

# YORKU

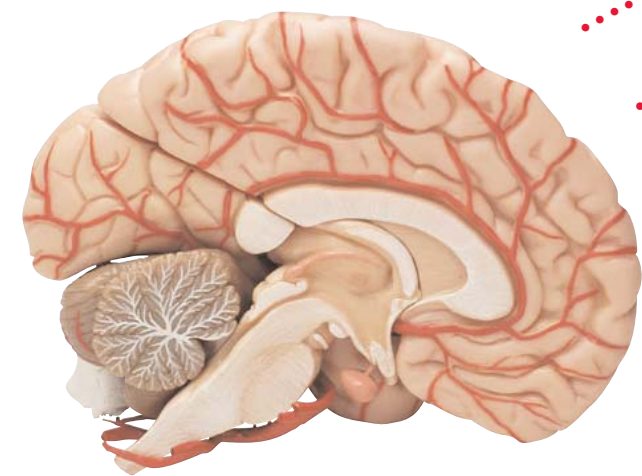


Our fifth annual look  
at York's undergrad achievers

# Top Class

PLUS

Music: York's Father & Daughter Act  
Journey to Las Nubes  
The Clicker Revolution



..... AN EDUCATOR SEES A SPONGE  
 ..... A PHILOSOPHER SEES DESCARTES  
 ..... A NEUROLOGIST SEES A SYNAPTIC MISFIRE

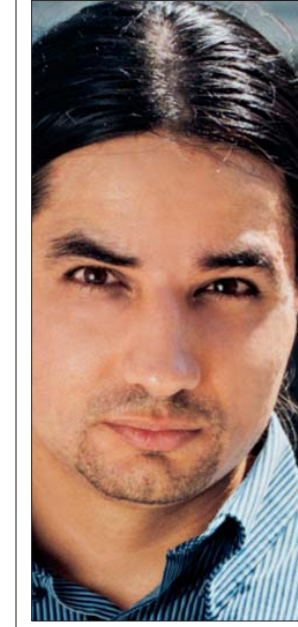
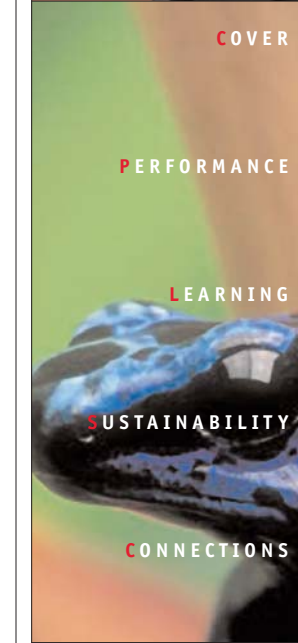
**QUESTION EVERY ANGLE.  
 STUDY EVERY ANGLE.  
 RESEARCH EVERY ANGLE.**

**WELCOME TO THE INTERDISCIPLINARY UNIVERSITY.** At York, we tackle real-world issues by bringing together researchers, graduate students and partners from different disciplines. Currently, neuroscientists, psychologists and psychiatrists at York's Milton & Ethel Harris Research Initiative are pioneering research into the clinical technique of Individual-Difference Relationship-Based Therapy. This could help countless children, including those with autism, get a better start. It is this collaborative approach to creating new knowledge that makes York a leading research innovator. To learn more about the interdisciplinary university, visit [YORKU.CA](http://YORKU.CA)



**INSIDE YORKU**  
**YORKU**  
 THE MAGAZINE OF YORK UNIVERSITY

COVER PHOTOGRAPHY: LINDSAY LOZON



- 4 Editor@YorkU** Where are the top students now? BY BERTON WOODWARD
- 5 Leading Edge** Getting the most out of York. BY MAMDOUH SHOUKRI
- 6 Universe** Hello Mellow...What They're Reading...Brains are from Mars – and Venus... Librarians Who Chat...Mr. Professor...A Passage to Indium...On the Waterfront...Slow Food
- 12 Top Class** York's undergrad stars all have high ambitions, and many dream of making the world a better place. BY MARTHA TANCOCK
- 18 Roots Music** Grad Suba Sankaran of Toronto's autorickshaw grew up with a virtuoso teacher: York music Prof. Trichy Sankaran, her dad. BY MICHAEL TODD
- 20 The Clicker Revolution** How new technology – from remotes to “v-casts” – is challenging traditional teaching methods. BY DAVID FULLER
- 22 Journey to Las Nubes** Students who visited York's rainforest reserve in Costa Rica recount an educational adventure. BY LAURA BRODEY, CHRIS SAKER, EMILY STEWART AND RUWAN WIJESUNDERA
- 26 Reaching Out** York researchers like Amir Asif are working with industry partners to help spur Canadian innovation. BY DAVID FULLER
- 30 York People** Native educator Brent Debassige...biographer Richard Dyde
- 32 Giving** York launches its Family Campaign
- 34 Back Talk** My love song to Africa. BY STACEY TSOUROUNIS

**DECEMBER 2007**

Where are 2003's top achievers? BY BERTON WOODWARD

# Flying High

**I**F YOU'VE BEEN AROUND this university for any length of time, you will be used to seeing a group of bright student faces on the cover of *YorkU* at this time of year. Starting on page 12, we present our fifth annual look at York's top undergrads, as measured at the end of second year. Up to last year, they came from seven undergraduate Faculties, but now we have an eighth – welcome, Faculty of Health. As you'll see, they are as diverse a group as ever, but united by their dedication to achievement.

So, you might wonder – what happens to these achievers later? Do they burn out from all that studying, or do they maintain their perfectionist pace? Now that we're at Year 5, I got in touch with several of our first crop from 2003 (you can see them in the online back issue at [yorku.ca/yorku](http://yorku.ca/yorku)). Where are they now?

Not far away, in the case of Paul Marmer (BES Hons. '06). He was already 29 when we talked to him back then, having taken a global journey of self-discovery before entering the Faculty of Environmental Studies. Now he's working on his MSc in York's Biology Department – and still managing to travel widely. Focusing on plant ecology, he has twice been to Mongolia, working on York-connected projects with the National University of Mongolia. Next year, he says, "I should be visiting the Canadian Arctic as part of an International Polar Year project on the impact of oil and gas development on Arctic peoples and ecosystems for my PhD studies."

Also still in academe is Glendon's Nicolas-Guillaume Martineau (BA Spec. Hons. '05), who went on to Queen's for



an MA ('06) and won the university's Scarthingmoor Prize for best master's essay in economics. "I am currently a second-year PhD candidate in economics at Queen's, with my research focusing on the fields of political economy and public economics." My guess: watch for his name in the Ottawa mandarin.

Ballet-loving Sarah Lochhead (BFA Spec. Hons. '05) now teaches and writes about dance in Barrie, Ont., and was honeymooning in Italy when I called. On graduation, Atkinson's Daraius Bharucha (BA Spec. Hons. '05) received the Governor General's Academic Medal – which recognizes the highest averages – then came back for his BEd ('06) and now teaches in York Region. He still takes courses at York – "you can say I'm hooked on learning."

But the most soaring trajectory so far must be that of Yaakov Roth (BA '04). He switched from science (GPA: 9.0) to economics before graduating, then went on to Harvard Law School, where last June he finished first in his class. Currently he is clerking for a US federal appeals court judge, and next year he will take up the ultra-prestigious post of law clerk to US Supreme Court Justice Antonin Scalia. No, they don't burn out. ■

Send letters, submissions, comments and ideas to [editor@yorku.ca](mailto:editor@yorku.ca).

# YORKU

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PHOTOGRAPH BY JEFF KIRK

How students can get the most out of York. BY MAMDOUH SHOUKRI

# The Best Time

**B**Y ANY MEASURE, the past 10 years have been a period of incredible growth for York University. The construction cranes that tower over the Keele campus are constant reminders that our institution is still very much a work in progress. In the last decade, York's student population has reached 51,000, including 5,000 graduate students. York is now the second-largest university in Ontario for both graduate and undergraduate students.

York is growing in other ways, too, leaping from strength to strength in reputation and quality. Examples: The Schulich School of Business was again ranked top business school in Canada (and fourth in the world) this year by *Forbes* magazine; Osgoode Hall Law School is the largest common law school in Canada and one of the most highly regarded in North America; the Faculty of Fine Arts is the first and largest comprehensive fine arts Faculty in the country; York's Space Engineering



## Getting involved in York's clubs, organizations, teams and publications is the key to a rich experience.

Program is the only one of its kind in Canada. All this on top of our hallmark excellence in the social sciences and humanities and our burgeoning strength in the sciences.

To my mind, though, the most exciting measure of growth is in the increasing quality of our students. Now more than ever, York is attracting and retaining the best and brightest from across Canada – and beyond.

Consider entrance averages: in 2001, 41 per cent of students entering York had an average above 80; in 2006, that number had risen to 60 per cent of students. In that same period, the mean GPA of the entering class rose from 78 per cent to 82 per cent. As a first choice for incoming students in Ontario, York went from fourth place in 2001 to second place in 2007.

One of my challenges as president is to improve the quality of the student experience at York. That means ensuring not only that students get the best education possible, but that they are challenged and stimulated by life outside the classroom as well.

In some ways, York is a self-contained city between Toronto

Mamdouh Shoukri is York's president and vice-chancellor.

PHOTOGRAPH BY JEFF KIRK

and Vaughan, a place where it's easy to be anonymous. One of the challenges York and other large universities face is how to get away from the "commuter campus" model – a place where students come to class, then mostly turn around and go home. I believe the solution lies in getting involved.

To make this easier for students, York is working hard to build and enhance neighbourhoods where students can socialize, participate in clubs and student government, and interact with faculty and other students. As large as York is, it's also a community of communities, a collection of people with diverse interests and backgrounds who share at least one goal – the pursuit of academic excellence.

More students from different backgrounds and with different interests mean more extracurricular activities to choose from. York has more than 240 student clubs and organizations, 23 varsity teams and hundreds of intramural sports teams, and countless student publications. Getting involved in some of these activities is the key to a full and rich student experience.

There's no better or easier way to make friends, learn about leadership, effect change and enhance your student experience than by getting involved. If you're a student and unsure of where to start, visit York's Student Community & Leadership Development site at [yorku.ca/scld](http://yorku.ca/scld). And enjoy your time at this great University. ■

# UNIVERSE



**W**ant to zone out? Who wouldn't? York knows students get busy and stressed. That's why the Health Education & Promotion program, sponsored by York's Student Community & Leadership Development (SC&LD) unit, created a unique initiative called "Mellow Monday". Now students can unwind in the "Stress-Free Zone", get a massage in the "massage zone" (on a massage chair), play games (Jenga is a favourite), eat snacks and have fun. The best part is, it's free (otherwise you might stress about the cost, right?) and open to anyone. Mellow Monday's staff is made up of peer health educators (York student volunteers).

Why come? "It's a way to unwind at the end of the day, before heading home on the bus or getting in the car for the daily commute," says Leah State, coordinator, Health Education & Promotion for SC&LD. "It's often a challenge for students who aren't members of a club or association to find a space where they can relax."

