

## Report of the Vice-President Research University of Saskatchewan

### Review of Activities - January 2006

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#### Purpose and Overview

This Report is intended to provide an opportunity for interested parties in the University community (as well as our external partners) to offer feedback on current programs and services, and to assist in ensuring that future possible and planned initiatives are strongly related to the institution's research, scholarly and artistic mandate. The Report is not a comprehensive summary of all activities, but instead highlights specific goals, actions and tasks that may benefit from discussion and feedback in a wider consultative approach.

The Office of the Vice-President Research (OVPR) continues to develop an institution-wide agenda aimed at intensifying research, scholarly and artistic (RSA) activities, and enhancing research culture at the University of Saskatchewan. These developments are considered within the broader context of the strategic priorities of the University (e.g., Strategic Directions, Integrated Planning) and goals of the OVPR (See *Appendix I* for a summary of the seven areas of priority confirmed at the OVPR Executive Retreat in September 2004). Beginning in July 2003, the OVPR has engaged in a broad spectrum of activities which have included developing services to assist University researchers in successfully pursuing grant, contract and knowledge transfer activities; translating knowledge and innovations in the public and private sphere; obtaining infrastructure support; and ensuring that scholarly successes are celebrated in both the internal community and in provincial, national and international arenas. OVPR efforts have emphasized proactive services to faculty and graduate students to address obstacles which may hamper researchers' efforts. The OVPR is placing a growing emphasis on assisting members of the scholarly community in exploring new programs or collaborations. As the University enters the final two years of the 2003-2007 Integrated Planning cycle, the OVPR will assess and, if necessary, modify past initiatives to ensure appropriate benefits have been obtained. For example, the OVPR will, in consultation with the Centres Forum and other collegial discussion groups, launch a strategy for the effective management of research centres. In 2006, a new initiative to lead university-wide efforts in the development of a *U of S Chairs Program* will be launched; and efforts to describe the U of S research, scholarly & artistic landscape will be completed. In addition, it has become clear that the OVPR should assume a greater role and leadership in the development of a targeted partnership strategy to enhance national and international research opportunities and to develop the University's profile in these broad areas. Over the next few months, the OVPR will explore this potential and propose a new framework to maximize national and international research partnering activities for the benefit of our scholarly community.

A central responsibility of the OVPR is to ensure that University decision-making and collegial processes at all levels are informed by the research, scholarly and artistic agenda. With this objective in mind, active participation of the OVPR research leadership team on major planning forums (PCIP, PEC, Deans' Council, Council Committees) and in the development of the remaining foundational documents (*Teaching & Learning, Changing Structures, Complement Plan, and Outreach and Engagement*) remains a priority. The 2005-06 year will see completion of the OVPR College visits initiative and continued work with the Associate Deans Research and Centres Forums.

#### New Initiatives

##### Research and Innovation Centre

With the leadership of the Industry Liaison Office, the OVPR is developing a proposal for a U of S Research and Innovation Centre primarily designed to house industry liaison and early stage incubation facilities for start-up companies. The new facility will also provide a much-needed home for research

services and research communications. The proposal will detail plans to secure external capital and operating funds to enhance the university's efforts to add value to promising innovations and to move those innovations to local start-up companies. Work has begun on developing a plan for space, completing a study on the type and amount of space required for incubation, developing a preliminary operation plan for the incubator, and coordinating with campus and external stakeholders.

#### University of Saskatchewan Chairs Program

The OVPR, in collaboration with the Vice-Provost and the Vice-President University Advancement, will develop a strategy to increase the University's national and international competitiveness through a new University of Saskatchewan chairs program. A multi-faceted program, articulated in the Integrated Plan, is envisioned with the aims of (1) assisting units in attracting faculty with international and national reputations; (2) retaining exceptional faculty; (3) providing funds to leverage external support for chairs; and, (4) recognizing outstanding scholarly achievements. A draft discussion paper will be available in February 2006.

