# ---(in)edition VOLUME 19 NUMBER 8 APRIL 9, 2002

# Canada Research Chair — Tardif:

Seeing the Forest for the Trees

by Annette Elvers, (in)edition Editor

Jacques Tardif is passionate about trees.

"They call me the Tree Hugger," says Tardif, an Environmental Studies professor at UWinnipeg. As a dendrochronologist, Tardif takes samples from jack pines, white spruce, and white birch. Consumed by his research, he talks to the trees as he works. "I always say it's okay until the trees start talking back," Tardif jokes.

Rummaging in an office filled with maps, books, and an assortment of yellow MacDonald's straws filled with tree cores, Tardif pulls out a tree section known as a "cookie." It's bigger than a dinner plate but not nearly as round; the cookie has large indentations in its sides. "See these scars," he says, holding out the cookie, pointing to ridges where ice pushed into the trunk. "This damage occurred in 1757."

Not only can he pinpoint the winter when the ice crushed into the side of that damaged tree, Tardif can tell you if the tree ever suffered a fire. Changes in the width of the rings speak to him of drought conditions or years of plentiful rain. Looking at a sample can even detail springs of ravaging spruce budworms.

"The trees were there – they stand there, and they see these changes coming and going," says Tardif. "They can tell us what happened 250 years ago." The trick is knowing how to ask.

It's this knack of asking the right questions and methodically looking for the answers that has landed Tardif a prestigious Canada Research Chair, specifically, the "Canada Chair in Tree Ring Research."

The Canada Research Chair Program was established by the federal government in 2000 to identify innovative researchers across the country. The program provides funding so that researchers have the support and equipment they need to continue their research. So far, about 400 new Chairs have been named in universities throughout Canada. Tardif is UWinnipeg's first.

"As Chair I have to develop a five-year research program," he says. "The objective is to take the information we have about Manitoba and grid the province." Tardif points out that Manitoba is an especially interesting place to pursue his particular brand of research because

the province contains several marked changes in climate and geography. He embarks on a detailed discussion of Manitoba's ecosystems, and then suddenly stops. "Now I'm sounding like a teacher!" he laughs.

Despite the self-deprecating remark, Tardif's lectures are anything but dry. According to fourth-year student Alanna Sutton, Tardif's classes are not only engaging, but they're also geared towards making classwork meaningful for each individual. "He knows all of us and he tries to make things relevant," says Sutton. "For example, I've worked with him doing research on Black Island, so when he explains something to me he'll use examples from Black Island. That makes things so much easier to understand."



JACQUES TARDIF: NEWLY APPOINTED CANADA RESEARCH CHAIR

Jacques Tardif > continued from page 1



Tree cookie

As excited as he is about his teaching and research in Environmental Studies, you would never know that Tardif almost chose a different path.

His background includes psychology, political science, and creative writing – he pursued studies in all these areas with determination and passion. But despite a scholarship offer for a master's degree in Political Science and a poetry professor urging

him to commit to the writing life, he took another route. Tardif headed off into the forests of Northern Quebec to study biology, and he never looked back.

"Why trees? I don't know," says Tardif. "But my father was a scaleman, and he worked in the forest most of his life. A few times I went with him when I was young. I still remember the smell of the wood."

Sutton says whatever led Tardif to Environmental Studies, she's lucky to have him as a professor. Although she's still an undergraduate, Tardif encouraged Sutton to send one of her papers to the Canadian Journal of Botany. Not only was it accepted, but Tardif helped her to work through the process of making her work ready for publication. "I can't think of any other school where I could be an undergrad and send in my work to a national journal. Working with [Tardif] has opened up a lot of doors for me.

"You'd think that someone who has accomplished so much doesn't have to bother with the 'little' people, but he's not like that. It's really nice."

# A Sign of Conflict by Annette Elvers, (in)edition Editor

"Morning sickness is commonly believed to be a behaviour designed to protect mothers and embryos from bad food and parasites."

Up to 70 per cent of all expectant mothers experience some form of pregnancy sickness: tiredness, sensitivity to strong foods or odours, nausea, and vomiting.

The symptoms are so well known that even a well-timed case of the stomach flu can make a sexually active woman start to wonder if she's pregnant.

But as easy as it is to describe the symptoms of pregnancy sickness (also known as morning sickness), it's difficult to explain why it happens.