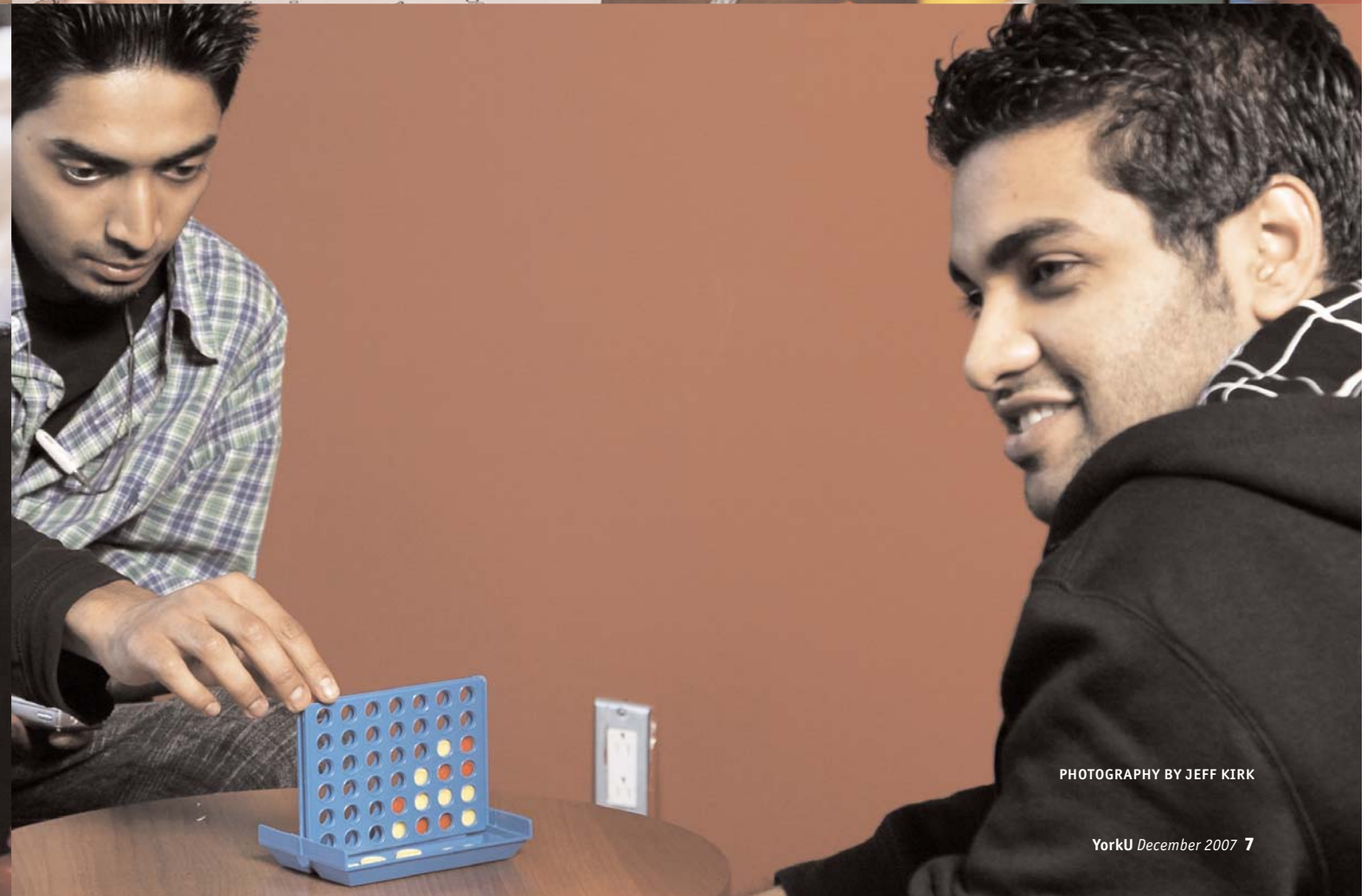
State notes that students today are often under an enormous amount of pressure in addition to their studies because of part-time jobs, family commitments and volunteering. "And the pressure, both internal and external, to perform academically can be very intense," she says.

Mellow Monday – which started in the 2005-2006 academic year – takes place from 2:30-4:30pm in Room 307, York Student Centre. It was founded by peer health educator Alona Iskovitch, and is part of SC&LD's mandate to enrich and improve the quality of student life at York. "Alona wanted a place where students could go all the time, not just during exams," says State. "That's especially important at York since so many students commute." ■



## Hello Mellow

Don't like Mondays? Try York's 'Stress-Free Zone'



PHOTOGRAPHY BY JEFF KIRK

BOOKS

# What They're Reading

York people reveal what's on the bedside table

**Craig Scott**  
Director, Nathanson Centre on Transnational Human Rights, Crime & Security, Osgoode Hall Law School

*Lignes de faille*

By Nancy Huston

"I have just begun to read Nancy Huston's latest novel, *Lignes de faille* (literally translated, Fault Lines), which won France's prestigious Prix Femina last fall. Toronto's McArthur & Company recently published its translation, *Birthmarks*. Ever since reading her debut novel, *The Goldberg Variations*, I have been a sucker for her gift for characterization and the way she captures voice in her wonderful writing. I'm only partway through *Lignes de faille* but already hooked."

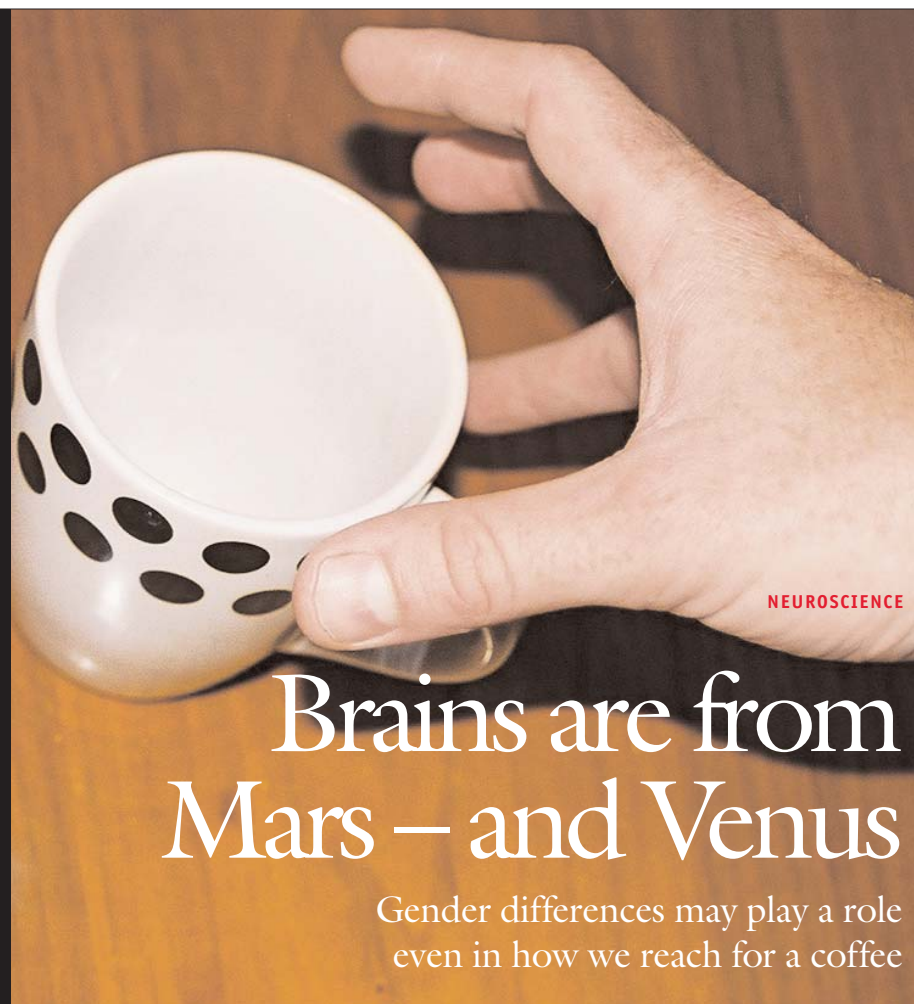
**Peter Taylor**

Atmospheric science professor, Faculty of Science & Engineering  
*Churchill on Hudson Bay*

By Angus and Bernice MacIver

"As I prepared to leave Manitoba's Churchill Northern Studies Centre, which serves as a base for our weather-related research work, I noticed this book for sale in paperback. It is the result of a project of The Churchill Ladies Club, and by chance I had sat down for lunch at the same table as a group of members of that club earlier in the week. So how could I resist?"

"The book is written by a trapper and his schoolteacher wife. There are many reminiscences about the joys and hardships of life as a trapper, including surviving a blizzard in zero visibility (so work-related for me) and the dangers of working in polar bear country – also a work-related issue. ■■"



# Brains are from Mars – and Venus

Gender differences may play a role even in how we reach for a coffee

**A** new study by two York researchers has demonstrated that men's and women's brains work differently when they're reaching, say, for a cup of morning coffee – or any other object for that matter. "Work" in this case really refers to the way male vs. female brains process information (brain activity) in reaction to visual stimuli (reaching for a java).

Lauren Sergio is in charge of York's Sensorimotor Neuroscience Laboratory, where researchers study the fundamental neural mechanisms underlying the production of visually guided limb movement. "In order to accurately reach for an object, you have to transform a sensory signal into a complex pattern of muscle activity. The control processes employed by the brain which underlie this seemingly straightforward task are not, as yet, completely understood," says Sergio, a School of Kinesiology & Health Science professor in the Faculty of Health.

"In the past researchers assumed the cortical networks for visually guided movement were the same for males and females. But in our experiment we used functional magnetic resonance imaging [fMRI] to show there were, in fact, significant sex-related differences in human brain activity during visual-to-motor transformation tasks," says Sergio, who worked on the project with recent doctoral graduate Diana Gorbet (PhD '06, MSc '02, BSc Spec. Hons. '99).

Sergio and Gorbet observed that in females, movement-related areas on both sides of the brain lit up during a series of hand-eye coordination experiments. Curiously, men's brains lit up on both sides only during the most complex tasks; otherwise, only one side showed activity. These findings may have implications for the design of stroke rehabilitation therapies, says Sergio. "If someone has a stroke on one side of the brain – in one of the areas that differs between males and females – it may be important to take into account the sex of the patient." ■■

PHOTOGRAPHY BY RSQUARED

UNIVERSE

RESOURCES

# Librarians Who Chat

York's virtual reference service gets big hugs from students

(Ryerson staff could field York inquiries and vice versa). "The collaborative infrastructure is invisible to users, though," says Grewal. Online conversations are in real time. "It's like a reference chat room," Grewal says.

How do students like it? Here are two e-mail comments Grewal saved: "i love this service...who ever [sic] came up with this idea should come to me and I will give them a big hug...i love u, who ever u are...u have saved me from not completing my assignments. thank u." And another favourite: "Thanks for the help. You librarians kick ass." ■■

**I**f you don't know where to get information for that last-minute essay, ask a librarian – a virtual one, that is. York students are doing just that, says Kalina Grewal, University reference librarian.

Since York reference went virtual in 2003 with "Ask A Librarian Chat Reference", the number of users keeps getting bigger. In 2002-2003, more than 2,300 people at York were helped by the online librarians. In 2005-2006, they answered 4,081 questions. For comparison consider the similar service at the University of California at Los Angeles. They fielded 907 ask-a-virtual-librarian questions in 2005-2006. Interestingly, UCLA has almost the same number of full-time undergraduate students (36,268) as York.

