia came up with a policy on the promotion of women's rights in the workplace he hoped to have implemented in two workplaces in his country – Kenya.

"To me, it's (sexual harassment in the workplace) a big issue that has a simple solution," he said.

Mr. Maina's documentary – *A Step Towards Empowering Kenyan Women* – featured interviews with two Kenyan women experiencing sexual harassment at work. Without the support of their employers, their families, or the police, they expressed feelings of helplessness. One

of the two companies Mr. Maina approached fully accepted the policy initiative, while a second has agreed to follow up with such an initiative in the future.

Meanwhile Denise Wedderburn created a documentary based on the global implications of the implementation of Trent University's anti-sweatshop policy that guides the purchase of apparel. She is the University's fair trade

outreach co-ordinator, and decided to document some of her work as part of her project. In her role as co-ordinator, she's currently conducting policy implementation training. Ms. Wedderburn taped the first of a series of training sessions with Trent's Human Resources Society to include as part of her documentary.

The purpose of the anti-sweatshop policy is to ensure that Trent's departments,

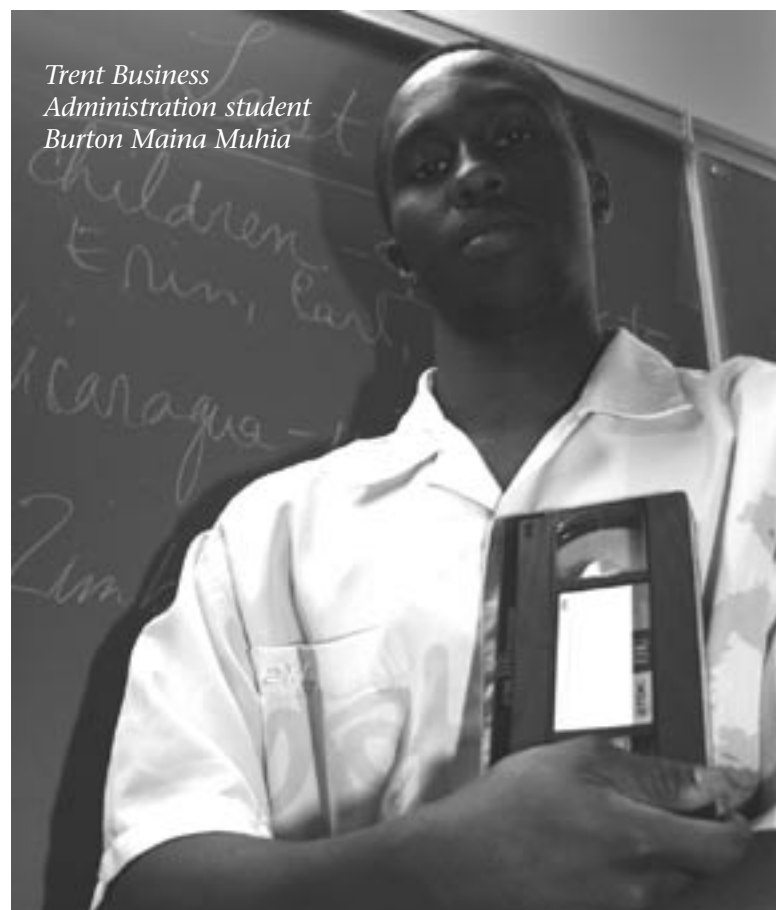
student organizations and suppliers are socially responsible with their practices and to ensure that apparel manufactured for the University is made under humane working conditions.

"You can make a difference and affect lives around the world by making a small difference here at Trent," she says.

Ms. Wedderburn's documentary showed students that sweatshops are operating across Canada and in their own backyards.

Another group of students – Shingirai Kanhukamwe, Julian Meitanis and Oliver Omole – started a silk-screened T-shirt business and organized a charity dance to raise funds for the Matthew Rusike Children's Home in Zimbabwe, where one in eight children is orphaned. After learning how to silkscreen, they created the T-shirts with anti-sweatshop and fair trade messages and sold them at a booth in the University's Otonabee College. The students raised more than \$1,000 and in doing so, used their accounting, advertising, finance, and human resources skills. And in finding an organization to support, they learned about working with diversity, says Prof. Quaid.

"Through this documentary project, children and workers in developing countries are benefiting from the combined expertise of students from the Trent Business Administration program. Thanks to their hands-on involvement, many of the students have said that these causes have now become a part of their life." 🌱



Trent Business Administration student Burton Maina Muhia



Trent Featured on Rick Mercer's Monday Report

Footage of Rick Mercer's foray into fencing at Trent University launched the season finale of his acclaimed *Monday Report* on March 29. One week to the day after his visit to the Symons Campus, much of the footage from the fencing practice he attended and from his conversations with students aired across the country on CBC.

During his visit, Mr. Mercer also asked the students what he should see and do, in Peterborough on a Monday night. The students, having adopted a little of Mr. Mercer's wit, quipped that they would be staying in to watch *Monday Report*.

