# INDIRECT COSTS PROGRAM

PROGRESS REPORT

FOR APRIL 1, 2012 TO MARCH 31, 2013



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### INDIRECT COSTS PROGRAM

### **Background**

In 2001, the federal government provided a one-time investment of \$200 million to alleviate some of the financial pressures associated with federally-funded research in Canadian postsecondary institutions. Subsequently, in 2003, the Indirect Costs Program (ICP) was established on a permanent basis and investments in the program have risen gradually, from \$225 million in 2003-04 to \$332.4 million in 2012-13.

These investments are used to cover a portion of the indirect costs<sup>1</sup> of research supported by the three federal funding agencies (the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council, and the Social Sciences and Humanities Research Council) at universities and colleges, and at their affiliated research hospitals and institutes.

### **Program objective**

The objective of the Indirect Costs Program is to help universities, colleges, and their affiliated research hospitals and institutes maintain a research environment that will enable them to make optimal use of the federal investment in academic research.

### **ACCOUNTABILITY AND EVALUATION**

The program has adopted the following approaches to address the issue of accountability:

- institutions receiving program grants must prepare yearly reports;
- the Program requires that institutions receiving program grants establish appropriate procedures, systems and controls to ensure that program policies and requirements are followed in accordance with the terms and conditions of the program;
- the Program requires that institutions have current and valid agreements with their research hospitals and health research affiliates:
- during site visits, program officials review how the institutions manage their grants; and
- the program itself undergoes internal audit and evaluation on a periodic basis (usually once every five years).

### **Outcomes reports and Progress Reports**

The program requires participating institutions to submit a yearly report on their outcomes, including a statement of account. The information obtained from the reports is intended to provide an account of federal funding and is a key element in the program's performance strategy. These institutional outcomes reports also form the basis of this report (the Indirect Costs progress report) which is produced yearly. Institutions submit their reports in June of every year, the Secretariat reads and analyzes them, seeks clarification where required and uses the contents to produce the report. The outcomes report provides quantitative and qualitative information on the impact that expenditures have had in the program's five eligible expenditure categories: research facilities; research resources; research management and administration; regulatory requirements and accreditation; and intellectual property management. The statement of account presents the amount of expenditures made with program funding invested by the institutions in each of the five areas.

### **Financial Administration**

The Program requires participating institutions to establish appropriate procedures, systems and controls to ensure that program policies and requirements are followed in accordance with the terms and conditions of the program as outlined its Financial Administration Guide (the guide is available on the program's website at <a href="http://www.indirectcosts.gc.ca/administer-administ

### **Institution-Affiliate Agreements**

In cases where institutions share their indirect costs grant with affiliated hospitals and health research institutes, the program requires that institutions have formal and valid institution-affiliate agreements which clearly indicate the nature of the relationship between the two and their roles and responsibilities in managing the grant. The parent institution is responsible for ensuring that its affiliates understand and follow the program's conditions for funding. Affiliate institutions must report annually to the institution. The institution specifies the exact format and required contents of the report, integrating the information received from each affiliate into its yearly outcomes report.

### Site visits

Since September 2006, program managers have visited a total of 47 institutions: 21 major research-intensive universities and their affiliated research institutes, four large universities, seven mid-size universities, and 15 small universities, colleges and CEGEPs. The visits have had the following objectives:

- to assess the effectiveness of the control measures and systems used to ensure compliance with the program's policies and regulations;
- to review the expenditures or the methods used to allocate funds, in order to ensure that they follow program quidelines:
- to discuss program-related issues and challenges; and
- to obtain feedback on the program's policies and guidelines and its financial management practices.

The visits also provide opportunities to observe the working relationships between universities and their affiliated research institutes; to share with them other institutions' best practices; to encourage them to give more details about the impact of their grants in their annual outcomes reports; and to adopt new approaches for communicating program outcomes.

### Internal audit and program evaluation

An internal audit of the program was carried out in the fiscal year 2008-09, and a sixth-year summative evaluation of the program was completed in 2009. Overall, the reports on these activities presented a positive picture of the program in terms of its administration and relevance.

