

# *in edition*

The UNIVERSITY of WINNIPEG

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## When Art & Science Blend

A team of researchers from three distinct disciplines are collaborating to unearth mysteries that lie within historical works of art. Using equipment initially developed for cancer and space research, Ed Cloutis, Claudine Majzels and Doug Goltz are exploring the origins of paintings and artifacts. With expertise from geography, art history and chemistry, the research will have far-reaching implications. "There are incredible advances to be made in art history," says Cloutis. "In addition, there is a commercial application. The conservation of historical materials is valuable beyond measure."

The interdisciplinary research team includes experts from the Winnipeg Art Gallery and the National Research Council's Institute for Biodiagnostics. The group was assembled two years ago to investigate and develop applications of state-of-the-art imaging spectrophotometry for analysis of historical art works. They have formalized this collaboration through the establishment of the Centre for Scientific and Curatorial Analysis of Painting Elements (C-SCAPE).

C-SCAPE will be housed at the U of W, and will consist of three highly complementary facilities: Spectral Imaging (SI), Materials Analysis (MA), and Integration



See ART & SCIENCE  
continued on page 2

Doug Goltz, Claudine Majzels, and Ed Cloutis: bringing science and art together.

# RESEARCH ISSUE

## Art & Science

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and Art Historical Analysis (IAHA). Truly integrated investigations are being undertaken on the basis of scientifically valid principles. "We can use high-tech equipment to identify what pigments were used to produce a painting or drawing without having to physically remove any of the painting for analysis," says Cloutis. "Imaging techniques are a non-destructive way to learn about the origins of paintings and artifacts for conservation and restoration purposes."

The equipment essentially extends the range of what the eye can see, enabling the viewer to determine a host of valuable information. "Looking at artworks using these imaging techniques allows us to see through layers of paint and other pigments," says Majzels. "This can reveal drawings underneath, giving us insight into the artist's choices. We can learn a lot about the history of the work, and possibly its authorship,

date, and place of origin." This powerful diagnostic tool can give us insight into the artist's process.

A number of 15<sup>th</sup> and 16<sup>th</sup> century paintings that make up The Gort Collection at the Winnipeg Art Gallery have been examined. Other collections the experts plan to study include the Hudson's Bay Company archives and artifacts at both the Crafts Museum of the Manitoba Crafts Council and The Dugald Costume Museum. The research team will be able to provide valuable advice to gallery and museum curators as to how the artwork should be cleaned, preserved and/or restored. The equipment is also portable for use on location where collections are housed.

C-SCAPE represents a paradigm shift in the marriage of science and the humanities for art analysis, which could produce notable advances in art history. "Only in the last few hundred years have art and science been thought to

be separate," notes Majzels. "This collaboration pulls the two streams together."

The interdisciplinary approach exposes students to a variety of research fields. "Students get to see how the things they've learned can be applied to areas that might, on the surface, seem unrelated," says Cloutis. "We're breaking down barriers and expanding students' horizons." The project is bringing together students from art history, geomatics, and analytical chemistry to work on research teams focusing on the analysis of specific works of art. In the future, the faculty research team hopes to base a course on this project.

The Canada Foundation for Innovation Research Development fund is providing \$160,000 towards the \$400,000 project, the balance being derived from other sources. "By investing in this research infrastructure project, we are supporting

the development of a unique and world-class expertise at the University of Winnipeg," says David Strangway, President and CEO of the Canada Foundation for Innovation. "This is an impressive example of the type of partnerships that are essential to preserve Canada's intellectual capital — one of our most important resources in a knowledge-based economy."

The CFI is an independent, not-for-profit organization established by the federal government in 1997 to strengthen the capacity for innovation in Canadian universities and research institutions.

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## Excellence Awarded

The Prix Manitoba Award recognizes individuals who have enriched the lives of all Manitobans by their significant and lasting contributions. Donalee Deck has been honoured with this award to recognize her distinguished service to the University of Winnipeg. Deck combines professional skills and dedication to her field with the ability to engage the community at large. In her capacity as Technician/Curator in the Department of Anthropology, Deck has contributed enormously to enhancing the role of the University as an interpreter of Manitoba's rich archaeological heritage. She has taken great strides to document this aspect of Manitoba's heritage through materials and hands-on techniques, preserving the legacies of the First Nations peoples, European settlers, and recent inhabitants.

Deck has ensured that her work, and that of other researchers, is available to students of all ages through publications, public displays, workshops, conferences, and educational activities and programs. She brings confidence and professionalism to her work, making it relevant to people's lives. She is able to generate interest in and excitement about her projects, and has added both texture and complexity to our province's history.

