SFU’s annual Research Luncheon was held at the Wosk Centre for Dialogue this year. President Michael Stevenson and Vice-President, Research Mario Pinto welcomed guests from private and public sector organizations, government, and members of the media to celebrate SFU’s research achievements over the past year and recognize our community partners. SFU researchers from a wide range of fields were seated with guests at each table to describe some of the exciting research projects currently underway and to explore potential new synergies.

The featured speaker was Dr. Zamir Punja, Professor of Plant Pathology/Biotechnology in SFU’s Department of Biological Sciences. Dr. Punja’s research involves the improvement of food crops using techniques in biotechnology, genetic engineering, and novel methods for disease control. On this occasion, he described his investigations of the pharmacologically active compounds in ginseng, an important herbal plant that has been cultivated for centuries in Asia and is widely used in traditional Chinese medicine. Many people don’t realize that there are two main types grown worldwide: Asian ginseng (Panax ginseng) which provides a “warming” effect (yang), and North American ginseng (Panax quinquefolius) which provides a “cooling” effect (yin).

Canadian-grown ginseng is now receiving brand recognition in Asia, and ginseng cultivation is well-established in British Columbia. As it takes four to six years of growth to produce a marketable root, the industry is very interested in Dr. Punja’s research on a method for cloning ginseng, which has the potential to provide plants rapidly and with a reduced impact on the environment. Dr. Punja is also working on DNA-based methods to assess the genetic diversity in ginseng, and experimenting with genetically modified ginseng for potential enhancement of the plants’ resistance to disease, which cost the industry a $3 million reduction in the value of the 2003 crop. Dr. Punja’s work is supported by Science and Engineering Research Canada (NSERC) and the BC Innovation Council.

Focus on Ginseng at SFU’s Research Luncheon

Dr. Mario Pinto, SFU Vice-President, Research, and Dr. Zamir Punja, SFU Department of Biological Sciences

The Role of a Project Manager

SFU researchers have been successful in obtaining funds for a number of large-scale, networked projects. In some cases, these projects involve more than a dozen co-investigators located across Canada and abroad. SFU project leaders face great responsibility in the administration of these projects; they are challenged not only to coordinate the research itself, but also to be ultimately responsible for overall reporting and financial management activities. A wide range of administrative and management skills are needed to run large-scale research projects and, knowing this, many funding sponsors require applicants to incorporate project management methodology into their research proposals. Project leaders on such large-scale projects need skilled project managers to assist them, particularly with the complexities of financial planning, administration, reporting, communications, and coordination with University procedures. A good project manager’s contribution is essential to the successful outcome of the research and to the likelihood of receiving renewed or future funding.

As SFU has fiduciary responsibility for the management of research project funds, project managers need to develop effective working relationships with staff in Research Accounting and Research Services, and to understand the roles and responsibilities of those offices with respect to financial oversight, including the transfer of funds to co-investigators’ institutions.

What are the typical responsibilities of a project manager? What knowledge
MESSAGE FROM THE VICE-PRESIDENT, RESEARCH

I am delighted by the changing face of research at SFU: the success of our researchers is bringing returns on the significant investments made in our research infrastructure in recent years. Our physical infrastructure has been enhanced by a total of over $68 million in projects funded since the establishment in 1997 of the Canada Foundation for Innovation (CFI) and the BC Knowledge Development Fund (BCKDF) that matches the CFI contributions. Twenty-nine researchers to date have received start-up grants through the CFI New Opportunities fund. Our large-scale CFI/BCKDF projects include 4D Labs, recently awarded the largest CFI grant ever made to SFU; the Centre for Interdisciplinary Research in Mathematical and Computational Sciences (IRMACS); the Laboratory for Advanced Spectroscopy and Imaging Research (LASIR); and the Scientific Computing and Imaging Research Facility (SCIRF). SFU also hosts the head office of the federal Network of Centres of Excellence in the Mathematics of Information Technology and Complex Systems (MITACS), which has just received a renewal of its mandate with a 50% increase in funding for the next four years, the largest award made to any of the networks (see the article on MITACS in this issue).

With support from the federal Indirect Costs program and from SFU’s Discovery Park, SFU has invested in enhancements to the human infrastructure that supports our researchers. Research Grants Facilitators in each Faculty, together with staff in Research Services and in Research Accounting, assist researchers in identifying funding sources, and securing and administering research funds.