The summative evaluation included recommendations for strengthening the information base used to assess the program's impact (the report is available on the program's website at <a href="http://www.indirectcosts.gc.ca/publications/index-eng.aspx">http://www.indirectcosts.gc.ca/publications/index-eng.aspx</a>). In response, the program's management staff established a working group of representatives of various organizations, including universities, the Association of Universities and Colleges of Canada (AUCC), the Canadian Association of University Business Officers (CAUBO), and the Canadian Association of University Research Administrators (CAURA). The working group was mandated to define a set of parameters for use in assessing the state of the research environment at Canada's universities every five years.

Between December 2012 and March 2013, the Secretariat invited a variety of stakeholders to participate in a consultation in order to obtain feedback on the indicators that were developed.

Three of the five assessment components were part of the consultation process—management and administration capacity, availability and quality of research resources, and degree of regulatory compliance. The consultation's main results are that while the research community generally agrees with the objectives pursued by the project, the respondents expressed some concerns over data comparability, data generalization and data collection.

A program evaluation was completed in 2013-2014. It is expected that the report and the Management response will be made available on the program's website in the summer or fall of 2014.

### **OVERVIEW OF INSTITUTIONS' EXPENDITURES IN FISCAL YEAR 2012-13**

As a whole, institutions funded by the program use their grants largely for research management and administration, and for research facilities. These two categories combined accounted for 68 per cent of total spending in 2012-13 as shown in Figure 1. The breakdown of spending by institutions in each of the five eligible categories has remained fairly consistent over the last few years as shown in Figure 2 below. However, as funding from the program covers only a portion of the indirect costs of research borne by institutions, this may not reflect trends in the actual costs or total investments of institutions in these areas.

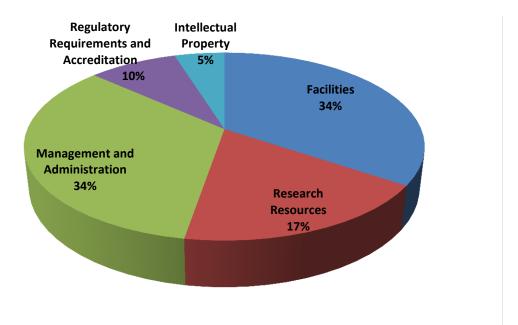


Figure 1: Proportion of grants spent in each expenditure category, fiscal year 2012-13.

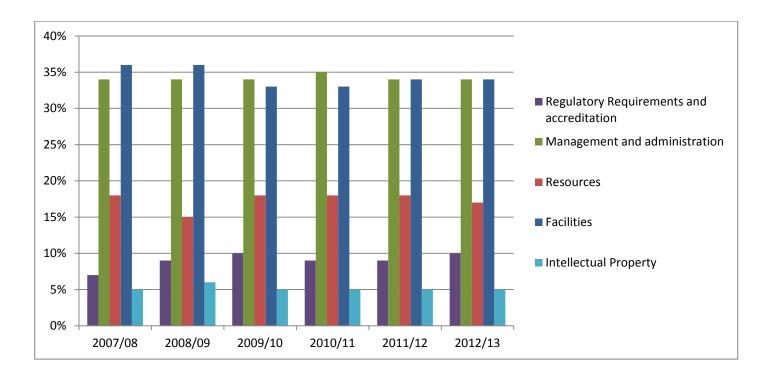
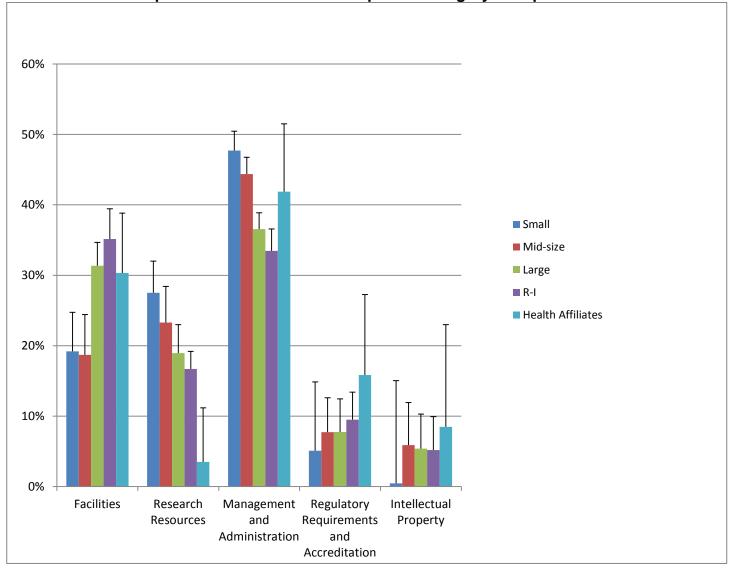


Figure 2: Proportion of grants spent in each expenditure category, fiscal years 2007 to 2013.