"York's stats are a statistical anomaly in terms of virtual reference use among North American universities," Grewal says. She attributes that to the University's heavy emphasis on essay writing, good reference services and a high number of student commuters. The service offers instruction in formulating research topics and in selecting and evaluating information sources.

Grewal says the "Ask" project originally began as a pilot partnering York, Ryerson and the University of Guelph, all of which belonged to the Ontario Collaborative Virtual Reference Project (Guelph has since dropped out). The OCVRP service allows participating universities to share staffing

STUDIES

# Mr. Professor

Males still far outnumber females among Canadian faculty

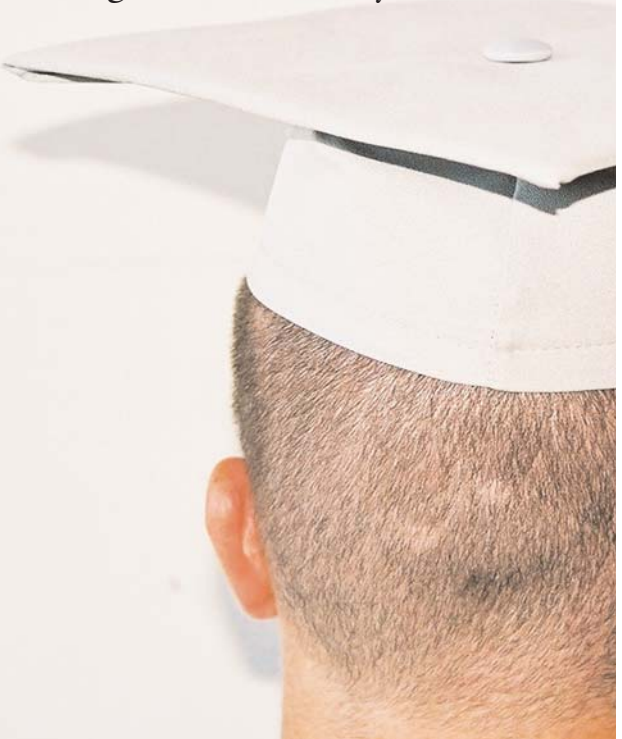
**A**ccording to York sociology Professor Penni Stewart, male professors still significantly outnumber female profs across the country even some 40 years after the largest faculty hiring wave at Canadian universities.

Stewart, based in York's Faculty of Arts, and colleague Janice Drakich from the University of Waterloo, recently published a study showing that in 2003-2004, women made up 58 per cent of full-time undergraduate students and 48.7 per cent of full-time graduate students but represented only 31.7 per cent of full-time faculty and 18 per cent of full professors. In 1960, women constituted 11 per cent of full-time faculty and four per cent of full professors.

"The percentage of women full-time undergraduate students in the 1960s was smaller than men's, but it reached parity in 1988," say Stewart and Drakich. "Eighteen years later women continue to enter universities in large numbers, but that has not produced a significant shift in the gendered structures of the academy."

In 2003-2004, the disciplines with high proportions of female faculty were education (47 per cent), fine & applied arts and humanities (41 per cent) and health professions and occupations (39 per cent). Only 15 per cent of mathematics and the physical sciences, and 11.2 per cent of engineering faculty, were women. "Regrettably, women continue to be clustered both as students and faculty in feminized disciplines; are not appointed to the rank of full professor at the same rate or speed as men; and are still under-represented in senior administrative positions," the researchers say.

To York's credit, however, it had the highest percentage of women in full-time faculty positions in 2003-2004 among major Ontario universities (41.9 per cent); Waterloo was the lowest (22.7). ■■



PHOTOGRAPHY BY RSQUARED

SCULPTURE

## A Passage to Indium

Art is part of the Chemistry Building's structure



One of York's most intriguing and large-scale sculptures isn't even displayed outside. In fact, you might not realize it's a sculpture as it seems so much a part of the building, and in a way it is. Susan Schelle's aptly named *Passage* is located (or is that hidden?) just past the entrance lobby to one of York's most handsome buildings, the Chemistry Building located on the west side of campus near Bethune College. Interestingly, *Passage* is part of the building's structural passageways.

Schelle's work, which is constructed of marble, polished cement, and real and stylized ginkgo trees, takes the form of sculpted books that form a witty, mock-ionic base to polished-concrete columns. Stylized ginkgo leaves are used as a decorative motif and inset in the floor – as well as the building's entrance ways – while outside, in an enclosed courtyard, are actual live ginkgos.

The sculpture is a permanent installation and was created specifically for the Chemistry Building in 1993. The work reflects the relationship between parallel systems of knowledge as represented by the image of the book and the ginkgo leaf, says the artist. The leaf – as both image and in its real form – represents the fauna of the local area. And medical research, of course, links Ginkgo biloba extract with a reputation for increasing brain alertness – always useful at university. ■

Could anything offer a more intriguing study – or more opportunity for multidisciplinary – than Toronto's beleaguered and fought-over waterfront? Indeed, that may be one reason principal investigator and Faculty of Environmental Studies Professor Gene Desfor decided to research it. Assisting Desfor in this initiative – called "Changing Urban Waterfronts" (CUW) – are researchers from York's social sciences, humanities and "hard" sciences. The project, now underway, investigates Toronto's waterfront during the past 100 years using ideas from both social nature and political ecology. "The harbour is a special place where land and water meet," says Desfor. "You can see it as an interactive space in which the social and the natural are constantly remaking one another. 'Urban nature' is inherently political because it's produced, partially anyway, by social processes. 'Problems' with nature are socially constructed."

For example, FES Professor Gail Fraser and research assistant Dave Andrews have been studying the diet of double-crested cormorant chicks on Toronto's Leslie Street Spit. Their findings highlight the links between socio-political and natural processes and could have a bearing on decisions made by wildlife managers who are facing concerns from fishing and aquaculture industries about (the "problem" of) rising cormorant populations on both the Spit and throughout the Great Lakes.

The overarching question CUW seeks to address, says Desfor, is: how have various discourses and practices combined to produce and regulate Toronto's waterfront as a socio-economic and ecological place and space? Researchers are concentrating mainly on Toronto's eastern waterfront, including the Port Lands, the Don River Valley and the Leslie Street Spit. The three-year project is funded by the Social Science and Humanities Research Council of Canada. ■

RESEARCH

## On the Waterfront

Gene Desfor studies the urban space where land and water meet



PHOTOGRAPHY BY RSQUIVAREDO; JEFF KIRK

# UNIVERSE

TRADITION

## Slow Food

Economist Sam Lanfranco has joined a growing movement – from his farm

In a world of fast food it's good to know some folks are taking it slow – at least, Sam Lanfranco is. At York, Lanfranco wears his economics professor's hat, but back home on the 50-hectare farm he bought five years ago in Prince Edward County, it's more likely to be a John Deere cap. "In the County I'm seen as a farmer surviving with supplemental 'off-farm' income. In the city I'm seen as the academic with a farm. I started life as a farm boy, working on the family farm."

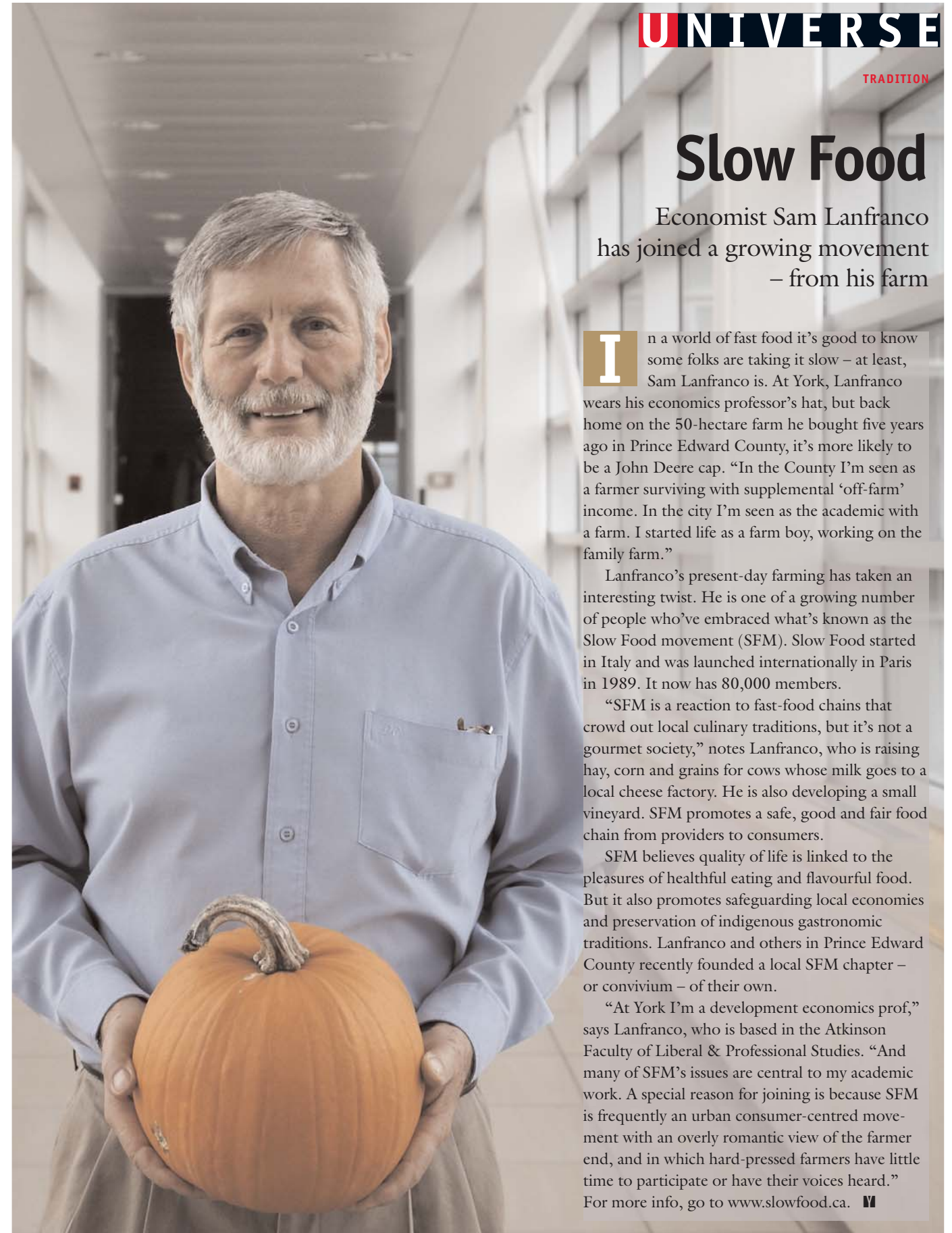
Lanfranco's present-day farming has taken an interesting twist. He is one of a growing number of people who've embraced what's known as the Slow Food movement (SFM). Slow Food started in Italy and was launched internationally in Paris in 1989. It now has 80,000 members.

"SFM is a reaction to fast-food chains that crowd out local culinary traditions, but it's not a gourmet society," notes Lanfranco, who is raising hay, corn and grains for cows whose milk goes to a local cheese factory. He is also developing a small vineyard. SFM promotes a safe, good and fair food chain from providers to consumers.