#### Developing International Partnering Opportunities

The OVPR is increasingly called upon to create and participate in opportunities to develop national and international partnerships with government, educational institutions and industry. These partnerships are key to supporting and expanding the University's research agenda. Following a number of missed opportunities in 2003-04 (e.g. Brazil), and recognizing that the University needed to establish and enhance its presence on the national and international stage, the OVPR increased efforts to respond to requests from both the private and government sectors to participate in trade missions and collaborative discussion opportunities. In the last 18 months, representatives from the OVPR led or were involved in: the California-Canada Summit on Future Strategic Partnerships in Research; ABIC 2004 (Europe); Bio 2005 Trade Mission (USA); Malaysia Mission; India Trade Mission led by Industry Canada and NRCAN; Launch of University Advancement campaign in New York, USA; Premier's Saskatchewan Trade Mission to China; and Joint Canadian University Mission to Israel. In addition, the OVPR has initiated an annual *'The U of S Goes to Ottawa'* delegation in which appropriate government and political entities are engaged in discussion of U of S priorities and initiatives. Significantly, all of these activities highlight the strong relationship between research, and graduate and undergraduate recruitment and learning experiences.

Over the next few months, the OVPR will explore the potential, benefits and strategies of coordinating international outreach activities related to the research, scholarly and artistic agenda, economic development, student recruitment and student learning experiences. These discussions will include a broad range of university and external agencies such as Saskatoon Regional Economic Development Authority, Saskatchewan Trade and Export Partnership, Student & Enrolment Services Division, Graduate Studies & Research, International Research Unit, Global Relations, and College advocates for international activities. Potential exists for developing a framework for cooperation and for identifying countries and locations with the greatest potential for the U of S internationalization efforts.

#### Facilitating Opportunities to Work with Indigenous Peoples

The University of Saskatchewan hosts a growing number of faculty working with Indigenous Peoples in research, scholarly and artistic activities of mutual interest. This developing strength is demonstrated through a number of U of S established and developing centres (e.g. Indigenous Peoples' Health Research Centre, Institute for Aboriginal and Indigenous Graduate Studies & Research, CUISR, Native Law Centre, Aboriginal Education Research Centre, SPHERU) as well as individual faculty research programs. A new strategy has been developed to raise the profile of work with Aboriginal Peoples and by Aboriginal scholars; for example, more Aboriginal faculty and students have been featured in the newly-launched research newsletter, on our website, and in newspaper supplements. A video profile of Aboriginal students engaged in research is planned.

OVPR programs such as the *Collaborative and Research Facilitation Awards* and the IPHRC seed grants are facilitating work with Indigenous Peoples by offsetting some of the significant costs associated with

development of community research proposals. Efforts to develop the Tri-Council mandated guidelines on research with Indigenous Peoples are proceeding; a new Working Group has been formed to work with OVPR staff in the Ethics Office. In addition to developing the required guidelines, the Working Group is exploring the feasibility and impact of a unique Indigenous Ethics Committee capable of assisting researchers in research planning around community protocols. This spring the OVPR will continue discussions with leading Aboriginal researchers on campus, and the Special Advisor on Aboriginal Initiatives (and perhaps a wider group), to ensure we increase efforts to identify and implement effective strategies to facilitate research, scholarly and artistic activities in this area.

#### University Research Centres

The Integrated Plan and associated discussions (e.g., 2004 development of the *Policy on Centres*) have consistently identified the development of a research centres management strategy as a key goal for the University of Saskatchewan. Intended to articulate and facilitate the role of all centres in the University, the strategy will be founded on a number of principles, including but not limited to: 1) an understanding of the various governance structures, 2) accountability to the constituency being served, 3) accountability to the institution, 4) reporting channels, 5) productivity benchmarks, 6) relevant aspects of U of S research centres relationships, and 7) adherence and coherence of research centres' goals with U of S Strategic Directions. Initial discussions in the Centres' Forum have focused on best practices for management of research centres, but other key aspects include resource commitments, linkages to academic programs, and comprehensiveness and inclusiveness in review processes. These ideas are expected to be formally organized into a position paper, and the discussion expanded to the University as a whole, in spring 2006.