### Proportion of institutions that spent in category of expenses



**Figure 3:** Proportion of grants allotted to each expenditure category, by size of institution. The bars represent standard deviation of the means

Institutions of different sizes tend to allocate their funding differently with respect to the five expenditure categories. Figure 3 illustrates this difference, comparing the investment patterns of the four sizes of institutions described in Table 1 and their health affiliates. In general, small and mid-size institutions as well as health affiliates allotted a larger share of their Indirect Costs grants to the management and administration category than did large and research-intensive institutions; large and research intensive institutions directed a greater proportion of their funds to the facilities category than did small and mid-size institutions. Differences in the proportion of the grant allotted to each expenditure category can be observed among institutions of the same size. This variability is greater for the intellectual property management category and could be explained, in part, by the fact that some institutions do not have a technology transfer office and do not allocate funds towards this area.

Table 1: Institution types and proportion of total program budget received by each type

Туре	Criterion <sup>2</sup>	Number of institutions	Proportion of program budget	
Small	ICP grant of less than \$100,000	53	0.4%	
Mid-size	ICP grant of \$100,000 to \$1 million	30	3.7%	
Large	ICP grant of \$1 million to \$3 million	14	7.1%	
Research- intensive	ICP grant of more than \$3 million	29	88.8%	

In the fiscal year 2012-13, 20 institutions signed formal agreements with research hospitals or health research institutes. Expenditures by these affiliates accounted for 15% of the program's total budget and were spent primarily in management and administration, followed by spending in the area of facilities. Affiliates also invested more heavily in regulatory requirements and accreditation than did all other types of institutions.

### IMPACT OF EXPENDITURES

### Impact by expenditure category

Institutions deem the Indirect Cost Program's funding to be essential to the success of their research enterprises; however, the program covers only a portion of the actual amount of indirect costs of federally funded research. For this reason, the impact of expenditures can be challenging to evaluate as the funds are, in general, widely dispersed within the institutions and their affiliates (where applicable). Institutional Outcomes Reports provide qualitative information and examples regarding their investment in the five expenditure categories, which can reveal certain trends. These are examined in the following sections:

### 1. Research facilities

Maintaining modern working space and equipment is critical for a successful research enterprise, and ensures that institutions can provide high-quality and leading-edge research environments, which are essential in order to facilitate research excellence. From investing in new facilities to maintaining the current ones, from modernizing equipment to continuing technical support of skilled technicians, institutions of all sizes face the challenge of maintaining suitable research facilities in the face of increasing research costs. Similar to previous years, the majority of institutions indicated operating costs, including renovations, electricity and heating as the largest category of expenditures in this investment area. Others noted an increase in spending on technical support, in order to properly maintain and update specialised research equipment. Many institutions also stated that their investments of Indirect Costs program funding in research facilities had an impact on their research capacity; the resulting improvements to their research environment contributed to increasing productivity and enhancing the quality of research.

"[funds from] The Indirect Costs Program were used to support the ongoing maintenance and operations of several research facilities that are vital to research and the university administration. The research facilities have attracted and strengthened research partnerships with industry, community and the health-care sector; additionally, the facilities helped attract additional research funding to UOIT. Without the Indirect Costs Program, UOIT would have to pull resources from other core areas of the university to support the operation and maintenance costs of these facilities, the major costs-driver for this category."

University of Ontario Institute of Technology, Ontario

"Cette subvention nous permet de poursuivre nos efforts afin de doter nos chercheurs d'installations et d'équipements à la fine pointe, accroissant leur capacité et leur qualité de recherche et ce, sans compromettre nos activités d'enseignement et les services à la collectivité. "

Université du Québec à Rimouski, Québec

"Without the support from the ICP for research technicians, our ability to maintain and efficiently utilise facilities at Saint Mary's would be severely hampered. Without these positions, research students and faculty

Institutions have been categorized according to the amount of program funding they received. The figures shown are used solely for purposes of analysis in this report.

would have to operate and maintain these facilities themselves. Not only would this greatly increase the risk of damage to the very expensive instrumentation in the facilities, it would mean that valuable time and resources of faculty would be expended in the training of students and in the actual running/analysis of samples by the instrumentation. Research productivity has been positively affected by the establishment of these Research Instrument Technicians."