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Comments, suggestions and submissions are welcome. (All material is subject to editing.)  
The deadline for the next issue is June 22, 2000.

*in edition* is printed on recycled paper. After you have finished with this issue, please pass it on to a friend.

## Meeting the Needs of Children in Transition

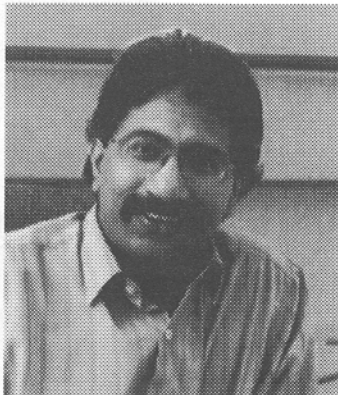
Education professor John P. Anchan is working with other researchers from 10 universities across Canada to conduct a longitudinal survey of New Canadian Children and Youth (NCCYS). Conceived in 1994 and launched in 1996, this Metropolis Project recognizes the need to meet challenges associated with the migration and integration of ethnic and religious minorities in large cities around the world. Information from community-based samples suggest that immigrant children face greater risk of alcohol abuse, drug addiction, delinquency, depression, post-traumatic stress disorder, and higher levels of psychopathology. Studies in the U.S. and the U.K.

propose the opposite is true; their investigations reveal that immigrant children have a mental health advantage, higher academic aspirations and exceptional achievements. These inconsistent results are reason for concern and are the impetus behind the Metropolis Project.

"It's an exhaustive study that looks at the immigrant experience in terms of the health and development of immigrant and refugee children from three age cohorts: four to five, eight to nine, and 12-13," explains Anchan, adding that the study is unique in that it differentiates between immigrant and refugee children, as well as visible and non-visible immigrants. "The pre-and post-immigration stress can be overwhelming to the point of adversely affecting mental health. Some of these children have watched their parents being tortured, suffered through all kinds of traumatic experiences themselves, and been brought to an unfamiliar country where they don't know the language or the culture. It is unreasonable to expect them to prosper without the proper assistance and care."

The last in-depth study of this kind was conducted in 1994. The National Longitudinal Survey of Children and Youth (NLSCY) included approximately 23,000 children, but only two per cent were immigrant and refugee children. "This survey does not reflect the reality in Canada. Our pilot study will use many elements from The National Longitudinal Survey of Canadian Children and Youth, as well as elements of the Health Behaviour in School-Aged Children study, which was sponsored by the World Health Organization," he notes. "But the focus will be different. It will be a cross-sectional study exploring multiple ethnic groups and allowing inter-regional comparisons."

Cultural sensitivity is critical to the outcome of the survey. A host of physicians, social workers, educators, and health workers have been working together since the initial phases to develop survey questions that are specific to each ethnic group represented in the study. "If the questions aren't



*John Anchan says that Canadians must strive to meet the needs of immigrant and refugee children.*

applicable to the individual child, the answer will be meaningless," Anchan points out. "We also want to avoid touching culturally sensitive subjects, so we must construct subtle and sensitive questions without losing important information." The questions address physical and mental health issues, well-being, integration (settlement and social support), evolution of personal/ethnic identity, and discrimination and racism.

The NCCYS research teams have been established in Montreal, Toronto, Winnipeg, Calgary, Edmonton, and Vancouver. The study involves 21 researchers from 10 universities. The Winnipeg team includes Anchan from U of W and two researchers from the University of Manitoba: Esther Blum,

from the Social Work Department, and Shiva Halli, from the Sociology Department. The local advisory committees are made up of many affiliated researchers, graduate students, post-doctoral fellows, federal, provincial and municipal governments, NGOs and private sector representatives. "There is tremendous energy and enthusiasm about the project," says Anchan. "We've had a lot of financial backing and interest from community groups, including social service providers, governmental representatives, policy-makers, researchers, and other experts."

The goal of this study is to determine the extent of the problem and to provide access for immigrant and refugee children to services that will minimize the trauma they suffer and the negative experiences they have. "In addition to offering adequate health care services, we must examine the education system. The nurses, doctors, teachers and psychologists who work with these children must be as diverse as the children themselves," Anchan says. "We need an 'international classroom' in Canada to break down the communication and cultural boundaries that exist."