As this broader management strategy is being developed, the OVPR will continue to pursue centre-specific solutions to management and/or resource issues. For example, a strategy to integrate VIDO more fully within the University proper through the School of Public Health initiative has been developed. The OVPR continues to work closely with other centres reporting to the VPR to address chronic and long-standing resource issues – in fact, some of these issues have highlighted the need for a more comprehensive policy in the area of administration and management of research centres. The focus of these discussions has been on developing sustainable strategies that balance appropriate funding mechanisms with an emphasis on centre accountability and success.

#### Enhanced Communications and Information Management

Several initiatives to improve internal communications have been implemented to complement existing activities such as the regular OCN Research Column by the Director of Research Communications. The *Research Newsletter* now provides bi-monthly updates for the campus community on research successes, upcoming events and new developments in research administration. In January 2006, the OVPR launched a revamped website. This joint Office of Research Services/Research Communications initiative has resulted in a new “look and feel” for the website that emphasizes ease of user access. Looking to our external audiences, the OVPR continues to evaluate options for a U of S research publication; for example, an online versus hard copy magazine. It is important that any new research magazine create synergies with college initiatives – many have their own research publications – and appropriate research is being conducted regarding effective messages and venues to reach target audiences.

The OVPR is also re-constructing its database to improve Research Services' ability to capture and report on a greater range of indicators and aspects of research activity. The goal – a readily accessible database with practical, current and comprehensive information – will enable the OVPR to better assess initiatives, and to respond to researchers and external clients.

## Ongoing Initiatives Launched 2005: Update

### College Visits

In 2005, the OVPR began a "two-phased" approach to meeting with college representatives to discuss college research, scholarly and artistic work objectives and to identify ways in which the OVPR can support unit goals. The first phase – meetings of the OVPR Research Coordinators and Grant Facilitators with the Associate Dean Research for each college – has been completed. The second phase – meetings of the Vice-President Research and the Dean and Associate Dean Research – is at its mid-point with all meetings scheduled to be completed by summer 2006. The two-way feedback afforded by these visits is valuable in helping refine the OVPR understanding of college RSA goals and priorities, including graduate student initiatives, thereby raising awareness of OVPR programs and services, and identifying initiatives or activities which would benefit from a joint OVPR/College effort. In addition, feedback obtained through these visits will assist the OVPR in ongoing planning.

### Research, Scholarly and Artistic Landscape

In the summer and again in the fall 2005, the Research, Scholarly and Artistic Work Advisory Committee issued a broad call to the University community for the submission of summaries (1) outlining areas of research strength and promise and (2) providing evidence of the level of activity in these areas. Many areas of campus provided submissions that, beginning in September, were reviewed by a widely representative Advisory Committee chaired by the AVPR. The Advisory Committee focused on identifying synergies, linkages, and a number of broad themes (each with a number of sub-themes) which capture the breadth and depth of research, scholarly and artistic work activities on campus. These themes and sub-themes have been modified a number of times in response to feedback from the campus community. The Committee anticipates that a close-to-final outline and a sample description of one or two of the theme areas will be available in late February/March 2006. The Committee is firmly committed to an extensive, consultative approach in identifying appropriate themes and sub-themes. Numerous meetings have been held with individuals and groups representing the many facets of research, scholarly and artistic work on campus. This input has been essential to the work of the Committee and in ensuring that the final outcomes best reflect U of S areas of strength and promise, and that a comprehensive description of the research landscape at the U of S is available for further planning and collegial discussion.

### Undergraduate Students

The "undergraduate research experience" is a critical component of research, scholarly and artistic work at any research-intensive university. One question, originally articulated in the RSA Foundational Document and re-iterated in the OVPR Integrated Plan, is: "Does the OVPR have a particular leadership role in undergraduate research at the U of S?" This question formed one aspect of the April 2005 *Report of the Subcommittee on Undergraduate Research*. The report, which was distributed throughout the campus community and presented at Council in June 2005, highlighted the extensive opportunities to engage in research which currently exist for U of S undergraduate students and offered six recommendations to further enhance and communicate the benefits of attending a research-intensive institution. Subsequent to this initiative, in August 2005 the OVPR sponsored the attendance of a U of S delegation (including teacher/scholars, students, and administrative staff) at the first *Canadian Summit on the Integration of Teaching & Research* at the University of Alberta. Findings from both of these undertakings are informing work on the *Teaching & Learning Foundational Document*; the OVPR is actively involved in developing this foundational document.

