



Institute of Infection and Immunity

Annual Report 2002-2003





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Canadian Institutes
of Health Research

Instituts de recherche
en santé du Canada

Institute of Infection and Immunity

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CIHR IRSC
Canadian Institutes of Health Research Instituts de recherche en santé du Canada

Canada 



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Message from the Scientific Director

The mandate of the Institute of Infection and Immunity (III) is to develop and coordinate a research effort in infection and immunity and to ensure that the results from the research are communicated to the right people – health care professionals, stakeholders and funders, policy makers and the general public – enabling them to apply the research findings and make informed decisions.

The safety of food and water has consistently been a major concern of Canadians. To set a national research agenda for safe food and water, the Institute has taken a leading role in forming the Canadian Research Coalition for Safe Food and Water. The Coalition has brought together representatives from 16 diverse organizations, including private-sector organizations and five federal government departments, with an interest and expertise in food and water safety. These organizations, with no previous history of working together as a group, are now discussing common problems and leading a coordinated Canadian research effort. The Institute and a number of the Coalition partners have invited applications for grants in this area and it is anticipated that the results of the research will help in ensuring safer food and water for all Canadians.

In addition to our efforts in shaping a national research agenda for food and water safety, we have been active in developing and supporting research in many other areas. For example, when we determined that more research was required to understand the social and behavioral factors involved in hepatitis C infection, the Institute facilitated a priority-setting workshop and followed up by launching a request for applications. The hepatitis C workshop was just one of several that the Institute sponsored or participated in this year, including meetings focused on antimicrobial resistance and regenerative medicine.

Partnerships are important to the Institute and help to build research capacity. We were delighted to organize the Partnership Forum in January 2003, where representatives of non-governmental organizations, health charities and professional societies working in the areas of infection and immunity, together with Institute staff, met to explore the possible creation of networks among their associations and organizations. We encourage the formation of such networks because we believe that they will strengthen the voice and

increase the impact of individual member organizations and ultimately improve the health of many Canadians, some of whom are afflicted with chronic and, in some cases, debilitating diseases.

The importance of a strong Institute of Infection and Immunity has most recently been demonstrated by the outbreak of Severe Acute Respiratory Syndrome (SARS) that arose in China and spread to other countries, including Canada, by March 2003. We have already responded to numerous requests for information about SARS and we are poised to coordinate a rapid research response to the outbreak.

The Institute continues to respond to the needs of the infection and immunity research community using various methods to ensure that the Institute's response is appropriately targeted. As an example, the Institute Advisory Board and the CIHR Research Priorities and Planning Committee are currently creating the CIHR HIV/AIDS Research Advisory Committee (CHARAC), a significant step towards the development of a coordinated research agenda and enhanced funding for HIV/AIDS research.

I would like to take this opportunity to thank the Institute staff in London and in Ottawa for their dedication and commitment to the Institute. Assistant Director, Special Projects, Dr. Judy Bray, was instrumental in the creation of the Canadian Research Coalition for Safe Food and Water and I thank her for her efforts. I greatly appreciate the advice, leadership and hard work of the Institute Advisory Board in guiding the activities of the Institute. I also thank CIHR President Dr. Alan Bernstein for his unwavering support for our Institute and the CIHR Governing Council for its dedication to upholding the CIHR vision and our place in that vision.

A handwritten signature in black ink that reads "Bhagirath Singh". The signature is written in a cursive, flowing style.

Dr. Bhagirath Singh
Scientific Director
Institute of Infection and Immunity

Institute of Infection and Immunity Staff



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Institute Profile

The Institute of Infection and Immunity (III) is one of the 13 institutes of the Canadian Institutes of Health Research (CIHR). As the Government of Canada's health research agency, CIHR promotes the creation of new knowledge and advances its translation into improved health, more effective health services and products and a strengthened health care system.