SFM believes quality of life is linked to the pleasures of healthful eating and flavourful food. But it also promotes safeguarding local economies and preservation of indigenous gastronomic traditions. Lanfranco and others in Prince Edward County recently founded a local SFM chapter – or convivium – of their own.

"At York I'm a development economics prof," says Lanfranco, who is based in the Atkinson Faculty of Liberal & Professional Studies. "And many of SFM's issues are central to my academic work. A special reason for joining is because SFM is frequently an urban consumer-centred movement with an overly romantic view of the farmer end, and in which hard-pressed farmers have little time to participate or have their voices heard."

For more info, go to [www.slowfood.ca](http://www.slowfood.ca). ■



PHOTOGRAPHY BY JEFF KIRK

COVER



# TOP CLASS

York's undergrad stars all have high ambitions.

BY MARTHA TANCOCK  
PHOTOGRAPHY BY LINDSAY LOZON

**T**HEY COME FROM ALL OVER the world, but they share at least one thing in common: excellence. For the fifth year, *YorkU* is shining the spotlight on some of York's brightest students. These are the individuals who scored the highest cumulative grade point average after second year in each of York's undergraduate Faculties. They've weathered the entry years and hit stride in mid-degree. Who are they? How have they done so well? Where are they headed?

The answers to these questions give an insight into remarkable individuals. Born with brains, they exhibit an intense passion for learning but insist hard work is the key to their high marks. Many in this year's group of mostly 20-year-olds aren't quite sure yet of their future, but all hope to go on to graduate or professional studies. Whether these first- and second-generation Canadians and recent immigrants decide to stay here or work abroad, many dream of making this world a better place and are already actively doing so. Read on to meet eight intriguing young women and men.



## Enjoying Ambiguity

**Mark Di Giovanni**  
Faculty of Arts • GPA: 8.6

**FROM A VERY YOUNG AGE**, Mark Di Giovanni showed such gusto for arguing – and winning – that his parents would say, “You’re going to be a lawyer some day.” And he will be. This summer, the 20-year-old philosophy student worked twice a week in a lawyer’s office and spent the rest of his waking hours boning up for the LSAT. The first of his kin to go to university, this grandson of Italian immigrants plans to specialize in property law and join the family’s building company in Vaughan.

The gifted math student had planned to be a civil engineer until a Grade 11 English teacher and a bookish girlfriend turned him on to literature. “I never used to read. I thought it was a waste of time.” Overnight, he dropped all physics and math courses, except calculus, to take Grade 12 English, creative writing, philosophy, law and business. “The thing I like about the arts,” says the guy who reads James Joyce and Hegel for fun, “is that there’s ambiguity. In math, everything is so set.” These days, when he surfaces from his ethics texts, he pounds out Roxanne on his drums. He figures he knows the secret to retiring early to a villa in Italy. “I work like a donkey.”



## A Gift of Commitment

**Hannah Renglich**  
Glendon • GPA: 8.55

**EVERY MORNING FOR SEVEN WEEKS** last summer, Hannah Renglich caught a *matatu* into Kibera, Nairobi’s sprawling slum. The editor-in-chief for Five Minutes to Midnight, a youth-driven human rights organization, was teaching journalistic skills to young Kenyans. She’d picked up her own pointers as editor of *Pro Tem*, Glendon’s student newspaper, and an intern at *This Magazine*. For the international studies and psychology major, the experience cemented a resolve to make the world a better place.

The 20-year-old has already campaigned for recycling and composting at Glendon’s cafeteria and plans to start a student food co-op after she returns from Bridgewater State College near Boston, where she is studying this year on a prestigious Killam Fellowship. While the shy, quiet social activist searches for ways to sustain the planet, she turns to music to sustain her soul. Singing in choirs since age 9, the Toronto Children’s Chorus veteran co-directed the Glendon Musical Ensemble last year and performs with Bridgewater’s chamber choir this year. “I can’t imagine life without music. I get a sense of community by being part of a choir.” A gifted student who could do anything, Renglich isn’t sure of her calling – yet. After grad school, bets are she’ll take up her pen for a good cause.



## Deep Green Thinker

**Grace Yogaretnam**  
Faculty of Environmental Studies • GPA: 8.8

**GRACE YOGARETNAM WAS JUST GETTING** back into the swing of school after six years working as a bookkeeper when the Green Party called. Would she run in Mississauga-Brampton South for the Jan. 23, 2006 federal election? The first-year environmental studies and political science student hesitated – exams loomed, Christmas was nigh. Yes, she would. “It’s important for me to live my values,” says the 25-year-old vegan who wears used clothing, takes public transit and founded the York chapter of The Campus Greens. During the campaign, “I loved speaking about causes I am passionate about” and that she came expressly to York to study.

No fan of TV, the daughter of Sri Lankan immigrants tunes in to CBC Radio’s “Ideas”, can cite George Orwell on writing clearly and devours books like journalist Robert Fisk’s 1,107-page *The Great War for Civilisation*, keen to hone her communication skills as well as learn about world issues. Daily meditation – in cafes, on buses, in class – has quietened a busy mind and harnessed a perfectionist’s impulse. A hefty scholarship now frees the part-time working girl and possible future lawyer to delve even deeper into her studies and volunteer more. “My goal is service. I’m here to serve and need to find out how best to do that.”

## Hooked on Finance

**Hira Khan**  
Schulich School of Business • GPA: 8.61

**ONE ON ONE**, HIRA KHAN talks a blue streak and enjoys a good laugh. But in class, she sits at the back and never raises her hand. The A-student who emigrated from Pakistan halfway through Grade 9 went quiet after classmates mocked her accent. Adept at written English, she surprised even herself by getting high marks. “I’m such a perfectionist. I have to be the best at everything I do.”

Despite pining for the culture she left behind, Khan threw herself into raising funds for good causes and running the student Ecoclub at her Toronto high school. Good at math, she followed her brother to York to study accounting but switched to finance, hooked on complex analysis and problem-solving. “I am a nerd, I know that,” admits the 20-year-old, who abandons her textbooks to watch “America’s Got Talent” or work out on her body-building sibling’s treadmill and ab-crunching machine. “It refreshes my brain,” just as praying to Allah five times a day refreshes her spirit. Here for a good education, Khan plans to get an MBA then start a banking career in personal money management. She’ll let her parents arrange her marriage and decide later whether she stays or returns to her beloved Karachi.





## Stages of Design

**Jennifer Lennon**

**Faculty of Fine Arts • GPA: 8.24**

**SHY AS A CHILD**, Jennifer Lennon resolutely resists her natural tendency to curl up in a corner and read. As competitive on the ski hill as her younger hockey-crazy brothers, the 19-year-old Calgarian has pursued more solitary recreation: playing piano and guitar, figure skating, wall climbing. Attending an independent-learning school where she did things on her own at her own pace suited her fine – until Grade 10, when she discovered drama class. “It was my introduction to team sports.”

She conquered stage fright and “had an absolute ball” doing ensemble work. With marks in the high 90s and countless options, the high-school grad decided to risk life in the theatre. But not as an actor. No, she who never took art is heading for an off-stage career in production design. Keen to master her craft, Lennon plays against type and propels herself into leadership roles, this year as head electrician of a major play. “It’s terrifying but really, really exciting.” Blissfully unsure where her future lies, she thrives on learning and getting As. “I like keeping doors open. I want to be able to swerve off the path and do something I really like. High marks give me the freedom to do what I want.”



## Sister, Sister

**Donna D'souza**

**Faculty of Health • GPA: 8.87**

**WHEN YOU COME OUT OF THE WOMB** with two other babies, there's bound to be post-utero competition as well as a mighty bond, especially with the triplet who is your identical twin. In elementary school, Donna D'souza's sisters earned A-pluses to her measly As until she put on her spurs in high school. “I decided I wanted to be on top.” She is now, and to stay there the kinesiology student spends so much time studying – on the bus, at home in Markham – that her friends don't call between September and April.

It helps that her twin Anna is also taking kinesiology at York. “We compete on every level.” Mom insists Donna take breaks. More science nerd than sports jock, she walks Sam the dog, checks out “American Idol” and tunes into alternative British bands. “Music kind of levels me,” says the Bombay-born 20-year-old, who used to play piano, clarinet and tenor sax, and wants to learn acoustic guitar. Had she been less shy, the girl who directed *Footloose* in high school might have taken drama instead of music as her elective. Originally headed for teaching, the anatomy ace figures on a future as an occupational or physio therapist. Maybe, though, she'll go into medicine – like Anna. ■

## Nation Builder

**Merat Koohestani**

**Atkinson Faculty of Liberal & Professional Studies • GPA: 8.26**

**A PATRIOTIC MERAT KOOHESTANI** hopes one day to serve the country he loves – Iran. In the meantime, his roots grow deeper in Canada. Born and raised in Tehran, the 24-year-old information technology student has had little trouble adjusting since arriving in 2005. He was already fluent in English and comfortable with North American culture, having attended middle school in Oklahoma where his father had planned to start a PhD. Koohestani completed high school in Iran, did his two years compulsory military service, then applied to York. He'd been unable to get into a competitive IT program at home and York offered the chance to mix IT with business courses.

“When I was coming to Canada, I promised myself to be the best,” he says of his stellar academic performance. His secret? “I study hard.” Between school and working as a stacker at the library, this devout Shia Muslim also courted and married Sanar, an Iranian immigrant studying chemistry at York. Where they settle remains uncertain. These days, Merat likes to reread Machiavelli's *The Prince*, listen to Queen and take photos on his Ontario road trips. In a few years, the future MBA grad may be in business here or helping revive the economy of his cherished homeland.



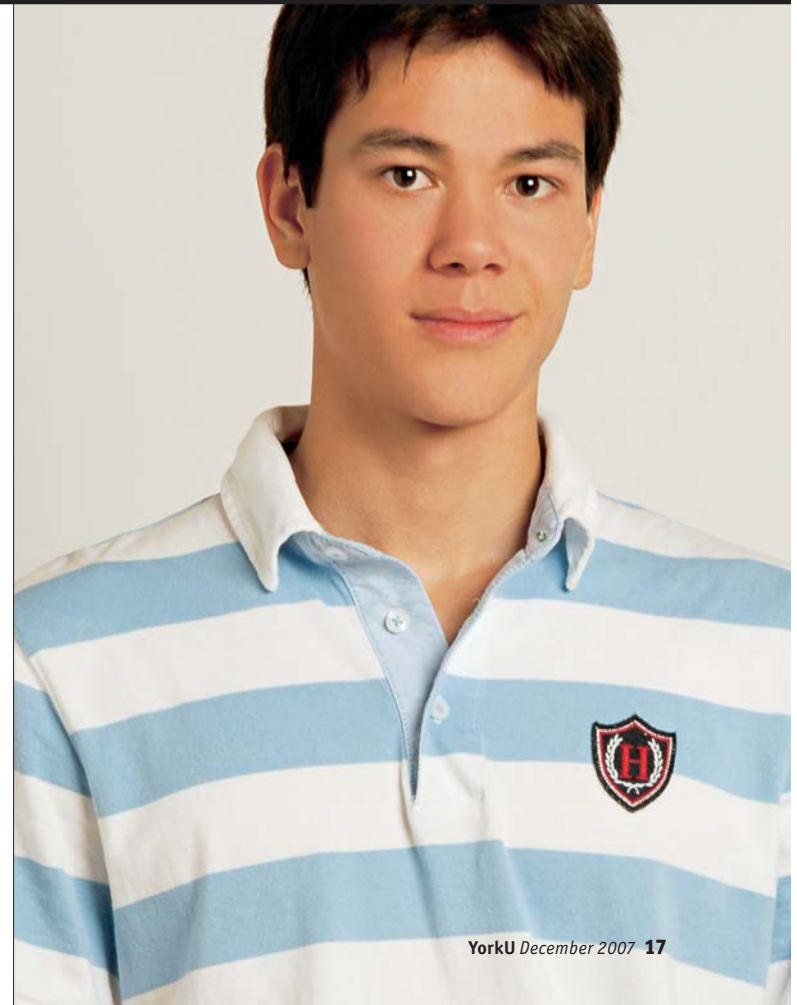
## Swimming Fast

**Kevin Davis**

**Faculty of Science & Engineering • GPA: 8.9**

**BECAUSE HE'S SO BASHFUL**, Kevin Davis doesn't readily reveal that he was a provincial-level contender in butterfly stroke. Competitive swimming eclipsed piano lessons when he was growing up in Vaughan, but now nothing outshines biochemistry for this lab-besotted 20-year-old. All summer and fall he has been synthesizing ruthenium complexes for use as photosensitizers and electrocatalysts – and swimming lengths only when he needs a break.