### Facts about immigrants and refugees living in Canada:

- 1991: 16 per cent of the total population
- 1996: 17.4 per cent of the total population
- 1996: 20.7 per cent of the immigrant population is children below the age of 15
- Of the approximately 200,000 people coming into Canada each year, ¾ are from Asia, Africa, Middle East, and Latin America.
- The special needs of immigrant and refugee children remain neglected according to "After the Door has been Opened", a report by the Federal Task Force on the Mental Health of Immigrants and Refugees in Canada.
- More than 30 per cent (compared with 13 per cent of resident Canadian children) will live in conditions of poverty, poor stability and life-threatening environments.

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## Calling All Art Connoisseurs

During the summer, the Art Curator Department will be rotating a number of the works of art from the University's Permanent Collection in order to comply with the terms of the University's Fine Art Collection Policy. In addition, some new works have recently been added to our holdings. Between June 19 and June 23, artworks will be on exhibition in Gallery 1C03 from 12:30 to 3:30 p.m. The works can also be viewed on Mon., June 26 from 12:30 to 3:30 p.m. Any interested staff and faculty are invited to visit the Gallery at these times to view available works and to fill out a request form. After the requests have been processed (and considerations of lighting, security, traffic patterns, etc. in proposed new locations have been evaluated), the works will be reasigned to new spaces. All art should be rehung before the end of August. We hope that this process will be as democratic as possible and that it will allow for increased awareness and enjoyment of the collection. If you are interested in returning any of the art you currently have in order to trade for another piece, please contact Jennifer Gibson at Ext. 9253. If you would like merely to view some of the works from the University's collection, please feel free to drop by the Gallery at the above-mentioned times.

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## Hot Season Ahead



Virtuosi Concerts and Mondetta-Stage Performances ended the season with Brahms-Fest 2000, four nights devoted to the chamber repertoire of Johannes Brahms. Audience and musician response to this event was overwhelming! We continue with the momentum generated by this year's excitement and take great pleasure in announcing Bach-Fest 200—the six Bach solo cello suites performed by Winnipeg's preeminent cellists, Paul Marleyn and Arik Tesarczyk. Virtuosi Concerts was awarded \$5,000 from the Manitoba Arts Council toward the concert program for our 2000/01 Tenth Anniversary Season. Please call 786-9000 for subscription information, or find us on the web at [www.virtuosi.mb.ca](http://www.virtuosi.mb.ca) In picture, left to right, Boris Berman, pianist; Paul Marleyn, cellist; David Stewart, violinist.

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## Not Your Average Love Story

Stories about women that transcend time—that are popular today as they were in the days of oral storytelling—fascinate French and German Studies professor Carol Harvey. It is this fascination that led her to research *La Manekine*, a 13<sup>th</sup>-century verse romance by Philippe de Remy, sire de Beaumanoir. The work was so well known in the Middle Ages that it was imitated numerous times and adapted as a play and an epic poem. "The incest story is another element that transcends times and space," says Harvey. "People are still captivated by the darker side of human nature, especially because it occurred among people in the highest places.

"Women's literature is the first love of my life," says Harvey. "*La Manekine* is a rare romance—it was unusual for a male author to write about a female protagonist. It is also the first inscription of the cross-cultural archetypal folktale of the innocent persecuted heroine, variously titled 'The Girl Without Hands' or 'the Handless Maiden'." This narrative of a young woman who cuts off her hand to escape an incestuous marriage or other unsuitable union, Harvey ex-

plains, is still known today in many continents and countries, including Canada. It is considered by some to be a tale of female empowerment.

Both a medieval and a modern component are included in Harvey's research. Feminist perspectives are used to elucidate the male author's construction of the female protagonist and to determine the latter's relation to the dominant male-centred ideology of the era. Ethnographer Pauline Greenhill and folktale specialist Kaye Stone are working with Harvey to investigate the modern Canadian versions of the folktale. Jennifer Dueck and Melanie Sourisseau, U of W students, have been helping with analysis of the themes and motifs of the narratives. They are exploring several questions: What are the origins of the Canadian tales? What are the commonalities and differences between them and the medieval versions? And, most importantly, why is this compelling tale, first written seven centuries ago, still relevant to Canadian women?

## Students Get Their Wish

Families fleeing war-torn Kosovo, or leaving the family home on northern reserves for the noise and isolation of the city: these are the kinds of stories that make up *Three Stars and a Wish*, a book infused with emotion and rich with family histories.

"*Three Stars and a Wish* is the culmination of three months of life-changing interaction between University of Winnipeg Bachelor of Education students, and the staff, parents and students at Fort Rouge Elementary School," states Herb Katz, Education professor and coordinator of this unique project.