As defined by its mandate, III identifies research priorities and funds promising basic, clinical, population health and health services and policy research in infection and immunity. It builds research capacity by developing and funding strategic initiatives, along with training programs, fellowships and awards for excellent researchers. It also fosters partnerships to coordinate research efforts and speed the development of new methods to prevent, detect and treat

disease. The Institute also promotes the transfer of research knowledge to various stakeholders, health care professionals, policy makers and the general public, enabling these individuals to apply the research findings and make informed decisions concerning human health. The goal of all of these activities is to reduce the global burden of infectious diseases and disorders of the immune system.

Dr. Bhagirath Singh, Scientific Director of the Institute, is supported by a small staff located at the Siebens-Drake Research Institute at The University of Western Ontario in London, Ontario and at the CIHR corporate office in Ottawa. An Institute Advisory Board (IAB) composed of 15 internationally recognized researchers and representatives of stakeholder groups provides essential input and helps direct the activities of the Institute (see Appendix 1).



Carol Richardson, III Administrative Officer, Patrick Haag, Project and Communications Officer, and Veeran-Anne Singh, Acting Deputy Director, Program Delivery, answered questions about CIHR and III at the April 2002 conference of the Canadian Society for Immunology.



The Institute and its Advisory Board, in consultation with researchers and other members of the community, have designated two broad strategic research priority areas: infectious disease and host response. Within each priority area, specific research themes have been identified and are listed below.

During 2002-2003, the Institute was active in all priority areas. Highlights of these activities and the accomplishments of the Institute are summarized in this report.

Infectious Diseases	Host Response
Antimicrobial Resistance	Asthma and Allergy
Emerging Infectious Diseases	Autoimmune Diseases
HIV/AIDS and Hepatitis C	Innate Immunity
Microbiologically Safe Food and Water	Organ Transplantation and Regeneration
Novel Vaccine Development	



Outstanding Research

CIHR has made substantial investments in the support of research relating to the Institute of Infection and Immunity. In 2002-2003, almost \$120 million, representing approximately 20% of the total CIHR budget, was used to fund 1540 awards and operating and equipment grants in the areas of infection and immunity research. The projects supported by these grants will address fundamental research questions aimed at alleviating the suffering caused by infectious diseases and disorders of the immune system.

Safe Food and Water

Food- and water-borne illness represents a significant health threat for Canadians. In addition to the short- and long-term health effects of such illnesses, there is also a substantial cost to the Canadian economy in terms of work days lost and the potential impact of a contamination incident on international trade. It has been estimated that more than 200 known diseases are caused by food- and/or water-borne pathogens or their toxins. Because of changing patterns in demographics, globalization, emerging pathogens and antimicrobial use in agriculture, food- and water-borne illnesses are likely to become more prevalent in the future. In order to best protect our food and water supplies, strategic national food and water safety policies need to be developed that are based on the latest scientific evidence.

The Institute has played a leading role in forming a partnership, the Canadian Research Coalition for Safe Food and Water, that integrates government departments and private-sector organizations, in order to develop a national research strategy to prevent and respond to these diseases (see Translation and Use of Knowledge, below). In the past year, the Institute and partners have launched two Requests for Applications (RFAs) in support of this theme.

In May 2002, the Coalition launched its first RFA, titled, "Needs, Gaps and Opportunities Assessments (NGOA) in the Area of Microbial Contamination of Food and Water and Anti-Microbial Resistance", funded by III, the Canadian Water Network and the Natural Sciences and Engineering Research Council. The successful applicant was Dr. Mansel Griffiths, an expert in food-borne microorganisms from the University of Guelph. He plans to study the field of microbial risk assessment, examine how it is used in policy decisions and identify both methods for improvement and areas requiring further research.

