

Natural Sciences and Engineering Research Council of Canada

# NSERC *Contact*

*Investing in people, discovery and innovation*

## Fragmentation and Timing

Editorial by NSERC President Tom Brzustowski

Two factors have created special challenges for NSERC this year. One is the peculiar fragmentation of the Canadian system for funding university research (see diagram on page 3), where NSERC provides the direct costs, the universities provide the indirect costs and the salaries of the principal investigators, and the Canada Foundation for Innovation (CFI) provides 40 cents on the dollar of the cost of new research infrastructure and facilities. The provinces are also involved because they provide the core university funding from which the universities pay their costs of being in the business of research, and private-sector partners and also some provinces contribute the required complementary funding on CFI projects. As well, the federal regional development agencies are funding partners with the CFI in some parts of the country.

The other consideration that is very challenging for NSERC this year is the timing of the announcement of new resources. The important recent investments in research announced

by the Government of Canada have helped to attract many excellent new researchers to our universities. The next step is to provide through the established NSERC programs the new funding that these people need to start their research, but there has been no federal budget this year to deliver the required funds.

The issue of fragmentation may have had the unfortunate effect of creating the appearance of a disagreement between NSERC and the universities where, in fact, none exists. Some university officials believe that NSERC and the universities should both be telling government that the funding priority must now be the indirect costs of research. However, NSERC's Council decided in January that priority had to be given to providing research grants to the very large number of new applicants who presented themselves for the February competition. We believe that it is very important for Canada that so many new professors in science and engineering want to do research here,

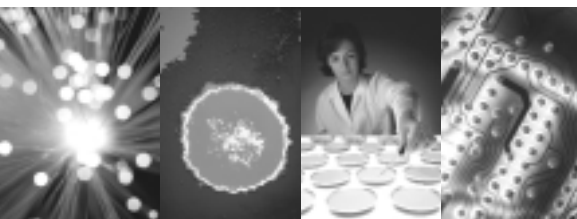
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sciences.

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ships among universities,  
governments and the  
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and it is essential that NSERC should give them resources that will at least allow them to get started.

Council's reasons are compelling. Canadian universities have started a massive renewal of faculty driven largely by demographics. They expect all of their new professors to be active in research, even if not all their predecessors were. As a result, NSERC saw an unprecedented jump in demand at the February competition; 761 out of a total of 3,038 applications came from first-time applicants. And the universities have told us that we should expect similar growth again next year.

NSERC is well aware that, because of the growing pressures on their core funding, the universities urgently need help in meeting the indirect costs of research. I personally have been making that point at every opportunity. We have even produced lists of specific expenses that the universities must meet to complement the funding provided through NSERC and CFI, in order to explain to decision makers the burden that the universities bear in the fragmented Canadian funding system. We have been clear and consistent: all the costs of research — direct and indirect — must be met adequately if Canada is to reap the great benefits of competitive university research in science and engineering. Within that total, however, NSERC's particular responsibility at the moment is only for the direct costs.

The timing issue has produced a challenge of another sort. The February competition was held within a total NSERC budget that was essentially unchanged from last year. There was no new money for this growth because there was no federal budget in February. Nevertheless, 567 of those 761 new applicants were funded, at 39% of what had been requested. This was done by very careful management of cash flow, but that approach comes at a price.

NSERC is not allowed to incur a deficit. That means that the extra money that was put into research grants for new applicants in the

February 2001 competition has to come out of other programs. We are now preparing a plan for doing this and will seek Council's approval for it in June. The details have not been set, but the general shape of the plan will very likely be as follows: no programs will be eliminated, but competitions in some programs will be suspended for a time. Deciding which competitions to suspend will depend partly on their timing; the research community will be notified far enough in advance so that people will not waste time preparing applications for competitions that might have to be cancelled. Applications already submitted will, of course, be considered.

The short-term effect of these moves would be to shift money into research grants from other parts of the NSERC budget.