### Policy Review and Development

Over the last three years, the OVPR has targeted for review and update specific research-related policies. For example, in January 2005, the *Research Overhead policy* received Board of Governors approval. In conjunction with the Department of Health Safety & the Environment, the OVPR is completing work on the *Fieldwork and Travel Safety Policy* and the College of Graduate Studies and Research is finalizing revisions to the *Post-Doctoral Fellowship Policy*. In addition, to these targeted efforts, the OVPR will be

undertaking a project to systematically evaluate research-related policies to ensure that they effectively address current circumstances and issues, and facilitate research, scholarly and artistic work. An important aspect of this review and revision process, will be ensuring the policies are readily accessible to campus researchers.

### **Programs and Services: Update on activities and enhancements**

The OVPR is responsible for all aspects of research administration. Services provided by the Office include grant and contract support, knowledge transfer activities, award development, research communications, ethics review and major program support. Some recent activities and achievements are highlighted below; the best source of information on these and all other OVPR programs is the recently revised University research website.

#### Canada Research Chairs

In Spring 2005, responsibility for the U of S Canada Research Chairs (CRC) program was transferred to the Innovation Programs Unit (IPU) – a newly re-organized unit in the Office of Research Services, which also manages the Indirect Costs Research Fund, the Research Overhead Fund, and Canada Foundation for Innovation programs. Currently, the U of S CRC complement is 34, of which 28 Chairs have been allocated (see *Appendix II: Summary U of S Canada Research Chairs*). Based on improvements in U of S Tri-Council activity, an increase in the CRC allocation is possible in the upcoming November 2006 distribution. In fall 2005, the University submitted its first requests for CRC renewals, and an additional number (at least 3) are possible in 2006. The OVPR has developed an internal review process to coordinate the renewal of CRCs, which are recommended to the CRC Oversight Committee, prior to submission to Ottawa.

The CRC Secretariat requires that all participating universities submit a revised *Strategic Research Plan*. The plan is required to address a host of issues including: distribution of chairs by gender, recruitment and retention goals, international and national recruitment aims, and distribution of chairs among areas of research, scholarly and artistic priorities. A joint committee of the OVPR and the Research, Scholarly and Artistic Work Committee has developed an initial draft. This draft is currently being circulated to the major research and planning forums of the University (including RSA Committee, Associate Deans Research Forum, and Planning Committee); the U of S CRC Oversight Committee will provide final approval to the plan and will submit it the CRC Secretariat by mid-February 2006.

#### Canada Foundation for Innovation

The new CFI competitions have been managed by the newly-reorganized Innovations Program Unit with appropriate feedback and direction from the CFI Advisory Committee. The University has implemented an intensive feedback and evaluation process for CFI proposals. *Appendix III* lists the current and pending submissions to the Leading Edge and New Initiatives programs.

#### Ethics

The University is continuing to experience a significant growth in the number of ethics protocol submissions in the behavioural area; in 2005, the Behavioural Research Ethics Board reviewed 20% more protocols than in the previous year. Numbers in the biomedical area have remained constant. The Ethics Unit is investigating measures to ensure timely response on research ethics issues. Effective 1 January 2006, the Ethics Unit introduced a new Serious Adverse Events Policy which the Unit anticipates will reduce processing and response time by up to 50%. Further options for streamlining and improving the ethics review process will be investigated in the upcoming months.

In December 2005, the Ethics Education Committee finalized an education strategy and began rolling the plan out to various research and planning committees for comment. A key component of this includes plans for a campus-wide survey to assess the current extent of ethics education and to develop concrete

strategies to address identified shortfalls. In addition, a number of education events have been planned for the January to May 2006 term, including REB workshops, panel discussions and graduate workshops.