In an exciting departure from the usual teacher training third-year BEd students receive, Katz brought Aboriginal and recent immigrant families from the Mayfair community together with 17 university students. What resulted is an emotionally-charged collection of stories relating the families' pilgrimages from places around the world to Winnipeg, the city they now call home. The book, coordinated by the University of Winnipeg and designed by U of W student Cindy Feduniw, includes 17 exodus stories, including the parents' wishes for their children's future.

This practical and fruitful collaboration helped students in the BEd program at the University of Winnipeg to relate with parents as valuable resources, rather than simply as

clients. Parents and teachers gained a new respect for one another, and children acquired valuable skills in research and writing. "U of W students learned how to teach children to write with clarity. In the process, the children connected with their parents in a meaningful way," says Katz.

Other lasting bonds were formed during the making of the book. "At the beginning of the project, everyone involved met for a spaghetti supper," recalls Katz, "and the students took it from

there. They quickly developed friendships, and through respect and understanding, they turned the idea for the book into a reality." Katz adds that the project helped BEd students to understand that children live in a world much bigger than the classroom. "Children's lives have many facets and each one has a history. We're showing future teachers the importance of being sensitive to the needs of each child."



*Three Stars and a Wish: A Fort Rouge School and U of W project.*

*Uma Parameswaran's What Was Always Hers has won the Canadian Authors Association's Jubilee Award for a collection of short stories by one author. Parameswaran's touching and humorous book also won the 1999 New Muse Award.*



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## NSERC/CRSNG Results

Name	Department	Title
Simon Liao \$17,000	Administrative Studies & Business Computing	Moment description in image analysis
Scott Forbes \$33,000	Biology	Why parents play favourites
Jacques Tardif \$11,000	Biology	Dynamics of tamarack-black spruce stands and climactic response of disjunct tree populations in the Canadian boreal ecozones
Jacques Tardif \$25,000	Biology	Image analysis system for tree-ring studies
Doug Craig \$33,000	Chemistry	Single molecule enzymology
Ed Cloutis \$14,000	Geography	Mineralogy, weathering history and volatile inventories of the Martian surface
John Braun \$16,000	Mathematics & Statistics	Stochastic modelling and inference
James Currie \$12,000	Mathematics & Statistics	Combinatorics on words
Vaclav Linck \$13,000	Mathematics & Statistics	Design, graph and word problems
Ortrud Oellermann \$16,500	Mathematics & Statistics	Network reliability measures and distance parameters in graphs
Terry Visentin \$10,000	Mathematics & Statistics	Algebraic methods in enumerative combinatorics
Yiqiang Zhao \$21,964	Mathematics & Statistics	High-speed workstation and PCs for engineering computing
Lisa Sinclair \$10,000	Psychology	Motivated activation and inhibition

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## U of W Students at the Height of Excellence

Created by the Government of Canada, The Canada Millennium Scholarship Foundation has a 10-year mandate to support Canadians in their pursuit of the knowledge and skills needed to face the challenges of the new millennium. This year, 39 Manitoba students were among the 889 recipients of the Foundation's Excellence Awards. This award recognizes students' exceptional academic achievements, commitment to community, capacity for leadership and demonstrated interest in innovation. In addition to these awards, the Foundation grants bursaries to post-secondary students in financial need.

This year's winners include 12 students from the University of Winnipeg:

- National Excellence Award: \$4,800 a year, renewable for up to four years, to a total of \$19,200: Candace Werestiuk
- Provincial Excellence Award: \$4,000 a year, renewable for up to four years, to a total of \$16,000: Margaret Carlyle and Lana Wilson
- Local Excellence Award: \$4,000, non-renewable: Jaelyn De Pape, Shannon Dyck, Jennifer Mozdzen, Valerie Pelleck, Mark Rosner, Larissa Smorang, Samuel Spiegel, Kristin Streubner, and Meghan Webb

## Beyond Gender: An All-Inclusive Women's Studies Text

Many women's studies textbooks are not inclusive of all women, says sociology professor Vanaja Dhruvarajan. She says that until now the literature has focused on gender issues, often overlooking race, ethnicity, class, disabilities and sexuality. This gap prompted her to produce a coauthored textbook titled *Thinking Through Difference: A Global Perspective* (Harcourt Brace Canada). Coauthor Jill Vickers is a political science professor from Carleton University. "This book reflects a paradigm shift that is occurring within women's studies," Dhruvarajan notes. "Marginalized groups of women are beginning to be fairly represented, and this text will make a significant contribution to that movement."

### Women's Magazines: Empowering or Impeding?

Dhruvarajan has just begun a content analysis of Indian magazines for women to determine whether the publications contribute to the empowerment of women. She is looking at 12 issues of four different magazines. "I've interviewed readers and editors to gauge whether the readers are interpreting the messages the way they were intended by the editors," she explains. "So far I've found that most readers do not read the magazines cover to cover. They select specific sections and don't always interpret them the way the editors intended."