In the last year our researchers have achieved some outstanding successes. They have won three of a total of only seven awards made nationally by the Social Sciences and Humanities Research Council’s (SSHRC) Initiative on the New Economy (INE), as well as two awards from SSHRC’s most recent competition for Community-University Research Alliances (CURA). Support from BCKDF, Western Economic Diversification Canada, and the BC Ministry of Children and Family Development has been secured for the installation of a state-of-the-art magnetoencephalograph (MEG) at the Down Syndrome Research Foundation, in partnership with VSM MedTech. Through the BC Leading Edge Endowment Fund competition, we have received funding for Leadership Chairs in Cognitive Neurosciences and Salmon Conservation, and have secured the matching funds necessary for both. In the latest operating grants competition of the Canadian Institutes for Health Research (CIHR), the proposals submitted by SFU’s four grantees received some of the highest scores in Canada, and SFU’s success rate of 36% was well above the national average of 28%. SFU researchers achieved a 79% success rate in the last Science and Engineering Research Canada (NSERC) Discovery Grants competition, and a 42% success rate in the SSHRC Standard Research Grants competition, again above the national average of 40%. With the assistance of Technology Managers in our University/Industry Liaison Office, we have achieved an 86% success rate for proposals to the NSERC Idea to Innovation (I2I) program that funds research and development leading to technology transfer to Canadian companies.

Further evidence of our growing strength in health research is our overall success rate of 35% for career awards from the Michael Smith Foundation for Health Research (MSFHR) compared with the BC average of 30%, and our 2003 trainee award success rate of 35% versus the BC average of 27%. SFU researchers are project leaders in the MSFHR Networks for Aging Research and Women’s Health Research.

The University has made a further investment in human infrastructure by providing support for the position of Awards Facilitator. Through nominating our outstanding researchers for external awards and prizes, we celebrate their achievements and bring further renown to the University. In the longer term, SFU researchers invited to serve on external committees will give us a competitive edge through the invaluable knowledge and experience they acquire. Some very prestigious awards have been won by SFU researchers this year: three of the 14 Killam Research Fellowships awarded nationally by the Canada Council for the Arts, and one of the six NSERC Steacie Fellowships. In addition, one more Fellow was elected to the Royal Society of Canada from SFU. Such awards bring honour not only to the individuals but also to the University.

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and experience are needed for this type of work? What makes a project manager successful?

Project managers should have administrative and management skills that enable them both to assist and to inform the project leader. It is particularly important that their skills complement the strategic planning skills of the project leader. Their role is to inform the project leader of what’s involved in managing the grant, including planning, budgetary control, financial management, deadlines, and timely completion of all required reporting. Project managers must be able to interpret and complete financial reports accurately, establish realistic and appropriately detailed budgets, and monitor and report on expenditures for the project.

The work of a project manager involves regular interaction with SFU administrators, researchers, collaborators, partners and students associated with the project; oversight of various internal and external reporting obligations and deadlines; and management of a portfolio of external relationships with universities, government and the private sector. The project manager often plays a major role in hiring and supervising technical staff and students, event planning, and oversight and maintenance of the project Web site. The project manager must be familiar with the sponsor’s regulations, including those pertaining to allowable expenditures, budget carryover and deviation, reporting requirements and required supporting documents. s/he also reviews processes in order to prepare
MITACS: Looking Forward

MITACS, the Mathematics of Information Technology and Complex Systems, is a federal Network of Centres of Excellence specializing in the development of sophisticated mathematical tools and methodologies for Canadian industry, business, and government. MITACS sponsors 35 research projects at 38 Canadian universities including SFU. These projects are partnered with 145 organizations spanning Canada’s economic and social sectors.

Launched in February 1999, the network was based first at the University of Toronto. The move to Simon Fraser University came in Fall 2000 after SFU computing science professor Arvind Gupta became Scientific Director. In Fall 2004, MITACS funding was renewed for a second term by the federal government. The funding renewal was announced by Member of Parliament Hedy Fry on behalf David Emerson, Minister of Industry, at a special press conference and reception hosted by SFU President Michael Stevenson. Because of its outstanding research program, MITACS will receive $21.6 million over four years, the largest amount awarded to any network. The NCE program requires a mid-term review in each seven-year period; a positive evaluation would mean a further award of $16.2 million, for a total investment of $37.8 million from the federal government.

With its mandate extended to 2012, MITACS is now looking to the future. While expanding its substantial core research program, it is also developing new initiatives. Chief amongst these are the proposed creation of two new networks—a fuel cell network to cement Canada’s lead in this burgeoning industry, and a cyber security network reflecting Canada’s prominence in telecommunications. Both are expansions of existing research projects funded by MITACS. Each will be managed by MITACS, connecting researchers from across Canada and incorporating relevant and synergistic research from a range of projects, disciplines and universities under one research theme.