### International Research

In February 2005, PCIP approved a reorganization of international research which resulted in creation of an International Research Unit within the Office of Research Services, mandated to double international research activity within three years. The integration of a unit responsible for the development and facilitation of international research into OVPR has led to a better information dissemination system for grant/contract opportunities. Moreover, the contract processes formerly used by USI have been integrated into ORS' standard operating procedures. Future work is needed to streamline processes relating to financial information and reporting. Staff has met with Financial Reporting to discuss an action plan. The International Research Unit will be key in helping develop the strategy mentioned above related to increasing international partnerships.

### Grant and Contract Development (Offices of the Coordinators and Office of Research Services)

In 2005, grant development teams (composed of Research Coordinators, Grant Facilitators and Grant Officers) began implementing a number of new services aimed at improving grant and contract performance with a particular emphasis on Tri-Council opportunities. Key activities and some area-specific accomplishments include:

- A strategy of workshop delivery that ensures: support for grant proposal development; education on new granting opportunities; education and support for specific groups (i.e. college, research area, or new faculty).
- On-line, user friendly information related to internal award opportunities, research resource personnel, and deadline information.
- Mentoring support and one-on-one information and feedback sessions.
- Effective management of grants and contracts from concept development through to submission and award.
- Theme-based meetings and idea exchange sessions focused on developing opportunities for inter- and multi-disciplinary research, scholarly and artistic activity.
- SSHRC - Introduction of an internal review program and a guaranteed seed funding grants for 4A researchers, and a new program through with SSHRC research time stipends are matched through centrally administered funds.
- CIHR – Four new applications to the SHRF / U of S research group program. Notable in this area is an application from a new collaboration of clinical researchers.
- NSERC – Doubled (from 2004) education and mentoring services provided around the Discovery Grant competition and increased individual support and education services related to NSERCs' partnership programs (e.g. facilitated the doubling of the number of applications to CRD in 2005 compared to 2004). The Office also participated in the successful proposal to have the NSERC Prairie Chair for Women in Engineering & Science at the U of S.

The OVPR, through its grant development teams, is currently completing an assessment of past initiatives and is finalizing a long range plan to continue to improve the quality and quantity of Tri-Council activity and the discipline specific approaches that will best achieve these aims. These reports will provide an opportunity for focused campus feedback in the spring 2006.

### Industry Liaison and Knowledge Transfer Initiatives

The Industry Liaison Office continues to vigorously pursue its mandate to increase commercialization and knowledge transfer activities. In 2005, the Office continued efforts to put in place college-specific knowledge transfer teams, to rationalize commercialization activities and to enhance community awareness of office services. For example, ILO has:

- Assumed responsibility for all CDAs and MTAs (previously handled through ORS), and is engaged or has completed discussions with a number of units (including Sask Cancer, VIDO and CLS) around management of intellectual property.

- Established a knowledge transfer team in the medical health sciences and has successfully applied for a CIHR Commercialization Management grant to hire a recent MBA.
- Delivered several educational seminars, lectures on IP and technology transfer to various colleges and research groups including Advancement, and is completing internal education initiatives and external outreach activities.
- Participates as a part of the board of the Saskatchewan government's recently created Enterpreunerial Foundation.

Highlights of 2005 include:

- Introduced ILO program for prototype development – Forge Ahead Fund – and have subsequently funded 3 projects including the cooling arch stroke intervention technology.
- Negotiated a revised MOA for Intellectual Property related to the USFA/University collective agreement
- Produced a revised Intellectual Property section for the graduate students' handbook.
- Completion of numerous licensing agreements and assisted start-up Adnavance in raising \$3,85 million.

### Research Communications

Research Communications continues to roll out its three-year Research Communications Plan to advance the U of S RSA profile locally, nationally and internationally. In 2005, media tracking recorded more than 1,200 media exposures for U of S research, scholarly and artistic work, including stories picked up by media around the world including CNN, The Guardian, and even Pravda. Research Communications continues to pursue the news media as the most cost-effective way to build profile for our research successes. In addition, the Unit has implemented strategies to increase the University's profile related to Aboriginal research, scholarly work in the humanities, fine arts and social sciences, and knowledge transfer activities.