However, such a plan might never need to be implemented fully, if at all. The Prime Minister has made a most welcome commitment to increasing the government's investment in R&D, with the very challenging national goal of moving Canada from fifteenth place to fifth on that scale. The importance of university research in science and engineering in Canada's innovation system is widely understood, and the need for funding it better and on a larger scale has been publicly acknowledged by ministers on many occasions. Attracting very highly qualified new professors to lead research in science and engineering in Canadian universities is a necessary condition for success, but it's not sufficient. We need them to make a long-term commitment to doing research and developing HQP in Canada, but to make that possible they must be given adequate and continuing resources to do the work.

If additional resources for NSERC are announced during the year, perhaps no competitions will need to be suspended. If adequate provisions for growth are announced in the budget of February 2002, we may need to suspend or delay only a small number of competitions planned for late 2001 and the first half

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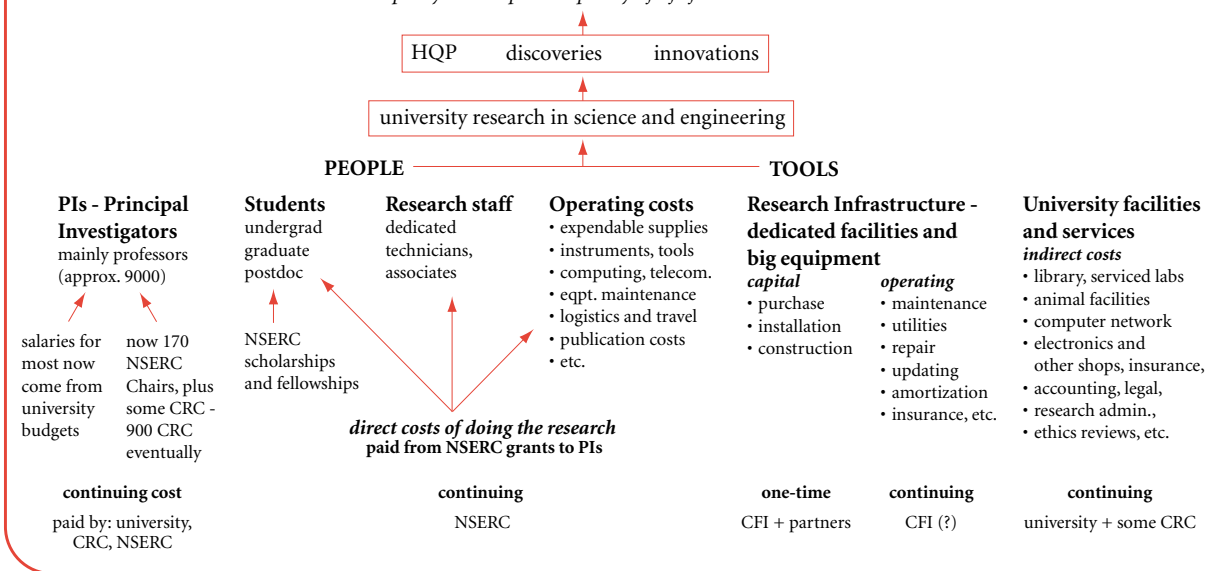
of 2002. In either case, the February 2002 competition for research grants would not be affected.

Canada is right to count on university research in science and engineering for important contributions to the future prosperity and well-being of Canadians. But to realize those contributions effectively, we need to

focus our will and our wit on improving the funding system for university research in Canada so that it might become more coherent, consistent, strategic and predictable. Fragmentation and unpredictability in research funding are indulgences that the country cannot afford if we are to reach the Prime Minister's challenging goal.

### How university research in science and engineering is paid for in Canada

Prosperity and improved quality of life for Canadians



## NSERC's eBusiness Project

### e-nabling! e-xtending! e-nriching!

NSERC's eBusiness Project has some ambitious aims:

- lighten the administrative load on researchers
- support and facilitate research collaboration and communication
- enhance accountability and transparency
- deliver services to its communities of interest more efficiently and effectively

The eBusiness Project is a priority at NSERC, with broad endorsement and an aggressive development schedule.