"Oh yes, the streets will be bare," Mr. Mercer joked.

He is best known as the star of *This Hour Has 22 Minutes*, *Made in Canada*, and *Talking to Americans*. 🌱

UPCOMING EVENTS • UPCOMING EVENTS • UPCOMING EVENTS

April 14 The Stratford and Shaw Lecture Series – John McIntyre on "The Best of the Rest," 12:15–1 p.m., Peterborough Public Library. This lecture is sponsored by the Department of English, Trill College and the Peterborough Public Library.

April 30 Open Session – Board of Governors Meeting, 10 a.m., A.J.M. Smith Meeting Room, ground floor, Bata Library. Please visit www.trentu.ca/secretariat/bogsched.html

May 12-15 Gilles Deleuze: Experimenting with Intensities – for more information see Grapevine News.

May 20 An Evening with Andy Barrie – Cash bar 6:30 pm, dinner at 7:15 pm, Scott House, Catharine Parr Trill College. Andy Barrie, host of *Metro Morning* on CBC Radio One in Toronto, will be the guest speaker at the annual Friends of the Bata Library Spring Fundraising Dinner. The title of his talk is "Roughing it in the [Media] Bush: an Immigrant's Tale of Becoming a Canadian Broadcaster." For tickets call Janice Millard (705-748-1011 ext. 1326) or Michael Peterman (705-748-1011 ext. 1737). Tickets are \$50 (includes tax receipt).

May 27, 28 Convocation – Please visit www.trentu.ca/secretariat/convo.html

2004 Statutory Holidays

Victoria Day Mon. May 24
Canada Day Thurs. July 1
Civic Holiday Mon. Aug. 2
Labour Day Mon. Sept. 6
Thanksgiving Mon. Oct. 11

Christmas Break

The University will be closed from Thursday, December 23, 2004, and reopen on Tuesday, January 4, 2005. Classes will resume on Monday, January 10, 2005.



VOL. 2, ISSUE 7 *Focus Trent* is published by the Communications Office at Trent University on the second Thursday of each month, from September through June. E-mail: communications@trentu.ca. *Focus Trent* copy submissions are due at the end of this month for placement in the next issue. Distributed in accordance with Canada Post Mail Sales Agreement #40064326.

DNA Cluster Headquarters Moves

"The next step after a dream is implementation," said Dr. Bradley White, to a group of stakeholders who gathered to celebrate the opening of the Peterborough DNA Cluster transitional offices at Trent University on March 16.

The ribbon-cutting ceremony provided an opportunity for DNA Cluster partners to come together in this next step. Previously located at the offices of the Greater Peterborough Area Economic Development Corporation (GPAEDC), the DNA Cluster headquarters is now housed in a portable building on the East Bank of Trent's Symons Campus.

The DNA Cluster is a strategic alliance between private and public sector partners to develop a regional centre of excellence in DNA and forensic science. This facility will become the centre of the DNA Cluster. Dr. White is the principal investigator for the project and Canada Research Chair in Conservation Genetics and Biodiversity at Trent.

Order of Ontario for Prof. Mackay



On the heels of this appointment to the Order of Canada in January 2004, Trent University's Dr. Donald Mackay, professor emeritus, has received Ontario's highest honour for lifetime achievement in his appointment to The Order of Ontario by the Ontario Ministry of Citizenship and Immigration.

The Order of Ontario recognizes and honours those who have enriched the lives of others by attaining the highest standards of excellence and achievement in their respective fields. This year's honourees will bring to 373, the total number of recipients since 1987, when the honour was first presented. Prof. Mackay was invested into The Order of Ontario by Lieutenant-

Governor James K. Bartleman at a Queen's Park ceremony on March 31, 2004.

Prof. Mackay is one of Canada's leading scientists and has greatly contributed to the quality and our stewardship of the global environment. Recognized internationally for his models describing the behaviour and effects of oil spills, he later developed an innovative system to predict the fate and effects of chemicals in the environment. The 'Mackay models,' as they are known, are used to help make regulatory and environmental policy around the world.

After 28 years as a member of the faculty of Chemical Engineering and Applied Chemistry at the University of Toronto, Prof. Mackay came to Trent in 1995. Prof. Mackay retired as a full-time faculty member in Environmental and Resource Studies and Chemistry in July 2002, but continues his research and the supervision of three graduate students, as director of the CEMC.

University Affairs Covers Prof. Poole

The April 2004 edition of *University Affairs*, featuring Trent University's Professor David Poole, has reached faculty, staff and students at 93 Canadian universities from coast to coast.

Prof. Poole, Associate Dean of Teaching and Learning and author of the textbook *Linear Algebra: A Modern Introduction*, appears on the cover of the magazine and is quoted in the article "Foot soldiers of the scholarly press." This cover story features the experiences of professors who have written textbooks.



University Affairs is published 10 times a year by the Association of Universities and Colleges of Canada and takes readers inside Canada's universities. Close to 24,500 subscribers nationwide will have the opportunity to read about Prof. Poole and how he came to write *Linear Algebra*.