Profile-building innovations Research Communications introduced in 2005 include:

- Producing a series of videos on Canada Research Chairs, CLS and InterVac researchers for public dissemination on television, at conferences, and in schools.
- Developing an expert commentary program with The StarPhoenix whereby the office solicits and edits commentaries by U of S researchers on topics of public interest and the SP runs them on the op/ed page.
- Lobbied the CBC to hold two national radio shows (Quirks & Quarks and Writers & Company – combined audience reach of 700,000 Canadians) on campus. Ten U of S faculty were showcased.
- Organized a series of half-hour SCN-TV interviews with nine U of S faculty, many of whom were in the arts areas.
- Initiated a Student Research News section of the website that SESD links to for both current and prospective students.
- Wrote a 3,000-word article on a U of S computer-related “first” which, in a highly unusual move, the SP agreed to run as a Weekend Extra feature.
- Worked on ads and other initiatives with internal and external campus partners to promote the unique life sciences cluster on campus.
- Arranged a U of S research story tour for CanWest columnist Don Martin who produced a page-long feature in the National Post.
- Promoted the CLS by helping to create a global synchrotron website (lightsources.org)

### Provincial Government Initiatives and Western Diversification (WED)

In 2005, the University Advisory Committee for WED reviewed and approved a number of proposals for submission to the external joint WED/SIR Committee which forms WEPA. Submissions to WED are typically developed in collaboration with WED and provincial priorities; additional discussions have occurred to increase the provincial Innovation and Science Fund (currently used to match CFI projects and CRCs) and to create a Saskatchewan Innovation Fund (SIF) which would complement existing infrastructure investments with operating funds and other seed funding opportunities.

## **Management of Research Revenue: Indirect Costs and Research Overhead**

The OVPR continues to champion the principle of re-investing research revenue back into research, scholarly and artistic activity, and in this context, the Office manages and develops recommendations (for final approval by the Provost's Committee on Integrated Planning) for both the Indirect Costs (IC) and the Research Overhead Fund (ROF). A fundamental part of the OVPR's management strategy is participation and input from the research community through representation on the Indirect Costs Advisory Committee. This Committee, whose mandate has been expanded to include the ROF, is crucial in identifying priorities and developing expenditure strategies. In 2005, at the recommendation of the Indirect Costs Advisory Committee, IC funds were allocated as follows:

- Operational support for research including facilities (18%)
- Resources in information technology and libraries (20%)
- Regulatory requirements (10%)
- Intellectual property management (10%)
- Management and administration – funds in this category include allocations to colleges and research development grants (approximately 20%) and to administrative services (22%)

Additional Indirect Costs funds may be available as a result of the University's growing Tri-council activity, and by political decisions which direct federal monies to Universities through the IC program.

The Research Overhead Fund is a new initiative as of January 2005, based on the new Research Overhead Policy approved by the Board of Governors. The change over to the UNIFI system has not yet allowed detailed tracking of overhead revenues to date. Accounting and assessment will be completed at the end of the fiscal year to determine available funds; at that time the Indirect Costs Advisory Committee will recommend allocations for the 2006-07 fiscal year.

## **Executive Sponsorship by OVPR**

An important aspect of the new governance structure for all capital projects and some new academic initiatives is the appointment of an Executive Sponsor. Typically, one of the VPs is an Executive Sponsor to perform a management and leadership role that depends on the state of the project; the OVPR is the Executive Sponsor for the new School of Environment initiative (through PCIP and Integrated Planning), and the following capital projects: Intervac (approved in 2005, expected to be operational in 2009), Aquatic Toxicology Research Centre (approved in 2005, CFI proposal in 2006, expected to be operational in 2007), Feed Technology Centre (CFI proposal in 2006), the Research and Innovation Centre, and others. These projects are all at various stages of approval and completion and require different levels of involvement of the OVPR leadership team. In addition, the OVPR is exploring, in cooperation with the Saskatchewan Research Council, development of a Mineral Technology Research Centre.