Specifically, it will enable applicants to submit their applications, including attachments, electronically by the fall of 2002 and to share the contents electronically with co-applicants and partners. It will also include an official electronic approval module for Research Grants Officers. And in the fall of this year, pilot versions of information-sharing tools for peer review committees will be on line. But these are only the first steps. The goal is to develop a broad range of easy-to-use and value-added electronic services — all delivered through a single electronic window.

In addition, NSERC is partnering with CIHR, SSHRC and other organizations to develop a common curriculum vitae for researchers.

## How to Partner With Europe

### Free Seminars Scheduled

NSERC is co-sponsoring four information seminars for Canadians interested in partnering with consortia involved in the European Union's R&D Framework Programs. The seminars are presented by the European Commission, in association with Canadian federal and provincial government partners.

The sessions are scheduled for different cities across Canada and will run between June 2001 and June 2002. Registration is free!

Visit NSERC's Web site for more information: [www.nserc.ca/intern/can\\_eu\\_e.htm](http://www.nserc.ca/intern/can_eu_e.htm).

### Attention researchers:

## NSERC's Literature Going Electronic

As announced last summer, print versions of NSERC's program literature are being replaced by electronic versions. These will be available on our Web site. Since the program guides and forms are also being revised, please make sure that you use the 2001 versions.

In May, our potential applicants for research grants were contacted by e-mail instead of being sent the pre-application material by mail.

Visit NSERC's Web site ([www.nserc.ca/forms/formtable\\_e.htm](http://www.nserc.ca/forms/formtable_e.htm)) for details on how to submit Form 180 (Notification of Intent to Apply for a Research Grant). This form may be completed using NSERC's On-Line System, or researchers may print a hard copy from the pdf version. For more information, contact your Research Grants Office or e-mail NSERC at [resgrant@nserc.ca](mailto:resgrant@nserc.ca).

# Competition News

## Research Grants Programs

In February, NSERC's Grants Selection Committees reviewed 4,701 applications for Research and Equipment Grants. Of those applications, 81.4 percent of the Research and 40.1 percent of the Equipment applications (including Major Equipment and Major Installation Grants) were recommended for support.

Here is a summary of commitments from the 2001 competition and instalments of grants awarded in previous competitions. It excludes a small number of awards still waiting for a final decision.

For a detailed list of awards and statistics, visit NSERC's Web site at [www.nserc.ca/about/factstat.htm](http://www.nserc.ca/about/factstat.htm).



(from left) Brian Tobin, Minister of Industry, Gilbert Normand, Secretary of State (Science, Research and Development), Kerry Rowe, Vice-Principal, Research, Queen's University, Thomas Brzustowski, and Richard Van Loon, President, Carleton University, at Carleton May 9, where the results of the nation-wide grants competition were announced.

## 2001 Grants Awarded, Including Instalments (in \$000)

Grants Selection Committee	Research Grants <sup>1</sup>		Equipment <sup>2</sup>	
	No.	\$	No.	\$
Animal Biology	210	6,798	14	930
Animal Physiology	189	7,387	28	1,067
Cell Biology	305	11,038	37	1,347
Molecular & Developmental Genetics	215	8,745	23	867
Plant Biology & Food Science <sup>3</sup>	306	11,871	50	1,852
Evolution & Ecology	482	15,155	44	1,380
Psychology: Brain Behaviour & Cognitive Science	406	11,229	36	916
Inorganic & Organic Chemistry	269	14,424	33	2,374
Analytical & Physical Chemistry	291	13,289	34	3,065
General Physics	132	5,211	7	598
Condensed Matter Physics	231	7,698	26	2,082
Space & Astronomy	166	6,625	6	173
Solid Earth Sciences	298	10,152	25	914
Environmental Earth Sciences	311	8,789	33	1,512
Pure & Applied Mathematics - A	304	4,966	2	108
Pure & Applied Mathematics - B	230	4,353	6	209
Statistical Sciences	264	5,318	6	338
Chemical & Metallurgical Engineering	499	15,901	45	3,434
Civil Engineering	499	12,730	42	1,950
Communications, Computers, & Components Engineering	354	9,388	13	845
Electromagnetics & Electrical Systems Engineering	279	8,562	18	814
Mechanical Engineering	530	13,277	44	1,767
Industrial Engineering	242	5,524	7	281
Computing & Information Science <sup>4</sup>	271	7,214		
Computing & Information Science A	183	4,070	13	486
Computing & Information Science B	239	6,322	13	504
Interdisciplinary	91	2,400	8	330
Selection Committee on Research Grants			17	7,566
<b>Sub-Total</b>	<b>7,796</b>	<b>238,436</b>	<b>630</b>	<b>37,710</b>
Subatomic Physics <sup>5</sup>	137	15,095	10	753
<b>Total</b>	<b>7,933</b>	<b>253,531</b>	<b>640</b>	<b>38,463</b>