Many women's magazines still maintain the status quo, Dhruvarajan notes. "But some magazines do not even set out to empower women. This would include magazines that



*Vanaja Dhruvarajan says her textbook will be used for both women's studies and sociology classes at the first and second-year levels.*

feature mainly articles about housework and relationships and beauty."

### The Difference a Generation Can Make

For Indian women and men who were born and raised in Canada, there are a host of unique challenges to be faced. According to Dhruvarajan, second-generation Indian women and men have grown up here as Canadian citizens, and yet they are thought of as outsiders. "I've conducted interviews with these young people to determine what their experiences have been and how they have dealt with them," she says. "The first 10 interviews I have analyzed reveal that racism is quite prevalent, particularly during junior high school." She adds that the problem diminishes substantially by the time the young people reach college or university. "By this age they have developed coping mechanisms and they also have the ability to choose their friends more selectively."

The interviewees are between the ages of 18 and 25, and are from middle-class families. High expectations of children is a common thread among parents and often leads to conflict. "The desire to improve their children's future economic situation drives many parents to place high expectations on their children. Meanwhile children are torn between their desire for approval from their parents and their need to be accepted by larger society. Young people find themselves denying their ethnic background in order to fit in at school," she says.



*The University of Winnipeg Alumni Association supplied students with apples, cookies, and juice during exams. 'Food For Thought' gave everyone the energy needed to make it through those finals!*

## COMING EVENTS

"Coming Events" is compiled by University Relations. Planning a campus event? Please let us know. Send **written** information to Paula Denbow (paula.denbow@uwinnipeg.ca), University Relations, 10 working days in advance of the event. Basic details are required: what, when, where, sponsor, price of admission (if any) and the name of a contact person.

FRI., JUNE 23 AND SAT.,  
JUNE 24

**Theology Alumni Reunion**—  
The class of 1960 has organized this two-day event. Alumni will be on campus to reconnect with fellow graduates.

TUES., JUNE 27

**An afternoon tea** will be held in honour of Chancellor Carol Shields. Everyone is invited to Riddell Hall from 3 to 5 p.m. to thank Dr. Shields for her dedication to the University as chancellor for the past four years.

SUN., AUG. 13 THROUGH  
WED., AUG. 16

**Chemistry Conference**—  
The 46<sup>th</sup> International Conference on Analytical Sciences and Spectroscopy. For more information, contact Doug Goltz at 9730.

## Leader in Environmental Studies

The University of Winnipeg is branching out to create a new Centre for Forest Interdisciplinary Research (C-FIR). The centre will be a gathering place for forest ecology researchers from around the world. And on the educational front, the U of W now will be offering the widest range of programming relevant to forestry in the Manitoba-Saskatchewan region. "This will be one of the few truly interdisciplinary forest ecology programs offered in Canada," states Rod Bollman, chair of the Biology Department. "We're going beyond the norm and looking at issues like the impact forests have on society."

The research centre and the University's expanded course curriculum in Environmental Studies will combine efforts to support key areas of sustainable forest management and related development. Industry, environmental groups, government bodies, and a variety of other stakeholders will have access to made-in-Manitoba research and expertise.

"Centre researchers will look at traditional land use, climactic changes, and biodiversity to shed light on present studies of natural disturbances, harvest practices, growth and yield determinations," says Katherine Schultz, associate vice president academic of research and graduate studies. "Review of the past and present will allow researchers to deal with future issues like better monitoring of forests, forest protection and health, genetic variability, and social values."

New forest ecology research is not all C-FIR will bring to the University and to the province. C-FIR will enhance

the experience undergraduate students receive in new University of Winnipeg programs in Forest Ecology and Forest Policy and Management to be offered this fall. As well, the centre will attract national and international graduate students and postdoctoral fellows working in forest ecology-related areas.



Guests gathered in Riddell Hall for a C-FIR reception. Back row, l to r: Richard Westwood, professor of Biology; President Constance Rooke; Gord Jones, Director, Forestry Branch; Barry Waito, Forest Resources Manager, Louisiana Pacific Canada Ltd.; Randy Raban, Chair Research and Development, Manitoba Hydro. Front row: Glen Pinnell, Vice-President Woodlands, Pine Falls Paper Company; Joy Noble, Coordinator of Institutional Relations, Canada Foundation for Innovation and Monica Edkis, board member, Churchill Northern Studies Centre.