## **Appendix I: Strategic Initiatives of the OVPR – Outcomes of the OVPR Executive Retreat September 2004**

### **1. Enhancing research culture**

- Benchmarking
- Recruitment
- Recognizing and rewarding research, scholarly and artistic successes

### **2. Increased research intensiveness and innovation**

- Tri-council success and contract success
- **Commercialization and knowledge transfer**
- International Research activity
- Mentoring, internal review and workshop opportunities
- College-specific support related to parameter documents

### **3. Development of research groups**

- Currently funding for approx. 11 Health research groups,
- Targeted group development of 10 social sciences/humanities/fine arts, 10 NSERC
- Research interests and areas of expertise database

### **4. Strategic research communications**

- Media relations
- Institution-wide research magazine
- Continued celebration, specific events for researchers

### **5. Strong role in remaining foundational documents**

- Teaching and Learning
- Outreach and Engagement
- Complement Plan

### **6. Areas of pre-eminence**

- Understanding role and importance of areas of pre-eminence
- Categories of “pre-eminence”
- Collegial, transparent process for determining and renewing areas

### **7. OVPR Relationships and Functions**

- Response to external reviews: new Ethics reporting structure
- Centres reporting to the VPR: Integrated Plan and Policy on Centres follow-up
- International Research responsibilities
- Team development around initiatives – Coordinators, Grant Officers, Development Officers, Contract Officers, ILO, etc.

## Appendix II: Summary U of S Canada Research Chairs

| Tier/Agency | Name                     | Department                         |
|-------------|--------------------------|------------------------------------|
| T2 NSERC    | DALAI, Ajay              | Chemical Engineering               |
| T2 NSERC    | GUTWIN, Carl             | Computer Science                   |
| T2 NSERC    | KRAATZ, Bernie           | Chemistry                          |
| T2 NSERC    | MOEWES, Alex             | Physics                            |
| T2 SSHRC    | PETERS, Evelyn           | Geography                          |
| T1 SSHRC    | MILLER, Jim              | History                            |
| T1 CIHR     | BABIUK, Lorne            | VIDO                               |
| T1 CIHR     | DELBAERE, Louis          | Biochemistry                       |
| T2 CIHR     | HAAS, Thomas             | Anatomy & Cell Biology             |
| T1 NSERC    | HIROSE, Akira            | Physics                            |
| T2 NSERC    | PICKERING, Ingrid        | Geological Sciences                |
| T2 NSERC    | BRANDIZZI, Federica      | Biology                            |
| T2 CIHR     | KALYNCHUK, Lisa          | Psychology                         |
| T1 NSERC    | KASAP, Safa              | Electrical Engineering             |
| T2 CIHR     | ABONYI, Sylvia           | Community Health & Epidemiology    |
| T2 NSERC    | ACHENBACH, Sven          | Electrical Engineering             |
| T2 NSERC    | YANG, Qiaoqin            | Mechanical Engineering             |
| T2 NSERC    | DUBE, Monique            | Toxicology/Vet Biomedical Sciences |
| T1 NSERC    | GEORGE, Graham           | Geological Sciences                |
| T1 NSERC    | POMEROY, John            | Geography                          |
| T1 NSERC    | CHIBBAR, Ravindra        | Plant Sciences                     |
| T1 SSHRC    | PARTRIDGE, Mark          | Agricultural Economics             |
| T1 NSERC    | PEDRAS, Soledade         | Chemistry                          |
| T1 NSERC    | ST. MAURICE, Jean Pierre | ISAS                               |
| T1 NSERC    | TSE, John                | Physics                            |
| T1 SSHRC    | BRAWLEY, Lawrence        | Kinesiology                        |
| T1 CIHR     | CHAPMAN, Dean            | Anatomy & Cell Biology             |
| T1 NSERC    | GIESY, John              | Toxicology                         |