<sup>1</sup> Includes individual, group, projects, institutes, and grants to holders of Women's Faculty Awards.  
<sup>2</sup> Includes Equipment, Major Equipment and Major Installation Grants.  
<sup>3</sup> Includes multidisciplinary network group grants.  
<sup>4</sup> Historical committee.  
<sup>5</sup> There are also 7 Major Facilities Access (MFA) awards in Subatomic Physics totalling \$846.9K.

## High-Quality Proposals Submitted: Genomics and Health Research

### Genomics Projects

In the second Genomics Projects competition, NSERC received 54 proposals requesting \$8 million in year one. Budget, not quality, meant that only 11 projects could be funded, for a success rate of 21 percent and an average annual award of \$150,000.

A detailed list of awards is available on NSERC's Web site at [www.nserc.ca/news/2001/p010507\\_t.htm](http://www.nserc.ca/news/2001/p010507_t.htm).

### Collaborative Health Research Projects (CHRP)

NSERC received 63 applications in the second CHRP competition. Twenty-seven applications were funded for a success rate of 43 percent and an average annual award of \$91,000.

The CHRP program supports collaborative research projects in the NSE, with the potential to lead to health benefits for Canadians.

A detailed list of awards is available on NSERC's Web site at [www.nserc.ca/programs/result/2001/chrp/chrp.htm](http://www.nserc.ca/programs/result/2001/chrp/chrp.htm).

### TIPS...

For tips on how to write a winning research grant proposal, visit our Web site at [www.nserc.ca/programs/winprop\\_e.htm](http://www.nserc.ca/programs/winprop_e.htm).

### TIPS...

For tips on how to prepare a winning scholarship or fellowship proposal, visit our Web site at [www.nserc.ca/programs/sf/pgs\\_pdf\\_tips\\_e.htm](http://www.nserc.ca/programs/sf/pgs_pdf_tips_e.htm).

## Scholarships and Fellowships Competition Results

Winners of NSERC scholarships and fellowships are among Canada's best and brightest young researchers and many will go on to be leaders of government, industry and academia.

In February, six scholarships and fellowships selection committees reviewed more than 3,200 applications for support at the graduate and postdoctoral levels. Candidates were assessed on their academic excellence, research ability and potential, and leadership and communication skills. Following the committees' deliberations, NSERC offered 1,689 Postgraduate Scholarships (PGS) and 235 Postdoctoral Fellowships (PDF).

The competition results are shown in the table below.

Selection Committee	Award Type	Number of Applications	Number of Awards	Success Rate (%)
Engineering	PDF	99	35	35.4
	PGSA <sup>1</sup>	277	182	65.7
	PGSB <sup>2</sup>	155	99	63.9
Computer & Mathematical Sciences	PDF	60	22	36.7
	PGSA	306	199	65.0
	PGSB	150	98	65.3
Physics & Chemistry	PDF	131	47	35.9
	PGSA	207	134	64.7
	PGSB	178	116	65.2
Earth Sciences & Ecology	PDF	122	45	36.9
	PGSA	243	157	64.6
	PGSB	150	98	65.3
Cellular & Molecular Biology	PDF	105	38	36.2
	PGSA	305	197	64.6
	PGSB	181	120	66.3
Life Sciences & Psychology	PDF	119	48	40.3
	PGSA	288	178	61.8
	PGSB	174	111	63.8
Total	PDF	636	235	36.9
	PGSA	1626	1047	64.4
	PGSB	988	642	65.0

<sup>1</sup> Scholarship support during the first and second or second and third years of graduate study.