In December 2002, the five federal departments that are members of the Coalition (Agriculture and Agri-food Canada, Environment Canada, Canadian Food Inspection Agency, Health Canada and the National Research Council) formed a partnership with III to launch the second RFA, entitled "Microbial





Contamination of Food and Water and Antimicrobial Resistance in the Food Chain Phase II – Establishing a Framework”. Research goals of the RFA included understanding the nature of microbial contamination of food and water, developing ways to detect and prevent it and examining antimicrobial resistance in the food chain. An additional goal of this RFA was to promote the formation of new research teams, or to expand existing teams, in which academic and government researchers combine their skills and resources to address important research questions.

Oculorespiratory Syndrome

During the 2000-2001 influenza season, a small number of people who had been vaccinated against influenza developed mild eye and respiratory symptoms, termed oculorespiratory syndrome (ORS). ORS occurred more frequently in people who had not received previous vaccinations, but there was concern that yearly flu vaccination might sensitize individuals and trigger the syndrome. To understand ORS and the role played by repeated flu vaccination, IHI launched a Request for Proposals in partnership with Health Canada, entitled, “Randomized Controlled Trial of persons with a history of oculorespiratory syndrome (ORS) following influenza vaccination”. A team led by Dr. Danuta Skowronski (University of British Columbia) was funded to

systematically examine the side effects experienced by individuals with a previous history of oculorespiratory syndrome following influenza re-vaccination during the 2000-2001 and the 2001-2002 influenza seasons.

HIV/AIDS

In 1990, the Government of Canada, recognizing the need for a formal, interconnected approach to HIV/AIDS, launched the National AIDS Strategy. It was succeeded, in 1998, by the Canadian Strategy on HIV/AIDS (CSHA) with increased emphasis on the ethical, legal and human rights issues raised by the epidemic. With an ongoing annual budget of \$42.2 million, the CSHA addresses a comprehensive range of HIV/AIDS-related issues, with research being a major component. CIHR has an agreement with Health Canada to administer the extramural research programs of the CSHA and funding for the Canadian HIV Trials Network. In 2002-2003, CSHA funds supported a total of 87 research grants, 3 group grants, 6 clinical trials, 12 salary awards and 39 training awards.

A key element of the agreement between CIHR and Health Canada is recognition that CIHR could achieve flexible and responsive research programs using a combination of investigator-initiated research and strategic initiatives. The need for a consultative process for identification



of research priorities was also identified. III has responded to these challenges by taking on responsibility for the management of CSHA funds coming to CIHR and by establishing the CIHR HIV/AIDS Research Advisory Committee (CHARAC), which will advise both III and the CIHR Research Priorities and Planning Committee on the optimal use of CIHR and CSHA funds for HIV/AIDS research programs.

In 2002-2003, III was pleased to fund two researchers who will specifically address issues of care and treatment for people with HIV in aboriginal communities. Dr. Judith Mill from the University of Alberta will study the diagnosis and care of aboriginal youth infected with HIV, while Dr. Patricia Spittal from the University of British Columbia will evaluate HIV vulnerability in aboriginal drug users. These investigators were successful applicants in the strategic competition that was launched by the CIHR Institute of Aboriginal Peoples' Health (IAPH) and III early in 2002.

HIV/AIDS research in the international context has also been funded under the Global Health Research Program Development and Planning Grants initiative that was led by the CIHR Institute of Population and Public Health and numerous partners, including III. The goal of the initiative is to build research

capacity in Canada to investigate and intervene in ecological, technological, economic, political and socio-cultural forces that influence global health. Seven of the 27 applications that were approved for funding have direct relevance to HIV/AIDS. For example, Dr. Mira Johri from the Université de Montréal and Dr. Robert Hogg from the University of British Columbia will study the care of HIV-infected individuals in Latin America, while Dr. James Blanchard from the University of Manitoba will examine the societal impact of the HIV epidemic in India.