The son of an aerospace engineer and a pharmacist, Davis has always easily chalked up As on his report cards. “I work a lot harder now than I did in high school,” he confesses. He enrolled at York to pursue a combined interest in biology and chemistry – and his girlfriend of three years – a deal sweetened by generous entrance scholarships. Last year, when he wasn't reading textbooks, he was volunteering as a peer mentor for first-year chemistry students and as a peer adviser for the Student Ombuds Service. Never seduced by TV or iPods, the guy who bicycles back and forth from home to school can't resist the odd computer game and online poker. But learning remains his biggest high. Graduate school is definitely on the horizon and possibly a career in medical research.





Grad Suba Sankaran of Toronto's autorickshaw grew up with a virtuoso teacher: York music Prof. Trichy Sankaran, her dad. **BY MICHAEL TODD**

**PHOTOGRAPHY BY JEFF KIRK**

# Roots Music

**T**HE OLD EXPRESSION “like father, like son” might best be expressed – in Suba Sankaran’s case at least – as “like daughter, like father”. Why? Because Suba, York grad and co-founder of the world-music group autorickshaw, is the daughter of Trichy Sankaran, York professor, *mrdangam* (South Indian drum) virtuoso and founder of York’s Indian music program in the 1970s. Lately, this father-daughter duo has been carving out some notable new musical directions in their respective careers.

If you haven’t heard autorickshaw on CBC Radio, as I did not long ago, then chances are you might have caught Suba and “auto” among the many world-music venues in and around Toronto – or across Canada, or even in Europe or India. Suba says she got the name for the group in 2003 from the motorized vehicle for hire that’s one of the most popular modes of transport in South Asia. Auto’s music lies on the cultural cutting edge, with its mixture of traditional Indian, jazz, funk, blues and electro jazz along with a bit of rapping and sampling. And in an interesting generational twist, Suba invited her father to play on the latest of the group’s three CDs, *So the Journey Goes* (2007).

**SUBASHINI SANKARAN GRADUATED** with a BFA (Spec. Hons.) in music in 1997 and got her MA in ethnomusicology in 2002.

However, she began her music career much earlier. “My piano teacher realized by the time I was 6 or 7 that I had perfect pitch,” Suba says. She began studying piano through the Royal Conservatory of Music (reaching grade 10 accreditation), along with South Indian classical music with her father and, later, Indian classical vocal music with other masters.

Was she influenced by her father’s drumming? “Definitely. He began teaching me – it’s an oral tradition – when I was just a little girl. We’d jam in the living room. It’s pretty amazing when you think about it. Here’s my dad, who knew and played for Pandit Ravi Shankar [Beatle George Harrison’s legendary sitar teacher] at the age of 9. My dad is a virtuoso, but he is also still ‘my dad’ if you know what I mean.

“I was born here in Toronto and so my approach to music has been somewhere between the Indian classical tradition and Western music, including classical and jazz,” says Suba. “My MA thesis was on the vocal innovator and improviser Bobby McFerrin. So there was that jazz/funk/contemporary side to my musical development, but my dad was always meticulous about performing Indian classical music in the right way – to give tradition its due respect.”

Not only is Suba a trained vocalist but, like her father, she’s a percussionist in her own right as well as an accomplished pianist

and arranger. Keeping up with musical family traditions she married Dylan Bell, who graduated from York in music (BFA ’95) and also studied with Trichy Sankaran. “My dad kind of freaked out when he heard I was marrying a musician!” she says with a laugh. “He knows how hard it is to make a living as one, and he comes from a more conservative tradition where it’s important to have a fallback career, like being a doctor or engineer,” she says, smiling.

**TRICHY SANKARAN’S MUSICAL JOURNEY**, like Suba’s, started early. The drum that he plays, the mrdangam, is the principal rhythmic instrument used in South India’s Karnatak form of classical music, dance and *bhajan* (devotional songs). “I was recognized as having a talent for playing percussion as a child,” says Trichy, “and singled out at age four. I always had the urge to play mrdangam even then.”

His invitation to join York came when he was still living in India, he says. “The idea even then – in 1971 – was to start a program in world music which we have, in fact, expanded. I agreed to come for only one or two years in the beginning, but I’ve been here ever since! It was an amazing time, and I even remember Shambu Das, a student of Ravi Shankar, was a part-time instructor in the music program in those days.” One of the

senior professors in the Music Department, Trichy has built up a highly respected program in South Indian music and trained numerous students in the theory and techniques of his drumming forte. In addition to his 50 years of classical concert experience, he has performed on four continents with jazz, electronic and African music ensembles, including his own group, Trichy’s Trio.

As far as father/daughter relations go, Trichy says he always encouraged Suba’s musical journey, which was, all along, informed by his own discoveries here in North America. “In the early ’70s electronic music was coming into its own. So I was experimenting in crossovers with that and my own music. I got interested in [Indonesian] gamelan, too, and eventually composed some scores for gamelan orchestra. There was constantly music at home and both my wife and I encouraged Suba.”

And how about the father/daughter chemistry? “I’m sure I know more about contemporary music because of Suba,” says Trichy. And Suba? “My father and I are great friends. We are like colleagues really. We get to bounce ideas off each other for our own various projects. And, of course, it’s also wonderful to have him play as a guest artist on autorickshaw’s CDs. Not a lot of daughters get to do that.” ■

**W**E'VE ALL BEEN THERE. You rush into a lecture hall and settle in with a few hundred of your classmates to listen to the speaker. You begin taking notes and, between hasty scribbles and a stifled yawn or two, it hits you – “I don't get this.” What to do? It's a question as old as the ages, but innovative teaching techniques and a new wave of classroom gadgetry are helping to provide some answers.

Enter the gizmos – laptops, clickers, podcasts, blogs – that are turning traditional teaching around and adding another chapter to the book on digital empowerment. Although they differ in how they contribute to improving student learning, each is gradually winning a place in the York educator's toolkit thanks to the efforts of staff at the Centre for the Support of Teaching (CST) and their colleagues in technical support units across the University.

The essential problem facing all teachers is how to engage students, many of whom don't always respond well to content-focused lessons, where class becomes a narrative about everything the teacher knows. “You've really got to go 180 degrees and say, what will the student know and be able to do, and to understand that ‘telling’ isn't teaching,” says Cheryl Dickie, educational development coordinator at the centre. The flip side of the narrative method is called inquiry-based teaching. Engaging students through questioning is an idea as old as Socrates that has been revitalized by a movement in many US universities to integrate more research skills into the curriculum – a task ideally suited to digital technology.

“When you engage students with inquiry-based methods, you create conditions that help them learn better, meaning that they understand material better, can remember it longer and can use it more flexibly later on,” says Ros

Woodhouse, CST's academic director and a professor in York's Atkinson School of Social Sciences. “So, it's a very powerful kind of learning.” Woodhouse says York faculty have shown leadership in Canada by using the technology to demonstrate how these experiences can be accessible to all students and not just an elite.

Encouraging students to answer questions can be difficult enough in a regular classroom and even more challenging in a 500-seat hall – and how do you engage the student who can't always attend lectures because they work or have to care for family? That's where the gizmos come in.

To put a new spin on her course, Karen Anderson, a sociologist from the Faculty of Arts and a CST scholar, has students work in small teams at round tables using laptop computers to research topical questions and then compare their results. “You come to know a lot more when you work collectively,” says Anderson. In her presentations on the method to other teachers, Anderson notes the biggest challenge wasn't the technology – it was finding round tables in a traditional classroom.

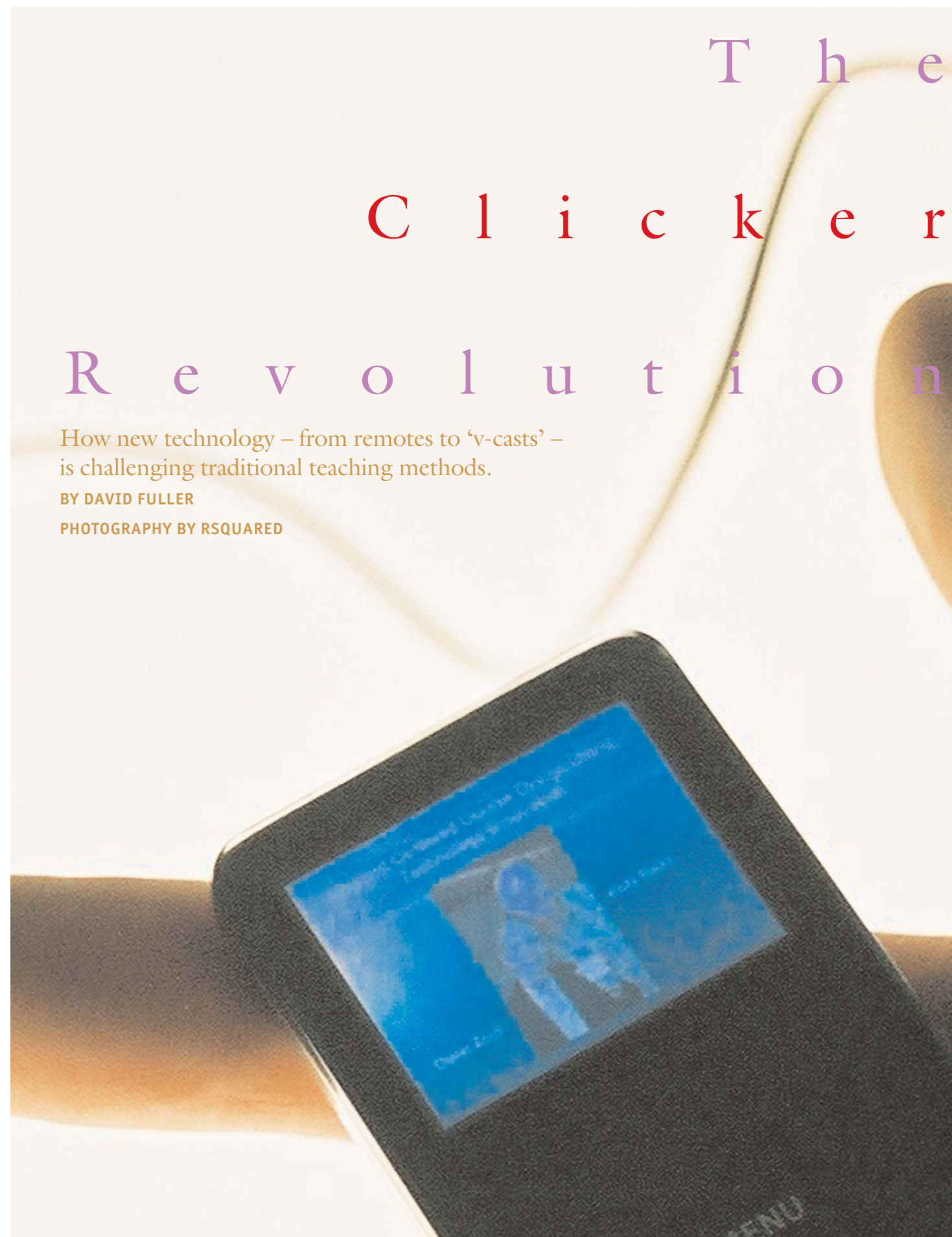
CST scholar Tanya Noel, a biologist in York's Faculty of Science & Engineering, is tackling the problem of engaging a large number of students in a lecture hall. Using hand-held remotes, popularly called “clickers”, Noel's students answer specially prepared, multiple-choice questions displayed on a screen. The students can confer with one another before “clicking”, then see the results on screen. The method tests students' grasp of threshold concepts and helps them spot gaps in their understanding before mid-term exams. It also allows every student to participate in the lesson. Noel now works with the centre to offer workshops and online resources on clickers for other faculty members.