<sup>2</sup> Scholarship support during the third and fourth or fourth and fifth years of graduate study.

## Canadians Collaborating Around the World

Many of the **Collaborative Research Opportunities** (CRO) projects funded by NSERC are interdisciplinary and all include international partners. Most frequent are collaborations with colleagues in the United States, Japan, Germany, France, Italy, Norway and Portugal.

Team sizes vary from 2 to 29, with an average of 9 members. There are 145 Canadian co-applicants representing 30 universities and 18 Canadian co-applicants representing 6 other Canadian institutions participating in CRO projects.

Since the program was launched in 1999, 93 applications requesting \$20.1 million in the first year of multi-year projects have been reviewed; NSERC has approved 25 awards for a total of \$4.9 million — a success rate of 26.8 percent and a funding rate of 24.3 percent. The awards range from \$76,000 to \$420,000 annually and average approximately \$170,000.

The list of CRO awards for 2000-2001 is on NSERC's Web site at [www.nserc.ca/programs/result/2001/rg/364.htm](http://www.nserc.ca/programs/result/2001/rg/364.htm).

## Environmental Research to Get a \$21.7 Million Boost from NSERC

Recently the Honourable Gilbert Normand, Secretary of State (Science, Research and Development) announced an investment of \$21.7 million to launch three new research networks to build the critical mass and interdisciplinary teams necessary to address complex issues in the field of environmental studies. Following a rigorous peer review the three new networks are:

- The **Collaborative Mercury Research Network (COMERN)**, under the leadership of Dr. Marc Lucotte at the Université du Québec à Montréal, which will improve our general understanding of mercury in ecosystems and the risks to those who eat fish (NSERC award of \$12.6 million).
- The **Climate Variability Network (CLIVAR)**, under the leadership of Dr. Jacques Derome at McGill University, which will improve the understanding and prediction of climate change (NSERC award of \$2.5 million).

- The **Biocontrol Network**, under the leadership of Drs. Raynald Laprade and Jean-Louis Schwartz at the Université de Montréal, which will address the challenge of controlling pests and diseases in greenhouse and nursery plant industries by developing novel strategies that are environmentally friendly (NSERC award of \$6.6 million).

These new networks will bring together more than 100 researchers and nearly 200 graduate students and postdoctoral fellows in research programs involving 25 universities and various partner organizations from the public and private sectors.

For more information, visit NSERC's Web site at [www.nserc.ca/news/2001/p010502.htm](http://www.nserc.ca/news/2001/p010502.htm).

(Competition News, continued on page 8)

# NSERC's Scholarships and Fellowships: New Survey Reveals Big Return on Investment

The data is in: NSERC's most recent participant surveys clearly confirm that its suite of scholarship and fellowship programs, combined with its support for researchers, is a good investment.

Together, these programs are ensuring Canada's future capacity for research and innovation. As the survey of former NSERC award-holders shows, NSERC "alumni" drive innovation in many spheres of Canada's S&T business and academic communities.

## Undergraduate Student Research Awards Program

The USRA student survey provides strong support for the program's rationale (see box).

### Undergraduate Student Research Awards (USRA)

#### Objectives

- To stimulate undergraduates' interest in research careers
- To encourage them to consider graduate studies
- To encourage them to pursue careers in R&D

#### Support level

- Financial support for four months to gain research experience in an industry or university setting

#### Program budget

- \$13 million annually

#### Scope

- Approximately 3,000 students annually

Of the 1,672 USRA students who responded, 65% reported that they accepted their USRA support because it was linked to their career goal, while 23% were attracted by the money provided (the industrial supplement can be generous).