"In my case, writing a

textbook was almost an accident," says Prof. Poole, as quoted in the magazine. "I was frustrated that I couldn't find a textbook that fit the course I was teaching."

Prof. Conolly works internationally

Trent University Prof. Leonard Conolly, former President and Shaw Scholar, has recently been appointed to three positions that broaden the boundaries of his studies internationally.



Prof. Conolly has been appointed to the advisory council of an international society established to support the study of Irish playwright George Bernard Shaw. Based at the University of South Florida, this new society is intended to broaden international co-operation among Shaw societies around the world.

Prof. Conolly has also been appointed to the advisory board on the Internet Shakespeare Editions (ISE) – a project based at the University of Victoria. The project, international in scope and supported by Social Sciences and Humanities Research Council of Canada (SSHRC) funding, will see a collection of scholarly Shakespearean texts and background material made available on the Internet.

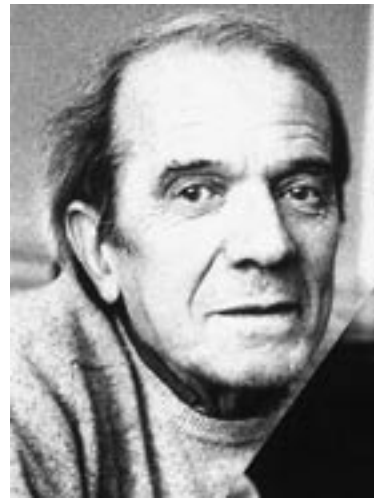
A third appointment sees Prof. Conolly as the consultant editor to a project that will compile Shaw manuscript collections into microfilm editions that will be available to major libraries.

Prof. Conolly is a member of the Academy of the Shaw Festival and has been reading, seeing, and studying Shaw's work for 45 years. These appointments link directly to his research.

Deleuze Conference at Trent: May 12-15

The Department of Philosophy at Trent University is holding an international conference between May 12 and 15, 2004 on "Gilles Deleuze: Experimenting with Intensities: Science, Philosophy, Politics, the Arts."

• May 12: Intensive Science:



philosophy of science faced with dynamic processes, morphogeneses, and multiple attractors.

• May 13: Virtual Philosophy: virtuality, as a modal operator, and 'flat ontologies'.

• May 14: Politics of Becoming: publics, counter-publics and the politics of becoming.

• May 15: Arts and Affect: aesthetics of the affect.

The speakers include Manola Antonioli, Veronique Bergen, Ronald Bogue, Rosi Braidotti, Ian Buchanan, Claire Colebrook, William Connolly, Manuel DeLanda, Stefan Leclercq, Brian Massumi, Philippe Mengue, Dorothea Olkowski, Paul Patton, and Arnaud Villani.

For further information, please visit www.trentu.ca/philosophy/intensities or contact Prof. Constantin V. Boundas (cboundas@trentu.ca or cboundas@cogeco.ca)

New Sleep Lab for Trent

Trent University's renowned sleep researcher, Dr. Carlyle Smith, has been awarded a large grant from the Canada Foundation for Innovation (CFI) Innovation Fund for the construction of a new sleep lab and the purchase of state-of-the-art recording equipment as part of the University of Toronto's Centre for Biological Timing and Cognition.

The new lab and equipment will be used to pursue in depth research on all aspects of sleep. Dr. Smith is one of eight researchers from four institutions affiliated with the Centre for Biological Timing and Cognition, which received a total of \$10,056,201 from CFI's Innovation Fund.

Trent University's new 900-square-foot sleep lab will feature three bedrooms, a control room, washroom, task acquisition room, and evoked responses recording room. It will be constructed in place of the current smaller lab in the Science Complex on the East Bank of the Symons

Campus. Studies of sleep and cognition will also be done at a second, smaller recording location at the new long term care facility, St. Joseph's at Fleming.

The Canada Foundation for Innovation is an independent corporation established by the Government of Canada in 1997, with a goal to strengthen the capability of Canadian universities, colleges, research hospitals, and other not-for-profit institutions to carry out world-class research and technology development.

Investigating Sleep, Memory & Aging

Meanwhile, Dr. Smith, has been awarded \$48,701 from the Canadian Institutes for Health Research (CIHR) to investigate the relationship between sleep, memory and aging. As primary investigator, he shares the award with Dr. Kevin Peters, a new faculty member with the Department of Psychology.

The new funding will be used to hone in on the link between memory and sleep.



"One of the things that is seen in older individuals is that the number of eye movements goes down," said Prof. Smith. "We know that humans need lots of eye movements to have good memory and that, for motor-type memory, we need the 'spindles' we see in Stage Two sleep. These drop off in some individuals as they get older. We're interested in comparing young healthy adults, like students, with older individuals who show age related decline in memory."

CIHR is Canada's premier federal agency for health research. Its objective is to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened health care system. ☘