For those who need time to review lecture material outside the classroom – for a variety of reasons, including indi-

vidual learning or lifestyles – one York instructor has developed an award-winning system that allows students to study at their convenience using video podcasts, or “v-casts”, of her course. Diane Zorn, a lecturer in York's Atkinson School of Arts & Letters, and Kelly Parke, of the Faculty Support Centre, Computing & Network Services, record specially designed lessons in Zorn's first-year philosophy course that can be downloaded and played back on a hand-held media player like an iPod. Each lesson includes accompanying documents such as lecture notes and – most importantly – features Zorn as the facilitator, not just a recorded lecturer. “Diane has abandoned the idea of ‘I want to emulate the classroom’,” says Dickie. Zorn says the v-casts appeal especially to visually oriented students and what researchers have dubbed “kinesthetic learners,” who tend to be hands-on, active, and require frequent breaks.

There's a decidedly old-fashioned challenge to implementing this digital wizardry, however. Inquiry-based teaching takes time – it's not easy to craft truly probing questions and, as a teacher, you have to know how to use the technology. To help faculty who are less familiar with digital techniques, CST worked with the Faculty of Arts to develop a 10-week program called Arts do TEL, showing teachers how to develop courses using both traditional and Web-based methods.

As exciting as this all sounds, some traditionalists still wonder if the technology and new methods of teaching might restrict the amount of course content each student receives. It's a concern that staff at CST understand well. “To adopt such a different method of teaching, where you might not get through the same amount of ‘content’, is a really big shift,” Dickie admits. “We intuitively want to teach people lots of stuff.” But, adds Woodhouse, “what we know about learning is that ‘less is more’.” ■



How new technology – from remotes to ‘v-casts’ – is challenging traditional teaching methods.

BY DAVID FULLER

PHOTOGRAPHY BY RSQUARED

Students who visited York's Las Nubes Rainforest reserve in Costa Rica planted trees, saw fabulous wildlife – and flew through the jungle.

BY LAURA BRODEY, CHRIS SAKER, EMILY STEWART AND RUWAN WIJESUNDERA

*The summer semester began for a select group of 24 students in environmental studies, biology and international development at York University with a spectacular field trip to the Las Nubes Rainforest and other ecosystems of Costa Rica. The purpose was to gain knowledge of neotropical ecology and its application to sustainable development, in a two-week field course conducted by environmental studies Professor Howard Daugherty. Packed with essentials such as tents, rain gear, headlamps and binoculars, the group set off in late April this year. This account was written by four of the students.*

**C**OSTA RICA FIRST GREETED US with a glorious view from the plane: lush hills covered with tropical vegetation, fluffy white clouds rolling over the horizon – the beauty was staggering. Upon our safe arrival, we strapped our bags onto the roof of the tour bus and headed for Talari Mountain Lodge, within the Las Nubes region of Costa Rica. There we had our first immersion into our surroundings, as we listened in awe to the vast plethora of sounds that are the nightly chorus of the rainforest. We identified our first species of tree frog, calling it the “Nintendo Frog” after its computer-like call. Then we retired to the lodge and our tents, eagerly anticipating the opportunity to set foot upon the biological reserve of Las Nubes – “The Clouds” – donated to York University by Dr. Woody Fisher, an internationally known medical researcher and internist.

### Las Nubes: Planting New Rainforest

**WE AROSE WITH AN EARLY SUNRISE** and prepared for our hike into Las Nubes. This consisted of arming ourselves with boots and shovels, as a last line of defence against the fabled jaguars of the region, and of course, to aid us with our reforestation project. Although Las Nubes is now protected, there are small areas that had been used as pasture that we were attempting to return to prime rainforest habitat.

Our path was lined with dense plant life, sporadically punctuated with the light of intensely coloured flowers and epiphytes. We wound around roots that wrapped themselves

around the bases of trees, and past slippery moss-covered rocks, until we arrived at the Río Peñas Blancas, a clear-rushing river that reaches the Pacific Ocean. The only means of crossing the river was along a gigantic fallen tree. After we carefully walked across, a steep climb lay before us which seemed dark and ominous. But the view was stunning as we ascended, capped with a pair of graceful swallow-tailed kites, circling in the blue sky of the early morning that would soon be covered by clouds.

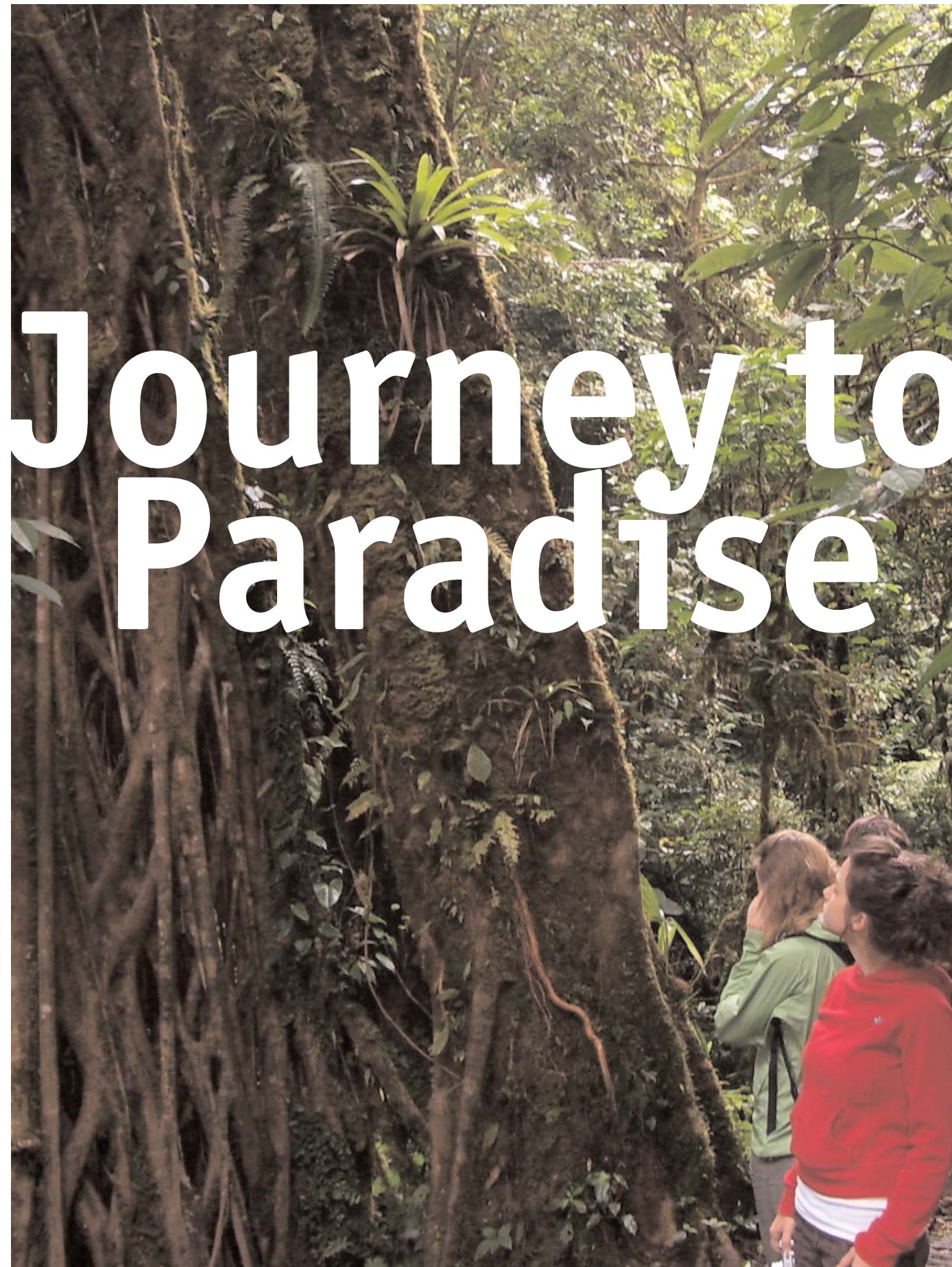
We commenced planting our 94 saplings with enthusiasm. The scenery and the morality of our task contributed to the spirituality of the experience, and as the crates of saplings were depleted, there was a feeling of contentment all around. This was aided by the knowledge imparted by Luis Angel Rojas, a self-trained naturalist who knows Las Nubes better than any living person, who assured us that the majority of the trees we planted would indeed reach maturity.

As we left the rainforest, the value of Las Nubes as a migratory corridor was clearly evident. The fruit-bearing trees we planted would serve the dual purpose of providing prime habitat for birds, while also helping to offset the carbon that we would emit during the field course. In fact, this act gave birth to the Las Nubes Carbon Fund, which can now be used by members of the public in Canada to offset their own carbon emissions, with the knowledge that the money paid in will be used to plant trees in Las Nubes and the surrounding region. An essential component of the fund is the COCOFOREST tree nursery, established by York University students five years ago in collaboration with a local community group. We later worked in the nursery, filling over 1,400 bags full of soil, so that seeds could be planted in them and nurtured into saplings that will be used to provide more habitat and sequester even more carbon in the region.

### Coffee: Made in the Shade

**THE BENEFIT OF COFFEE**, other than its magical property as a stimulant, is that it naturally grows in the shade. This means that other, larger trees can be simultaneously grown with coffee on a farm, which improves the condition of the soil and makes the use of artificial fertilizers redundant. The trees also provide food and shelter for animals and a continuous habitat for many

# Journey to Paradise





species. Our group visited two farms, a sustainable model farm owned by a large Costa Rican coffee cooperative, Coope-Agri, and the private farm of Luis Angel. Both employed many ingenious methods to avoid the use of nasty chemicals such as artificial pesticides.