Their general level of satisfaction was high: 85% rated their experience as "good" to "outstanding," while only 1% scored their experience as "less than fair."

Most respondents were happy with opportunities to acquire both theoretical and practical experience, including R&D skills (86%), practical techniques and methods (79%), theoretical knowledge (77%), and learning to operate equipment and instruments (70%).

In addition, 47% acquired management skills — welcome experience for future jobs. They were nearly unanimous (93%) in their satisfaction with both supervision and instruction.

Did the USRA experience maintain or increase their interest in pursuing a career in R&D? Yes: 84% of the

respondents reported that the program increased (43%) or maintained (41%) their interest. Those whose stints took place in industry felt a similar pull towards a career in research.

Of the whole group:

- 83% said they would pursue a higher research-oriented degree, such as a Ph.D. (51%) or Master's (32%); and
- nearly 50% said that their USRA experience influenced these decisions.

Respondents also felt that their employment prospects improved: 90% of the industry-based award holders and 71% of those in universities credited their USRA participation with improving their chances of permanent employment.

Will these graduates stay in Canada? Probably:

- 71% of the industry USRA students, and 65% of the university students plan to remain here after completing their Bachelor's degree.
- Of those who intend to leave Canada, 62% will do so to broaden their experience by attending graduate school, while only 22% will leave to pursue job opportunities.

To be continued: see *Contact*, Fall 2001.

## Research Partnerships Programs: Reorganization A new structure and a new approach

April saw the launch of a new organizational structure for the Research Partnerships Programs (RPP) Directorate. More than a new structure, it's a new approach designed to facilitate access to NSERC's partnership programs by providing researchers and their partners with a single point of contact to respond to their needs.

"We have moved from a structure in which a program officer delivered only a part of the RPP programs to researchers in all fields, to a structure where a program officer works closely with a particular segment of the research community and delivers all RPP programs," said RPP Director General Janet Walden.

"Our new structure focuses on service to clients within community groupings, offering the full range of RPP programs

and services to clients conducting research within broad groupings or sectors," she added. "This way, we get to know the researchers, trends and needs for different segments of the community, and the researchers get to know their point of contact in RPP."

As part of this structural change, workflow and processes were examined to ensure the most efficient use of resources and

to support expansion of functions, including greater interaction with clients, increased program marketing, and greater intelligence gathering leading to more effective programs and policies.

A complete listing of sectors covered by each of the three major client community divisions and contact names and numbers can be found on our Web site at [www.nserc.ca](http://www.nserc.ca). Here's a glimpse:

Director General Research Partnerships Programs Directorate Janet Walden (613) 996-1545 <a href="mailto:janet.walden@nserc.ca">janet.walden@nserc.ca</a>		
Director Information, Communications, and Manufacturing Sectors Margaret Caughey (613) 992-5619 <a href="mailto:margaret.caughey@nserc.ca">margaret.caughey@nserc.ca</a>	Director Bio-Industries Krystyna Miedzybrodzka (613) 947-9452 <a href="mailto:krystyna.miedzybrodzka@nserc.ca">krystyna.miedzybrodzka@nserc.ca</a>	Director Environmental and Natural Resources Sectors André Isabelle (613) 992-5641 <a href="mailto:andre.isabelle@nserc.ca">andre.isabelle@nserc.ca</a>

# More SPARKs Set to Fly

Alberta, Lethbridge, Saint Mary's and York universities were the successful applicants in NSERC's recent SPARK (Students Promoting Awareness of Research Knowledge) competition.

Eighteen institutions are now participating in the NSERC program, which began three years ago as a pilot project. Based on the University of Guelph's award-winning SPARK program, it was designed to train students in various aspects of communications and to promote research news to the public. Through NSERC's SPARK program, students are recruited, trained and paid to write stories based on the NSERC-supported research at their university.

Here is a story by a SPARK student writer. For others, visit [www.nserc.ca/science/spark/index.htm](http://www.nserc.ca/science/spark/index.htm).