Saint Mary's University, Nova Scotia

### 2. Research resources

Improvements in facilitating the access to up-to-date and comprehensive knowledge resources are of capital importance for developing research capacity, and are vital to generating the high-quality, high-impact studies that benefit Canadians. The active role that libraries play in supporting improved access to research resources, and the effective management and dissemination of results and data is crucial in helping to support researchers' work. As in previous years, the majority of institutions spent the largest portion of ICP funds in this category on library and journal holdings. Institutions place growing importance on the availability of online resources and note that quick access to relevant information benefits their researchers. Productivity can be increased, since online material can be accessed remotely, and documents can be easily searched. The availability of adequate research resources is an important factor in the ability of Canadian institutions to recruit and retain faculty. The availability of online resources, in particular, has facilitated collaboration between researchers within institutions, nationally and internationally. Some institutions indicated that a lack of a current and relevant library collection and qualified resource staff would be an impediment to research and innovation, and are grateful for the support provided by the Indirect Costs Program.

"La subvention permet à la plus grande bibliothèque universitaire francophone du Canada atlantique de s'acquitter d'environ le quart de ses dépenses de fonctionnement et de la moitié de ses abonnements électroniques. Considérant que ces dépenses contribuent à accroître la capacité de recherche et de l'institution de façon considérable, l'impact de la subvention est majeur."

Université de Moncton, Nouveau Brunswick

"A significant portion of the ICP grant covers expenditures related to library acquisitions. This is an essential area for research that all researchers, postdoctoral fellows, graduate and undergraduate students in all areas of research can benefit from. The Library is an essential partner in research, providing ever expanding access for faculty members and students to scholarly information. The indirect costs grant has been used to maintain and enhance the University's collaboration in the Canadian Research Knowledge Network, a nation-wide university initiative to license electronic versions of scholarly journals and research databases. Through its licensing agreement, CRKN provides access to electronic versions of scholarly journals and research databases, which a smaller comprehensive institution would not otherwise be able to access."

University of Regina, Saskatchewan

### 3. Research management and administration

Institutions agree that administrative support is an essential service for productivity because it relieves researchers of many administrative tasks. Across institutions of all sizes, administrative support benefits researchers in preparing grant applications and managing grant funds. As in previous years, the largest portion of funding in this category went to institutional support for the completion of grant applications and research proposals, as well as salaries, and the hiring and retention of personnel with the vast expertise that is required in the multifaceted environment of research management. For smaller institutions, this typically meant the recruitment and establishment of a dedicated research administrator or office. For larger and research-intensive institutions, funding was associated with the recruitment and training of specialised research administrators and investment in IT systems to modernise grant applications and research funding tracking and management. Program funds appeared to cover ongoing expenditures rather than new expenditures in this category of expenses. Many institutions indicated that as research administration becomes more complex, and that reporting and accountability requirements at all levels are increasing, it is necessary to have professional staff available to advise and support researchers.

"As a result of our Indirect Costs grant, we have been able to retain a highly competent employee to staff our research office (who serves as the Research Officer and Administrative Assistant). Having a full-time research office is facilitating a growing readiness of younger faculty to apply for external research funds."

Redeemer University College, Ontario

"UNB has utilised the ICP from its inception to assist in its research growth strategy and to support the management and administration infrastructure required by the strategy. Furthermore, the ICP has allowed the university to leverage other funds to achieve these goals. Personnel dedicated to pre and post award functions in the Office of Research Services have allowed the university to proactively manage and grow its research enterprise."

University of New Brunswick, New Brunswick

"Une grande proportion des dépenses associées à cette section sont reliées aux ressources humaines. Étant une institution de petite taille, nous avons peu de paliers hiérarchiques et pouvons facilement établir des liens continus avec les professeurs et ainsi faire un suivi complet des projets de recherche en cours. L'objectif principal du contexte universitaire de l'INRS est d'assurer la mise en place de toutes les procédures pour une gestion conforme notamment, par rapport aux demandes des pourvoyeurs externes quant à l'utilisation des subventions. L'encadrement nécessaire touche plusieurs services de l'INRS dont le service à la recherche et à la valorisation, le service des finances, le service des achats pour n'en nommer que quelques-uns."