For instance, in order to deter a common pest that bores into the coffee bean, a simple contraption containing alcohol is suspended from the plant. This device successfully keeps the borers away from the coffee plants, reducing the need for pesticides. A solution for blocking wind was to plant a living fence that also provides habitat for birds and animals. The use of these natural deterrents, plus carefully chosen plants that help retain water and nutrients in the soil, all contribute towards the lushness of the coffee farm, and make it blend in with the surrounding rainforest.

In fact, what we found truly amazing was how these farms embody what sustainability stands for. Not only is the natural capital and biodiversity of Costa Rica preserved, the living standards of the locals are also improved. CoopeAgri runs numerous sustainable operations across southern Costa Rica and has implemented many social, medical and community building programs. All of these initiatives can be promoted through the purchase of Las Nubes certified fair trade coffee, which on top of being a socially and environmentally ethical choice, is also delicious! You can find it at Timothy's World Coffee locations throughout

Canada and at York's Las Nubes Café in the Computer Science & Engineering Building on the Keele campus.

### La Cusinga: Low-Impact Surfing

**THE NEXT STAGE** of our adventure took us a short 50 km away to the Pacific coast of Costa Rica. La Cusinga Eco-Lodge was chosen due to its limited impact upon its environment. All electrical operations at the lodge are conducted using renewable energy sources, such as solar panels, passive solar water heating and a mini-hydro plant. The food is also grown organically and the scraps are composted or fed to the organically raised poultry. The lodge is surrounded by lush rainforest, known as the "Forest of Giants", and borders the warm waters of the Pacific, known to us as "the most beautiful beach on the planet". What was so striking was that the rainforest is relatively untouched around the eco-lodge and there are no tourists. We could enjoy the surf in peace!

Riding on the crests of 15-foot mammoth waves, we could see an abundance of wildlife. The birds were glorious in their flight, with many sightings of toucans, parrots and hummingbirds. Even on our journeys back and forth to the beach, we were presented with a dazzling display. A group favourite was the sleek poison dart frog, with its neon green body and black markings that made it extremely difficult to locate on the forest floor. We

were also lucky enough to glimpse sea turtles amid the infamous brown boobies that were plummeting from the sky into the ocean to catch fish. Later we felt the incredible power of a torrential tropical thunderstorm, which made a few of us believe the world was coming to an end.

### Monteverde: Cool Sights

**THE ROAD TO THE** Monteverde Cloud Forest Reserve was unpaved and bumpy, and the drive from La Cusinga took 12 long hours. We were immediately enveloped by a climate entirely new to us in Costa Rica. In contrast to the heat and humidity at sea level, the cloud forest greeted us with cool breezes and a relieving temperature change. We spent a comfortable night at the Tropical Science Center lodgings, under warm, cozy blankets for the first time during the trip.

The following morning we arose to the sound of death, as howler monkeys were bellowing their eerie territorial calls across the rainforest. We gathered into small groups and set off into the rainforest with knowledgeable local guides. They pointed out animals, insects and birds visible only with the aid of a telescope. The diversity of the forest was so dense that we probably saw more animals in this two-hour hike than in an entire day elsewhere. Among the many things we saw were a glass-winged butterfly, a male and a female resplendent quetzal, and a flowering bamboo bush. The bamboo bush was

particularly special because it was flowering for the first time in over 20 years.

### Zip-Lining: Flying Through the Forest

**IN THE AFTERNOON** we drove to another park nearby to boost the adrenaline by zip-lining high in the canopy of the cloud forest. Our first duty was to get geared up for the adventure by putting on a harness and thick leather gloves. Earlier, we had been shown the basic techniques by several professionals, such as how to slow down and to stop before smashing into the trees ahead of us. We were also told never to put our hand in front of the carabineer that was attached to the cable, for fear of getting our hand chopped off! Even then, we couldn't wait to risk life and limb to fly along the metal cables.

At the first platform we climbed up four sets of stairs, about 100 feet above the ground. One by one, we attached ourselves, promptly hurling ourselves off the platform and through the air, high above the forest floor. Judging by the tormented screams, a few in the group were initially shocked at being so high, with only a carabineer holding them up. They quickly realized, however, just how exhilarating the experience actually was, and the screams turned into cries of elation.

The rest of the platforms were built into the trees, 18 in all. At times, because of the density of the clouds in the forest, we could see only a few feet ahead of us

and had absolutely no idea when the time would come to brake and stop. As the zip-lining adventure was coming to an end, we took a break so we could attempt the thrilling "Tarzan" jump. The idea was to jump off a 40-foot platform and free fall towards an open space in the forest floor. After swinging back and forth like a pendulum, the brakes suddenly engaged as two burly Costa Ricans yanked at our ankles, seeming to pull our legs out of their sockets, to make us come to an abrupt halt.

The sensory overload of Monteverde was not yet over as we took a "night walk" through the cloud forest with our guides pointing out an incredible diversity of nocturnal life. The next morning, it was time to take the bus back to San José, and reflect upon the trip as a whole.

### The Bird-A-Thon: Fun with Fundraising

**THE GREAT SUCCESS STORY** that arose during this trip was the bird-watching endeavour aptly named the Bird-A-Thon, something we had organized as a last-minute fundraising initiative. For every species of bird we saw, donors in Canada had pledged a small amount of money. After we identified 190 species in two short weeks, those small sums added up to a total of over \$2,500 in funding for local environmental education. Our group has decided to use these funds to help COCOFOREST establish a squirrel

monkey reserve downstream from Las Nubes.

Another positive outcome from the Bird-A-Thon, which fits right into the environmental education theme, was the enthusiasm for avian ecology that this fundraising incentive sparked among us. Getting up before dawn after a night of modest partying is quite a chore for a 20-something student, yet morning after early morning we would emerge from our sleeping bags, headlamps blazing, ready to silently watch and listen for the mind-blowing birdlife Costa Rica has to offer.

The field course as a whole provided the group with a first-hand experience of tropical ecology, while also providing an example of sustainable, ecologically based agriculture and how it can be successful. It is essential that the biodiversity in Costa Rica be preserved, which can only occur through a development strategy that is sustainable and allows Costa Ricans to prosper as a result of maintaining their natural capital. This can be done both through eco-tourism, which provides an influx of tourist dollars to tropical regions, and through sustainable agricultural production. Thus it is extremely important that the York community support the Las Nubes project and, we hope, drink York's only sustainable brand of coffee. Through this support, the local communities around Las Nubes will prosper, biodiversity will be protected and students and others will continue to experience this beautiful part of our increasingly depleted global biosphere. ■



# Reaching Out

York researchers like Amir Asif are working with a wide variety of industry partners to help spur Canadian innovation. BY DAVID FULLER

PHOTOGRAPHY BY JEFF KIRK

**I**N THESE EARLY DAYS OF THE 21ST CENTURY, treating cancer can still be a relatively crude exercise where as many healthy cells are destroyed as cancerous ones. But a therapeutic device with Star Trek-like precision may be just around the corner, thanks to York computer engineer Amir Asif. His research has led to an idea for improving radiation treatment that is already attracting interest from IBM. This story of theory meets application was made possible by York's Office of the Vice-President Research & Innovation (VPRI), which decided several years ago to mount a research and innovation outreach strategy that would open doors to new ideas and new ways of using them.

In his studies of how computers process statistical data signals, Asif came up with an idea for focusing radiation on a tiny homing beacon implanted in the patient's body and, with a technique called "time reversal", do it more powerfully and efficiently. As Chair of York's Department of Computer Science & Engineering in the Faculty of Science & Engineering, Asif is also helping members of his department develop ideas for tools that would be at home in any starship's sick bay. These scientists, who also include members of the Faculty's Mathematics & Statistics Department, are using the results of their basic research to come up with devices that can, for example, look at the inner workings of DNA, animate medical images to better show doctors what ails us, or help a person guide a wheelchair with their eyes.

"It's very exciting to know that there are applications from the real world in which these theoretical results could be used for the benefit of humanity," says Asif. "This is a big leap forward. If you look at most of these techniques, they are not traditional medical ideas derived from empirical studies – they have a very strong mathematical, computer-science background. They have been proven theoretically and now scientists are looking at applications for these mathematical models."

The marvellous instruments that he and his colleagues proposed at a workshop with IBM in September don't exist yet, but they could in the near future with the creation of a proposed National Centre for Medical Devices Development (NCMDD). This initiative is designed to capitalize on the fact that almost half of all the companies in Canada's \$5-billion medical devices industry are located in or near Markham, Ont., in York Region – right next door to York University and its community of researchers who are studying the science behind those devices.

The vision for NCMDD is being developed by the University together with a broad consortium of public- and private-sector partners. They are already demonstrating the power of collaboration. Companies like IBM and sanofi pasteur are working with York University to promote the strengths of the region, which competes globally for ideas and the business they generate. It's all part of York's broader research and innovation outreach strategy in which the University and its partners share knowledge to spark social or economic advancement in spheres as divergent as health, entertainment and regional planning.

The NCMDD initiative is designed to create new research and economic opportunities around an existing industry cluster. "With so much exciting growth and development already happening in the medical devices industry in York Region, a research centre would be an ideal way to build on existing knowledge and expertise," says Mark Lievonen, president of sanofi pasteur Canada, the Canadian arm of the globe's largest vaccine maker. "For example, new discoveries made at the centre could result in collaborations with world-class companies to help commercialize them."

That kind of result is what government agencies are looking for as an important addition to current funding models for research and development. "Governments do a lot of investment in basic research, which is critically important in the long term," says Stan Shapson, York's vice-president research & innovation. "But governments also want to look at opportunities for earlier returns on investment. That's why it's also important for a university to take applied research and, in some cases, graduate training and experience out into the local community."

Putting new knowledge to work has become a matter of economic survival. The federal government released its strategy for science and technology in 2006 and emphasized the need to stay with the innovation curve through collaboration among stakeholders, a path the University started down in

2001 when VPRI was created. “The federal strategy charts where the country needs to go, and York University is already there,” says Shapson. “York is ahead of the curve.”

By working with companies like sanofi pasteur, IBM and the more than 40 other partners that are now part of the medical devices initiative, the University also helps its own reputation and intellectual agenda as researchers find new areas of study and more resources to pursue them. Lievonen sees the partner-

## By working with these partners, the University helps its own reputation and intellectual agenda as researchers find new areas of study and more resources to pursue them.

ship as a natural blending of the University’s strengths in doing basic research and the corporate sector’s expertise in applying the results.

Lievonen is also enthused about sitting at the table with so many different partners and learning from them, sometimes in unexpected ways. Through his company’s association with York, Lievonen learned serendipitously of the University’s research and innovation outreach in the entertainment industry, a sector facing challenges similar to those in his field. He says he finds unexpected value in what he calls “crossover linkages” with these other industries that help inspire innovative thinking.