## Newsbureau Working for You

The NSERC Newsbureau team generated an unprecedented level of media coverage in the first months of 2001. Here are a few examples.

- McGill's Dan Levitin's work on psychology and music was featured extensively on TV and radio and in various print media. Over the Easter weekend, he and Dalhousie's John Connolly were the top stories on consecutive editions of *@discovery.ca*. John, whose neural imaging techniques are used to assess brain damage and treat dyslexia, was also busy giving radio and press interviews in Halifax.
- University of Saskatchewan mathematician Jamie Campbell received considerable radio and press coverage, including the *Globe & Mail* (front page) and Singapore's top English-language newspaper.
- University of New Brunswick's Eric Hildebrand enjoyed radio and press coverage in New Brunswick, Nova Scotia and Montreal for his research into elderly rural drivers.
- The *Ottawa Citizen* prominently featured Université Laval biologists Jean Huot and Christian Dussault and their findings on heat-stressed moose.

### Evolutionary wonders

#### Upside-down lizards and long-lost marine life

By Alexandra Venter  
SPARK student

How does a gecko walk across the bottom of a leaf without falling off? How did ancient reptiles swim? U of C zoology professor Tony Russell (right) has been asking questions like these throughout his career.

Russell, who began teaching at the University of Calgary in 1973, likes to study topics that make people say "gee-whiz!" His interest in natural oddities extends to both living and extinct organisms, and he uses his knowledge of each to "reciprocally illuminate each other."

Russell's recently completed project on geckos and anoles, also known as American chameleons, has captured nationwide attention. The aim of this NSERC-funded project was to understand how these different critters manage to stick to smooth surfaces so well.

Russell's research team found that both lizards use essentially the same mechanism to complete the task, despite being genetically unrelated.

Neither lizard uses suction or secretions to cling. Instead, the amazing sticking ability is due to intermolecular forces of attraction. With each step, the gecko's foot uncurls like a party horn, flattening tiny hair-like projections called setae on the pad of the foot. The tip of each seta may be further split into a thousand spatulae, so small they are only visible using an electron microscope.

It turns out that the cumulative effect of the weak atomic bonding between each spatula and a surface is enough to keep the gecko firmly affixed.

Researchers from the University of California at Berkeley, Lewis and Clark College in Oregon, and Stanford University have depended on Russell's work on the mechanics of gecko locomotion in their studies, in which they have measured the force of attraction of a single seta to an aluminum wire.

Russell says that anoles walk in a mechanically slightly different way than geckos, but have similar, although independently derived setae, on their feet. The fact that anoles and geckos use such a similar mechanism to adhere to surfaces intrigues Russell. This likeness in function is an example of evolutionary convergence and constraint, he explains.

Russell's work on living reptiles complements his long-standing love of dinosaurs and other extinct animals.

"You can't learn more about fossils than you can know about living organisms," he says.

The recent discovery of several rare marine fossils in the tar sands in Fort McMurray has Russell very excited. Russell, who is also a research associate of the Royal Tyrell Museum of Palaeontology at Drumheller, will be studying the find with Elizabeth Nicholls of the museum and a team of graduate students.

The find includes both plesiosaurs and the first ichthyosaurs dating from the lower Cretaceous period ever to be discovered in Canada. (Plesiosaurs resembled the Loch Ness monster, while ichthyosaurs looked more like dolphins.) Other ichthyosaurs of similar age have been found in Germany and Australia.

Once the specimens are prepared — a process that will take thousands of hours — Russell hopes they will help him to understand more about patterns of diversity among these organisms.

"For any fossil organism you can never know what happened, but there's a desire for us to try and understand as best we can how those organisms may have behaved and functioned and lived their lives."