"Morning sickness is commonly believed to be a behaviour designed to protect mothers and embryos from bad food and parasites," says UWinnipeg biology professor Scott Forbes. This is why strong food smells can make a pregnant woman feel queasy – many expectant mothers become hypersensitive to odours associated with spoiled food. "Pregnant women tend to prefer foods that are more bland," says Forbes, adding that food with a plain taste and texture is more likely to be safe.

But Forbes says this widely held explanation for pregnancy sickness is only one piece of the puzzle. Forbes has just published an article for the *TRENDS in Ecology and Evolution* that suggests that the illness most women experience in their first trimester is actually due to a genetic conflict between mother and unborn child.

"Pregnancy is a two-step process: fertilization occurs, then the embryo has to implant," explains Forbes. Then, both mother and child have to secrete hormones to maintain the pregnancy. It's especially critical for the embryo to do its share of hormone production, because if it doesn't (which Forbes says happens in nearly three-quarters of all pregnancies) it gets sloughed off and the pregnancy ends.

In most mammals, pregnancy is controlled by the mother's body—she might stop producing the hormones that maintain pregnancy because of poor physical health or extreme conditions such as famine. "This isn't in the embryo's best interests," says Forbes, adding that an embryo's mission is to survive at any cost. "Sometime in the distant past, embryos learned to produce [the right hormones] and avoid being aborted." This shifted control over pregnancy to the embryo, and to all those that followed. "This kind of gene would spread like wildfire," said Forbes.

In turn, mothers responded by making their endocrine systems less sensitive to the relevant hormones. Control goes back to Mom? Not exactly. Embryos countered by increasing hormone production. "It stops when the costs get too high," says Forbes. "They've gone right up to the edge of the cliff, but not over. Any further and it would hurt either the mother or the child." What can be done about the unpleasant results of all this hormonal conflict? On this at least, experts agree: expectant moms need to wait it out.

For the full details of Forbes' findings, see *TRENDS in Ecology and Evolution*, Vol.17 No. 3, March 2002.



ON MARCH 26, THE CHANCELLOR'S FORUM FEATURED UWINNIPEG SPORT PSYCHOLOGIST CAL BOTTERIL. BOTTERIL IS THE FATHER OF JENNIFER BOTTERIL OF CANADA'S WOMEN'S HOCKEY TEAM, WHICH WON A GOLD MEDAL IN THE 2002 WINTER OLYMPICS.



ON MARCH 15, MAYOR GLEN MURRAY JOINED US FOR IWAM'S (IMMIGRANT WOMEN'S ASSOCIATION OF MANITOBA) EVENT: CHALLENGES AND CHOICES, A FORUM FOR IMMIGRANT YOUTH AT THE UNIVERSITY OF WINNIPEG.



ON MARCH 19 AND 20, STUDENTS AT NORWAY HOUSE SCHOOL WERE VISITED BY ABORINGINAL LIAISON OFFICER INGRID KRENN. AS PART OF STUDENT SERVICE'S EFFORTS TO ATTRACT AND RETAIN NEW STUDENTS, LIAISON OFFICERS VISIT SCHOOLS THROUGHOUT THE PROVINCE OF MANITOBA AND BEYOND.

## Pat Capponi: Bonnycastle Lecturer

by Annette Elvers, (in)edition Editor

The poor, the mentally ill, and the homeless must learn to help themselves.

It's a strong message, and one that might easily offend. But when it was spoken by Bonnycastle lecturer Pat Capponi - who has been poor, mentally ill, and homeless - her message was met with applause.

"When you listen to her, it's clear that she thinks this is the only way to go," says James Currie, UWinnipeg math professor and chair of the Bonnycastle lecture committee. "It's a bit difficult for people that are privileged to respond, because her viewpoint is that it's only the people in need who can really take these issues on."