Université du Québec - INRS, Québec

### 4. Regulatory requirements and accreditation standards

In an effort to ensure the safety of researchers and research staff, and the ethical treatment of research subjects, institutions must meet an increasing number of regulatory and ethical standards. In recent years, the different levels of government have introduced new regulatory requirements regarding, for example, the protection of animals, the use of human beings in research and the use of hazardous substances. Accordingly, the amount of time and resources that must be expended in order to comply with these standards has also been increasing. An increasing cost driver for this category, are the regulatory requirements themselves. Institutions directed the largest portion of their spending in this expenditure category towards the development and support of governing bodies such as research ethics boards and committees. The small, mid-size and large institutions directed most of their funds into the creation and support of regulatory bodies. For Research-Intensive institutions, the largest portion was spent in Technical support for animal care.

The training of staff for the proper handling of dangerous substances and biohazards, as well as training regarding research ethics were also areas of investment. Many institutions also indicated that without the Indirect Costs funding, they would be unable to meet regulatory requirements, which would seriously impede their ability to conduct research which meets the highest standards.

"The University has many research programs that are subject to detailed and stringent regulatory oversight (eg. biohazards, transgenics, environmental guidelines, animal use protocols). In addition, some of our research capacity contributes to our ability to meet standards of accreditation, particularly with respect to animal care services, and other related activities in our veterinary college. The ICP support that goes toward animal care at the University of Guelph plays an important role in helping us to meet the required standards. All of these efforts are helping us to minimize risk to researchers and to the University, and helping us to ensure that research funds are used only on projects that meet regulatory and other compliance guidelines."

University of Guelph, Ontario

"Le respect des normes de conformité est devenu depuis maintenant plusieurs années une exigence sociale incontournable que les établissements doivent considérer et intégrer dans leur mode de fonctionnement. Les politiques des organismes subventionnaires nous obligent aussi à s'y conformer. Bien que les coûts engendrés par ces exigences soient les moins importants de tous nos coûts indirects, le nombre de dossiers à traiter ne cesse d'augmenter et l'on voit apparaître de nouveaux besoins qui devront être répondus (environnement, biorisques)."

Université du Québec - École de technologie supérieure

"Without certified cabinets and support for the Animal Care Committee and animal facility, Brandon University would risk falling into non-compliance with the Canadian Council on Animal Care, and also risk losing our Certificate of Good Animal Practice. This would result in lab closures and a halt in animal-based research. Without ICP support funding would have to be taken from the facultyor the University operating budget, which, would then take funding away from other Brandon University initiatives."

Brandon University, Manitoba

### 5. Intellectual property management

Transferring knowledge from academia to a broader range of sectors, including the private, public, and not-for-profit sectors, creates many economic, social, and cultural benefits for Canadians. Institutions recognise the importance of transferring knowledge, sharing their research discoveries through such activities as publishing, licensing, forming spin-off companies, and other forms of engagement with non-academic sectors. With the help of ICP funding, many research institutions continue to strive to maximize the impact of their research and the return on the money invested in research grants. Across institutions of all sizes, most of the funds invested in this area were allocated to the creation, expansion or maintenance of a technology transfer office. The protection and management of intellectual property enables researchers to advance their research towards commercialization. Partnerships with industry are created, which often results in the attraction of additional funding from the private sector. Primarily invested in the payroll for specialised technology transfer personnel, funding was also devoted to technology licensing, commercialisation, legal assistance, and private sector partnerships. By providing funding in support of these services, institutions emphasised the significant economic and social benefits the ICP program has on them and the local community. While the percentage spent in this category has not significantly increased in recent years, the potential impact, in particular within smaller institutions, is considerable.

"For the first time in the University's history, NSCAD was in the position, in association with our Industry Liaison Office, to undertake the development of an agreement between a member of faculty, a private partner, and the University. It is expected that the Agreement will lead to the development of a new technology for commercial purposes. Without the support of the Indirect Costs program, this initiative could not have gone forward."

NSCAD, Nova Scotia

"As a growing institution, VIU faculty are engaging more with industry and are involved in creating inventions. As such, researchers require more support for contracts and assistance with commercialization. The institution now has four patents, with more on the way."