### Appendix III: Current and Pending Submissions to CFI Leading Edge and New Initiatives Programs

| Last Name   | First Name | Descriptive Title   | Department                         | Total Project Cost | Request from CFI  |
|---|------------|---|------------------------------------|--------------------|-------------------|
| <b>Leading Edge Fund</b>                                    |            |   |                                    | <b>10,559,022</b>  | <b>4,067,739</b>  |
| Pugsley   | Todd       | Particle Engineering and Research Laboratory (PEARL)  | Chemical Engineering               | 2,425,200          | 970,080           |
| Patterson   | William    | Development of an automated femtosecond laser ablation system for micron scale elemental and isotopic analyses  | Geological Sciences                | 5,110,600          | 2,044,240         |
| <b>Multi-Institutional LEF (led by McMaster University)</b> |            |   |                                    |                    |                   |
| Stoicheff   | Peter      | TAPoR Two: Extending the Scholar's Web  | English                            | 780,000            | 312,000           |
| <b>New Initiatives Fund – National Program</b>              |            |   |                                    | <b>33,502,875</b>  | <b>13,401,150</b> |
| Dosman  | James      | Canadian Centre for Health and Safety in Agriculture: National Agricultural Rural Industrial Hygiene Laboratory (AGRIVITA LAB)- A world leader linking agricultural/rural exposures to human health | Medicine                           | 13,700,000         | 5,480,000         |
| George  | Graham     | Bio-XAS: Life Science Beamline for X-ray Absorption Spectroscopy at the Canadian Light Source   | Geological Sciences                | 18,300,000         | 7,320,000         |
| Merriam   | Jim        | CAGENET (lead University of Calgary)  | Geological Sciences                | TBA                | TBA               |
|   |            | Spin and Angle-Resolved Photoemission (ARPES) (lead UBC)  | CLS                                |                    |                   |
|   |            | X-Ray Diffraction and Scattering Sector (BNB) (lead University of Guelph)   | CLS                                |                    |                   |
| Loewen  | Michelle   | National High Field Nuclear Magnetic Resonance Centre (NANUC II) (lead U of A)  |                                    |                    |                   |
| Dalai   | Ajay       | Solid Oxide Fuel Cell Experimental Unit, High Pressure Gas Supply, Fuel Engine Test Unit, Super Computing Facility (lead University of Calgary)   | Chemical Engineering               | 500,000            | 200,000           |
| Carter  | Jim        | Network for Inclusive Design (lead University of Toronto)   | Computational Science              | 97,875             | 39,150            |
| Lague   | Claude     | National Engineering Design and Development Infrastructure (NEDDIP) (lead Dalhousie University) (financially supported by Engineering, \$4K - \$12K)  | Engineering                        |                    |                   |
| Vujanic   | V.         | Canadian Biodiversity Consortium (lead University of Montreal)  |                                    |                    |                   |
| <b>New Initiatives Fund</b>                                 |            |   |                                    | <b>44,027,000</b>  | <b>17,610,000</b> |
| Corcoran  | Michael    | Integrative facility for the investigation of chronic diseases using comprehensive on line monitoring of physiological, metabolic and behavioral testing of animals                                 | Anatomy and Cell Biology           | 8,625,000          | 3,450,000         |
| Haas  | Thomas     | Structural Proteomics Facility  | Anatomy and Cell Biology           | 9,900,000          | 3,960,000         |
| Liber   | Karsten    | Aquatic Toxicology Research Facility  | Toxicology Centre                  | 6,250,000          | 2,500,000         |
| Laarveld  | Bernard    | Feed Technology Research Facility   | Animal and Poultry Science         | 11,125,123         | 4,450,049         |
| Reaney  | Martin     | High Throughput Chemical Analysis Suite for Bioprospecting and Combinatorial Synthetic Chemistry  | Applied Microbiology and Food Sci. | 1,400,000          | 560,000           |
| Dalai   | Ajay       | Bioenergy Technology Research Centre (BTRC)   | Chemical Engineering               | 3,500,000          | 1,400,000         |

|   |       |                                       |                           |            |   |
|---|-------|---------------------------------------|---------------------------|------------|---|
| <b>International Joint Venture Project</b> (Applicant Institutions: U of S/U of A; includes the following international partner institutions: Princeton Plasma Physics Laboratory; University of Washington, and Hyogo University, Japan) |       |                                       |                           |            |   |
| Hirose  | Akira | International Fusion Research Program | Plasma Physics Laboratory | 46,500,000 | 35,000,000<br>(requested from CFI, CIHR, NSERC, SSHRC, Genome Canada) |