Still, it's a philosophy Capponi stands by. "You go to an agency for help, to feel better. You go there, but you have no control, and for the time you're there it bears little relationship to reality," says Capponi. Instead, she advocates the work of groups that run businesses like Toronto restaurant the Raging Spoon, which is staffed entirely by workers with mental illnesses. At the Raging Spoon, people who found it difficult to fit into the mainstream work force could find meaningful employment. Similarly, Capponi spoke of a partnership between business owners in a wealthy Toronto neighbourhood and the homeless people who live in the same community. "At first [the business owners] looked at the homeless people like parasites," said Capponi. But when the homeless people started caring for public plantings of shrubs and flowers as part of a business initiative started

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## coming events

For a more detailed listing visit the events calendar at www.uwinnipeg.ca

#### Food for Thought - On April

10 and 16, Alumni Association volunteers will distribute snacks and juice to students as they study for upcoming exams, starting at 7 p.m.

#### Martha Masters, classical guitar, April 10 at 8 p.m. in Eckhardt-Gramatté Hall. Join us for the artistry of this award-win-

ning guitarist. For more information, contact 24-hour ticket hotline at 204.786.9000.

## Retirement Reception, April 30 in Riddell Hall from 2:30 p.m. – 4:30 p.m. Everyone is welcome.

## **Alumni Association Council**Meeting, May 5 at 6:30 in the Wesley Hall Third Floor

Boardroom. Please RSVP to Jeri Breckman at 204.786.9179.

## 25 Year Club meets on May 9 from 3 p.m. – 4:30 p.m. in room SM70.

#### University closed for Victoria Day on May 20, 2002.

### **UWinnipeg Convocation is on**June 02, followed by the DCE Convocation on June 21.

Do you have an important UWinnipeg event coming up? Let us know! Email your information to Annette Elvers at a.elvers@uwinnipeg.ca at least two weeks in advance.

#### Pat Capponi > continued from page 3

by the poor themselves, the business owners developed a new perspective. "That's what I mean - we're all neighbours, both the people with the money and the people with nothing," said Capponi. "We have to find a way to live together."

It's this kind of thinking that exemplifies the Bonnycastle lecture. Held annually at the University of Winnipeg, the Bonnycastle lecture was established in the memory of Richard H.G. Bonnycastle, publisher, former Chair of the Winnipeg Metropolitan Council, and the University's first Chancellor. Lecturers are selected by committee, and typically focus on an area of special interest

to Bonnycastle - the economics, social, and cultural life of cities.

"Pat Capponi fit our mandate perfectly," said Currie. Capponi's life work has focussed on pivotal issues of the inner city: homelessness, poverty, and advocacy on behalf of the mentally ill. She has travelled from coast to coast to investigate the lives and communities of Canada's poor, and to examine the changes that have hit the disadvantaged in an era of reduced social spending. Capponi is the author of several books, and has been involved in support groups, workshops, and group homes. She is also the recipient of the Order of Ontario.

"It's important for students to be exposed to important and challenging ideas, but it's also a service to the community," added Currie.

#### Staff Changes Report

February 18, 2002 - March 15, 2002

| New Appointments<br>Jocelyn Dowden<br>Andres Hernandez                               | Office Assistant 4<br>Office Assistant 5  | DCE<br>DCE  | 02/25/02<br>02/25/02                                     |
|--|---|---|--|
| New Term Appointments<br>Daniel Besner<br>Courtney McDonald                          | Admin. Assistant 2<br>Office Assistant 4  | DCE<br>DCE  | 02/25/02 12 mo.<br>03/04/02 12 mo. (part-time)           |
| Return From LOA<br>Connie Wawruck-Hemmett  | Library Assist. 3   | Library   | 03/04/02   |
| Position Change<br>Ingrid Willey<br>(fr: part-time to full-time)                     | Office Assistant 4  | DCE   | 02/18/02   |
| Retirement<br>Richard Ottenbreit   | Instructor III  | Counselling   | 03/01/02   |
| Departures<br>Graham Lane<br>Hugo Moule<br>Robyn Tully<br>Donalee Deck<br>Erin Booth | V.P. (Finance & Admin.)<br>TS 5<br>Admin. Assistant 1<br>Technician 5<br>Admin. Assistant 2 | President's Office<br>Ctr. for Learn. Technol.<br>Awards/Financial Aid<br>Anthropology<br>V.P. (Academic) | 01/19/02<br>02/18/02<br>02/25/02<br>03/01/02<br>03/07/02 |

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Along with traditional printed copies, (in)edition is now being distributed electronically on the faculty and staff e-boards. Share your thoughts on the electronic format - email a.elvers@uwinnipeg.ca