While targeted research projects are at the core of the MITACS strategic plan, novel training programs are key components. Students need to be trained in a multidisciplinary environment to ensure that they are prepared for a rapidly changing world, and issues of recruitment and retention must be addressed. The innovative MITACS Graduate Internships Program is one way of assuring that these goals are met. In this program, graduate students and postdoctoral fellows undertake research in an environment that tightly couples academic and industrial research. The expanded program already has the strong endorsement of Western Economic Diversification Canada, the Governments of British Columbia and Alberta, and the western Canadian universities. MITACS is currently promoting this initiative to SFU faculty and graduate students for 2005-06. It is expected that SFU will benefit from a minimum of five internships in the first full year of the program and an additional five internships in the second year, representing $150,000 of funding over the two years. SFU may also expect a share of the additional 24 internships available in BC over the following two years.

SFU’s role in MITACS extends far beyond hosting the head office, to being a major research node of the network. Of the 35 MITACS projects in universities across Canada, three are currently led by SFU researchers and a total of ten count SFU scientists as team members.

During its five years at SFU, MITACS has grown from an exciting concept to a mature organization that links together exceptional scientists from across the country. By 2012, MITACS will have achieved its vision of institutionalizing the mechanisms that support training, delivering, transferring, and commercializing mathematical power, allowing Canada to take a leadership role in embracing the mathematical sciences as the enabling technology for a knowledge-based economy. SFU is well-placed to be at the forefront of this transformation.

For more information on MITACS and a list of the projects, project leaders and investigators, see www.mitacs.ca.

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budgets and financial reports on time, with supporting documents needed to meet internal SFU requirements as well as those of the sponsor.

The project manager assists the project leader by reviewing and consolidating financial reports from all participants for submission to Research Accounting in advance of the funding sponsor’s reporting deadlines. This involves working closely with all project participants to ensure that these financial reports are received prior to the specified deadlines, are complete and accurate, and meet any audit requirements of the sponsor. The project manager must be readily available to respond to questions and resolve issues relating to the financial reports, including questions from auditors.

A project manager spends a significant amount of time and effort on account transactions and monitoring, for which a background in accounting or bookkeeping is essential. Just as important is a working knowledge of SFU’s policies and procedures for carrying out the transactions involved in such day-to-day processes as putting people on the payroll, purchasing equipment, and ensuring access to facilities at SFU.

Good project management involves collaboration, communication and the ability to help people to work as a team. While the collaborative skills of the project leader are essential
FUNDING LINKS

SUMMER GRANTS COMPETITION DEADLINES

The Office of Research Services (ORS) routinely receives and forwards new funding opportunity information to our list members (nserc-list@sfu.ca, sshrc-list@sfu.ca, cihr-list@sfu.ca). For more information, please check the ORS web site (www.sfu.ca/ors) and follow the links from Funding Opportunities to Funding Announcements Archive.

Please note that all letters of intent (LOI) and applications, whether paper or electronic, must be approved by the ORS using a form called the SFU Research Funding Application Cover Signature Sheet prior to the submission of the LOI or application to the agency with the exception of registration with an agency. This form can be found at www.sfu.ca/ors/sig.html and must accompany a copy of the application for ORS records. Applicants are strongly advised to allow sufficient lead time for consideration and approval at each level.

The Office of Research Services advises budgeting for project management in the initial application for external funding of large-scale projects. When a researcher has been successful in obtaining large-scale research funding, but administrative costs are not allowed by the granting agency as part of the budget, the Office of the Vice-President, Research may be requested to provide financial assistance in the form of a Discovery Parks Research Program Administration Grant. See http://www.sfu.ca/vpresearch/RPAGrant.html for more information.

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to the successful outcome of the project, an effective project manager can free the project leader’s time to achieve the primary goals of the research itself.

Note to Project Leaders
The Office of Research Services advises budgeting for project management in the initial application for external funding of large-scale projects. When a researcher has been successful in obtaining large-scale research funding, but administrative costs are not allowed by the granting agency as part of the budget, the Office of the Vice-President, Research may be requested to provide financial assistance in the form of a Discovery Parks Research Program Administration Grant. See http://www.sfu.ca/vpresearch/RPAGrant.html for more information.

Project Management Workshop Planned
The Office of Research Services (ORS) will host a half-day workshop aimed at giving those involved in research projects a better understanding of project management fundamentals including:

• Team leadership skills and techniques
• Planning techniques and tools
• Risk identification and management

The workshop is directed both to project leaders and to those who assist them in managing large-scale projects.

Workshop Leader: Rebecca Bateman, Ph.D., Certificate in Project Management

Date: Wednesday, August 10, 2005, 1:00 – 5:00 p.m.
Registration is required; contact ors@sfu.ca.