The entertainment initiative he refers to is the Consortium on New Media, Creative and Entertainment R&D in the Toronto Region (CONCERT) – a public-private consortium created to support research and development, commercialization and economic development within the entertainment and creative industries. Stakeholders from companies large and small – including AMD, Motorola, Apple and Xenophile Media – as well as governments and industry associations are sitting down together at the invitation of York University, Ryerson University and the Ontario College of Art & Design. Their task is to look at Toronto’s competitive strengths and weaknesses in the screen-based entertainment industry and map out a plan to ensure the region’s global competitiveness.

“Sitting at a table with a group of stakeholders and competitors who would typically keep proprietary information to themselves has been incredibly refreshing,” says Jim Mirkopoulos, vice-president of Cinespace Film Studios. “Everyone realizes we have to look at the greater strength of the industry.” Shapson echoed that point at the consortium’s launch in

February 2007. “We have dropped our institutional affiliations to sit at the CONCERT table,” he said. “Our competition is global and not with each other.”

“CONCERT really is the model for this kind of effort,” says Mirkopoulos, whose film studio business depends on highly skilled employees who understand the latest technological innovations in movie-making, such as those developed by York’s fine arts researchers and computer engineering scientists. “The convergence of the academic- and private-sector partners has been fantastic.”

Learning about opportunities is the challenge addressed by another key outreach initiative York University is mounting, part of a national pilot project in what’s known as knowledge mobilization. This effort brings the University’s researchers in the social sciences and humanities together with human service providers in York Region to look for innovative ways of doing things.

One example is connected to the projected growth rate for York Region over the next 20 years – 34 per cent, much of it from immigration. To learn more about coping with such a rapid influx of new people, the Human Services Planning Coalition (HSPC) – a York Region-sponsored planning body with representatives from social service agencies, police, the regional public school boards, health care providers and the regional government – came to York University looking for an alternative to a proposed multi-million-dollar demographic study.

Enter Professor Lucia Lo, a geographer in York’s Faculty of Arts, who studies immigrant settlement patterns. HSPC learned about Lo’s work through Peter Ross, York University’s representative on the HSPC Research & Innovation Action Group, and was able to make plans for a new study that will draw on Lo’s expertise and data her team has already gathered. The study also gives Lo a chance to extend her research and put it to immediate use in guiding regional planning – an arrangement that demonstrates the value of knowledge mobilization. “It’s a very important partnership,” says Simon Cheng, director of human services planning for York Region and an HSPC director.

York University researchers are involved in projects covering a range of disciplines, says David Dewitt, York’s associate vice-president research for social sciences & humanities. “Knowledge mobilization encompasses a huge area, from fine arts and cultural studies through nursing, psychology, business and law – it covers the full range that you can imagine.” York’s Faculty of Health, for example, is working with hospitals in the nearby Central Local Health Integration Network to develop ways for the University’s researchers and the hospitals’ research needs to become partnered, creating opportunities for both.

To Shapson, the key to York’s outreach efforts, whether in science and technology or the social sciences and humanities, is a shared philosophy and belief in the value of true collaboration and its power to open new areas of opportunity. “Our partners trusted they could work with us,” he says. “Once you have this trust, doors open and exciting opportunities emerge.” ■

# YORK PEOPLE

**Brent Debassige**  
PhD student, Native educator

## Ways of Knowing

YOU COULDN'T REACH Brent Debassige last summer. He was camped on the shores of Manitoulin Island's Lake Mindemoya without electricity or running water, writing his York PhD thesis in longhand. Being close to the land calmed him and helped him focus on his dissertation topic – respectful approaches to conducting research in First Nations communities. The Toronto-raised son of a migrant pipeline worker knew little of his ancestral culture until he took political science and Native studies at university. Graduating with a fiery resolve to sustain his endangered culture and language, the reformed teenage vandal saw education as the means. While studying for his MEd, he threw himself into learning Ojibway traditions and ways of knowing and, on a parallel journey of self-discovery, quit boozing and started doing volunteer work on his home turf. Now 32, the stellar grad student has won two consecutive Casino Rama aboriginal awards honouring academic achievement and community service. Whenever he gets the chance, he talks about his dream – introducing educational programming for Ojibway people that includes both indigenous and modern ways of knowing. "It's my big ambition," says the future professor. "And, one way or another, I want to make it happen." ❧

PHOTOGRAPHY BY BRYAN MCBURNEY

PHOTOGRAPHY BY JEFF KIRK

SERENDIPITY IS A WORD Richard Dyde can appreciate. It explains how he wound up as a scientist in York University's Centre for Vision Research studying astronaut balance and vision with Prof. Laurence Harris, and came to write a book about British aviation pioneer Sir George Cayley, whose airplane designs predate the Wright Brothers' by over a century. While completing his PhD in neuroscience in the UK, Dyde e-mailed a question to a York professor and received a job offer in reply. After moving to Canada in 2001, Dyde (or Richard Dee as he's known to his readers) wrote an unpublished book containing a reference to Cayley that prompted publisher McClelland & Stewart to commission a full biography. While in England researching *The Man Who Discovered Flight: George Cayley and the First Airplane* (2007), Dyde happened to look at one of Cayley's 1793 school notebooks upside down. Examining an apparent doodle, Dyde realized he had discovered the earliest written explanation of the principles of flight. "No one else did anything like this for another 50 years," says Dyde. "No one even came close. It's one of the untold stories of science." ❧

**Richard Dyde**  
Vision researcher, biographer

## Flight Stimulator



# GIVING

## All in the Family

York launches a campaign for faculty, staff and retirees

**A**RE YOU A MEMBER of the clan? York's Family Campaign launched in late September with much fanfare. This fundraising drive is for York University "family" – faculty, staff and retirees – and is part of the broader \$200 million "York to the Power of 50" campaign. The prime beneficiaries will be the other part of York's family – its students.

There are two primary goals for the Family Campaign: to see 2,009 donors participating by the year 2009, up from the current 1,594, and to foster a culture of philanthropy in support of imagining York's next 50 years.

York has many generous supporters who have made gifts in a variety of ways.

Diane Stadnicki (BA '78), special events coordinator, Student & Alumni Relations, in the Atkinson Faculty of Liberal & Professional Studies, has supported various scholarships and campaigns over the years. "My parents weren't able to attend university, so to them, education was very important because it meant growth, empowerment and the ability to make changes, personally and within the community," she says. Her son is now a music major in York's Faculty of Fine Arts.



LEADING LIGHTS: Co-chairs Ronald Pearlman (left), Nancy Accinelli and Ross Rudolph

John Heber was employed by York for 20 years, retiring in 1989. His service was in the finance division where, for his final eight years, he worked as the University's comptroller. He and his wife will create the Freia and John A. Heber Memorial Fund through a bequest to the York University Foundation. Their endowment fund will support fellowships and scholarships in science, engineering and business. "We are pleased that our bequest will be able to help students achieve academic excellence," says John Heber.

Chris Robinson, a York finance professor, has made several gifts, including two totalling \$125,000 to York's nursing program. Concerned with the "unsung" helpers and heroes of our community, Robinson also established two unique awards in Atkinson's School of Administrative Studies, where he is based. "I owe the money back to society because society gave me everything," he says.

Three co-chairs will direct the Family Campaign: Nancy Accinelli, retired special adviser, College/Faculty relations;

Ronald Pearlman, University Professor of biology in the Faculty of Science & Engineering; and Ross Rudolph, professor of political science in the Faculty of Arts and senior adviser to the vice-president academic.

Paul Marcus, president and CEO of the York University Foundation, says support like this for the Family Campaign is key to the success of "York to the Power of 50". "We definitely need the financial support of those closest to us but their participation is also an important signal to the wider philanthropic community that the people who know York best believe in this University." While cash gifts are the most common form of giving, a growing number of supporters from the York "family" are taking advantage of alternative ways of giving: bequests, stocks and securities, life insurance and other planned giving vehicles.

Faculty, staff and retirees who wish to support the Family Campaign can do so online at [yorku.ca/foundation](http://yorku.ca/foundation) or by calling 416-650-8210. ■

# BACK TALK

But Africa is not out of me. BY STACEY TSOUROUNIS

## Out of Africa

**T**HERE'S SOMETHING ABOUT AFRICA. Each time you set foot on the continent, it will push you to the point where you want to leave and never come back – and then, often in the very next breath, you are won over once again by that certain something. Something that defies definition, that can only be measured and described in moments. It is the warmth of dawn. A woman, bucket on her head, shrouded in mist and sunbeams. It is barefoot children playing in the dust, laughing with such joy that you want to beg them to teach you whatever it is they know that you don't. It is

### I was filled with admiration

a force that seems to infuse the African spirit with something precious and invaluable, making you wonder what poverty and wealth really are.

I was fortunate to be in the presence of this energy this past summer during a three-month internship with York International. I taught in rural western Kenya at Wikondiek, a primary and secondary school affiliated with York's Faculty of Education, after which I travelled to Rwanda via Uganda by bus (on roads my behind will not soon forget). Throughout my journey, I was struck time and again by the resilience and capacity for renewal of my students, my community and the countless strangers I crossed paths with across east Africa. As I ease back into Western life, feeling the afterglow of Africa fade, I long for the moments when something takes me back. When I remember.

I remember the maid of a wealthy Kenyan couple, a woman who had left three children behind in Tanzania to find work in Nairobi. "Mama Tanzania", as I came to call her, was a gregarious, outspoken woman blessed with the remarkable talent of being able to incorporate dancing into anything and everything. We quickly realized that she was the African version of myself and spent hours touring the more questionable areas of Nairobi, including the slum where she lived. The last time I saw her she had lost her job because she refused to be mistreated by her employers. "Mimi ni mtu," she told me in Swahili, pointing a finger at her chest. I am a person. And I was filled with admiration

Stacey Tsourounis is in fourth year of a bilingual French and English honours program at Glendon.

for this woman who lived in utter squalor and knew it, but who insisted that her humanity be acknowledged all the same.

I remember Zipporah, a 27-year-old widow with five children who had lost the will to live when she learned her husband had died of AIDS. Listless and melancholy, she came to see a musical performance that I organized with my students, and I was told it was the first time in months that she had



been seen laughing, clapping and dancing. Touched, I searched for her in the village to thank her for coming, and her sheer joy at my visit overwhelmed me. I spent hours with her at the market, in the

fields, at church services. Not once did my awe at her strength and determination diminish. She endured day after day under the merciless sun, harvesting millet, washing clothes, fetching water with poise and grace. Without ever complaining.

I remember a young Rwandan I met at an Internet café in Kigali who told me how he loved his country and his people, how he believed both were in the process of rebirth that follows a tragedy. I asked if he ever encountered people in the streets whom he knew to be murderers. Yes, he said, but you have to just continue on your way; hate just begets more hate. I asked if, when he saw passersby with scars from a machete, he felt all the things he wanted to forget come rushing back. Yes, he said. How did he find the strength to continue? You just keep going, he said. You push forward, "parce qu'il le faut." Because it must be so.

Those moments where that vibrant energy shone through are what made me mourn Africa before I'd even left. Africa is the only experience I've ever had that left me challenged, humiliated, irritated, disgusted, saddened, scared – and longing to do it all over again. In reality, you take a piece of that something about Africa with you when you depart. It leaves its mark on your humbled spirit and your guilty conscience, on your altered perspective and your malaria-infested liver. And for the moment, I'm content to bask in the memories, knowing that my life will ever be a love song to Africa and that something that is beyond me will always lead me back. ■