*Alexandra Venter recently defended her master's thesis in the Faculty of Science and is a writer with the U of C SPARK program (Students Promoting Awareness of Research Knowledge).*

## **Julie Payette-NSERC Research Scholarship Awards Reward Leadership and Excellence**

Twenty-four outstanding graduate students have recently been awarded Julie Payette-NSERC Research Scholarships. These scholarships, awarded for the first time in 2000, are offered to the four best candidates reviewed by each of six discipline-based Scholarships and Fellowships selection committees.

Canadian astronaut and NSERC Council member Julie Payette was invited to lend her name to this program because she embodies the leadership qualities and excellence that NSERC encourages and supports.

Winners are chosen for their academic excellence, their research ability and potential, and their leadership and communication skills. They come from all NSERC-supported disciplines and represent Canada's bright future in science and engineering.

These scholarships are valued at \$25,000 per year for two years. The 2001 winners are listed on NSERC's Web site, at [www.nserc.ca/programs/julie\\_e.htm](http://www.nserc.ca/programs/julie_e.htm).

## **Call for Nominations**

**NSERC invites your nominations for the 2002 Steacie Fellowships. The awards honour outstanding scientists and engineers who already enjoy a reputation for original research in the early stages of their careers.**

**Successful Fellows are relieved of teaching and administrative duties for two years so that they can devote all their time and energy to research.**

**The deadline for nominations is July 1.**

**For more information, visit NSERC's Web site at [www.nserc.ca/about/award\\_nomin\\_e.htm](http://www.nserc.ca/about/award_nomin_e.htm).**

# **NSERC Going Back to School**

## **Site Visits Scheduled for the Fall**

NSERC Research Grants staff and Grants Selection Committee members will visit a number of postsecondary institutions this fall to brief administration and faculty members on recent NSERC developments, hold grantsmanship sessions and meet researchers. The visit schedule is posted on NSERC's Web site at [www.nserc.ca/programs/rgvisit2001\\_e.htm](http://www.nserc.ca/programs/rgvisit2001_e.htm).

Scholarships and Fellowships staff will also be on the road to promote their programs and brief university staff on recent developments. They will be in Toronto and Quebec City Sept. 12, and in Halifax and Vancouver Sept. 21.

Information about the visits will be available at your university in August and September, or you can contact Louise Benoit, NSERC Site Visit Coordinator, at (613) 996-2985 or [louise.benoit@nserc.ca](mailto:louise.benoit@nserc.ca).

# **A Chair's Legacy**

## **NSERC Industrial Research Chair Program's Long-Term Success**

Dr. Rung Bui is excited. After more than a decade as holder of an Industrial Research Chair (IRC) at the Université du Québec à Chicoutimi (UQAC), he can proudly testify to the long-term benefits of the NSERC IRC program. And what benefits!

Under Dr. Bui's leadership, UQAC became an international centre for aluminum research and a familiar stopover for researchers going to and from North American meetings. The university received numerous international and national awards (including a Synergy award), and exported its technology to several countries. The United Nations Industrial Development Organization (UNIDO) chose UQAC to set up a new aluminum research program in India and a similar program in the United Arab Emirates. In addition, the National Research Council (NRC) is building its new Advanced Aluminum Technology Centre on the UQAC campus — an initiative that will provide 80 high-tech jobs. And to top things off, the university recently launched a brand new Ph.D. program in engineering.

Dr. Bui became an industrial research chairholder in 1990, assuming a five-year mandate to undertake research planning, supervise the program's researchers and graduate students, carry out his own research and provide a key contact point for the industrial researchers at Alcan International Limited, UQAC's industry partner. In 1995, when the Centre québécois de recherche et de développement de l'aluminium joined the partnership, Dr. Bui's mandate was renewed for an additional five years.

Today, while still an industrial research chairholder, Dr. Bui is also an emeritus professor at UQAC. The new emeritus professor has definite plans for the future, which include supporting even more extensive collaboration with industry partners and NRC, and sharing equipment and facilities.

For more information about NSERC's IRC program, including application and review procedures and selection criteria, please visit the NSERC Web site at [www.nserc.ca/programs/resguide/2a531\\_e.htm](http://www.nserc.ca/programs/resguide/2a531_e.htm).