Vancouver Island University, British Columbia

"The Indirect Costs Program (ICP) provides essential support to our IP and knowledge management programs and the staff who provide the services of: reviewing and evaluating inventions; filing and prosecuting patent applications; promoting industry outreach to foster and nurture innovative new partnerships; entrepreneurship and commercialization support to impact our regional economy and to promote the transfer of this knowledge, expertise and technology to the end users and ultimately to the marketplace, to see our health, policy and technological innovations provide benefits for all Canadians."

University of Ottawa, Ontario

### **General impact of investments**

While the five expenditure categories demonstrate the immediate and direct outcome the program has on postsecondary research, the program ultimately aims to improve the overall ability to conduct research and to recruit and retain world-class researchers. Table 2 shows the institutions' responses regarding three general impact categories. Larger and Research-Intensive institutions, because they receive larger grants, appear to be better able than smaller institutions to identify positive impacts. In general, however, small and mid-size institutions also identify the ICP funds as having a positive effect on their overall research capabilities, playing a key role in the implementation and maintenance of their emerging research programs.

Table 2: Proportion of institutions reporting general positive impacts of their grants, by institution size

General impact	Small	Mid-size	Large	Research- intensive	Total
Attraction of additional funding	53%	80%	91%	100%	83%
Making strategic investments possible	47%	56%	82%	73%	64%
Attraction and retention of researchers	80%	92%	91%	100%	94%

A number of institutions noted the growth in their research capabilities since the inception of the program. Several institutions noted that many of the research services and funding opportunities from which the institutions currently benefit would not have been realised without the support of the Indirect Costs Program. These institutions recognise the vital role played by the program grants over the years in helping them to develop their research activities.

The majority of institutions agreed that the ICP funds contributed to their ability to attract and retain world class researchers. The competition for excellent researchers continues to increase, and it requires a supportive and active research environment to attract and retain the best people. The ICP funds can help institutions maintain the highest research standards, and enables them to compete with other national and international institutions in order to attract new researchers and retain established ones.

Whether it is directly through supporting research administration and grant writing, or indirectly by helping to maintain the infrastructure necessary to support new initiatives, the program is cited by many institutions as an important factor in gaining new sources of funding. For some larger institutions, the ICP grant was especially supportive in producing new, sustainable research revenue through technology licensing and the attraction of international investors.

"UNBC is extremely supportive of the Indirect Costs Program because it has played a major role in the rapid expansion of research capacity at the institution. It can be stated unequivocally that this growth would not have occurred without the same vigour or outcomes without the Indirect Costs Program. UNBC anticipates increasing benefits from the Indirect Costs Program over the coming years as faculty members' research programs mature, and the number and value of their Tri-Council awards increase accordingly."

University of Northern British Columbia, British Columbia

"ICP funding enables Memorial to attract and retain researchers by providing the ability to have state-ofthe-art facilities, laboratories and equipment to enable these faculties to perform research, teach and supervise their students. In addition, departments such as the Office of Collaborations and Partnerships, Office of Research Services, Technical Services and Computing and Communications provide the essential services these researchers need to succeed in obtaining grants and contracts to enable their research, and in maintaining the facilities and equipment to carry out their research."

Memorial University, Newfoundland

### CONCLUSION

Overall, institutions indicated that the Indirect Costs Program has had a positive impact on their research activities, and that the availability of this funding is essential for the effective operation of their research enterprises. The Indirect Costs Program complements the research funding investment provided by the three federal research funding agencies by helping postsecondary institutions ensure that their federally-funded research projects are conducted in world-class facilities with the best equipment, resources and administrative support available, and in compliance with the various regulations and requirements.

Despite the variances in how the grant is used by the different institutions and that the program's funding is most heavily invested in the areas of research management and administration, research facilities, and research resources, the program has contributed to maintaining the health of the research environment in all five expenditure categories. Many institutions noted that the Indirect Costs Program has assisted in their ability to attract and retain high quality personnel and researchers, to comply with regulatory requirements and to transfer knowledge and commercialise their research results.

Overall, the program has contributed to allowing Canadian research institutions to increase their research stature both nationally and internationally by making their research environment attractive to researchers, students and research technicians.

Generally, institutions highlighted the indispensable contribution the ICP has made in ensuring that they are able to achieve both their research and teaching mandates, to ensure that they become both national and international leaders in research, and to continue to enhance their vital role in Canadian society.