Cystic Fibrosis

The discovery of the gene that causes cystic fibrosis holds great promise for a cure or for improved therapies for this devastating disease. The Institute, in partnership with the CIHR Institute of Circulatory and Respiratory Health, is pleased to support a new initiative led by the Canadian Cystic Fibrosis Foundation that was launched in March 2003. The goal of the BREATHE Initiative is to fund basic research focused on the development of novel therapeutic approaches for altering the course of cystic fibrosis.





Excellent Researchers and a Robust Research Environment

In addition to funding outstanding research, the Institute has been engaged this year in a number of activities to build research capacity. This has involved identifying gaps in current research programs, supporting the training of new researchers and providing ongoing support for established researchers.

Hepatitis C – Social and Behavioural Factors

Hepatitis C is a global health problem, with approximately 170 million people infected. It is estimated that the number of people infected with the hepatitis C virus (HCV) in Canada is 240,000 and that 4,000 new infections occur each year. Injection drug use is now the most significant exposure route for HCV in Canada, accounting for around 60 per cent of all HCV infections. Although some infected individuals are able to clear the virus, the majority are chronically infected and one-third are expected to eventually develop cirrhosis, followed by end-stage liver disease.

Through meetings, consultations and input from members of the CIHR/Health Canada Joint Advisory Committee on Hepatitis C, the Institute determined that systematic research concerning the social and behavioural aspects of HCV infection and transmission needed support to build research capacity in this domain. To address this gap and set research priorities, the Institute, together with Health

Canada, supported a workshop organized by Dr. Benedikt Fischer from the University of Toronto in February 2003. Conference participants agreed that socio-behavioural research was needed to form the basis for targeted, feasible and effective HCV prevention and treatment interventions, particularly in high-risk groups, and should be given funding priority. In March 2003, the Institute and Health Canada invited researchers to submit applications for “Interdisciplinary Capacity Enhancement (ICE) Team” grants in this area. Recognizing that many of the populations of interest are also at risk for HIV transmission, this RFA targeted both hepatitis C and HIV.

Training and Support for Researchers and Development of New Research Teams

Many outstanding, internationally recognized researchers in the areas of infection and immunity are supported each year through the Canada Research Chairs (CRC) program. To complement the investment being made by the CRC program, the Institute has established several new programs that provide research support for existing Institute-related scientists and fund salaries for trainees. The goal of these programs is to build research capacity in priority areas, encourage the formation of new teams that will perform innovative and promising research and ensure that there is a pool of highly capable researchers in the future.



Strategic Training Initiative in Health Research

The Strategic Training Initiative in Health Research (STIHR) was launched by CIHR as a way for Canada to increase its competitiveness internationally in attracting new, bright, creative research talent and to ensure excellence in the next generation of Canadian health researchers. Of the thirty-five programs funded in March 2003, three were in the areas of infection and immunity (Table 1).

New Emerging Teams Program

The New Emerging Team (NET) Program supports the growth of small teams or the creation of new teams of independent investigators. The projects undertaken by these teams are collaborative, multidisciplinary and innovative. In 2002-2003, the Institute and its partners identified strategic priorities and funded research teams in each of these areas (Table 2).

Host Susceptibility and Resistance to Pathogens in Health and Disease

Host response during infection involves interaction between predisposing host genes, pathogens and environmental factors. Host immune responses are not always beneficial and, in some instances, inappropriate or prolonged inflammation may contribute to the pathology of diseases or post-infection autoimmune reactions. Under this strategic priority, the research teams that have been funded intend to examine the host factors that may trigger and aid progression and severity of infectious, autoimmune and immunological diseases.

Antimicrobial Resistance, Health System Implications and Health Outcomes

The prolonged and intensive use of antimicrobial agents, combined with susceptible patients and the potential for cross infection, has resulted in resistant pathogens that are both expensive and extremely difficult to eradicate. Research teams funded under this priority will investigate prescription practices and other factors that may lead to antimicrobial resistance.

Table 1 – Strategic Training Initiative in Health Research Grants in the Areas of Infection and Immunity

Principal Investigator(s)	Host Institution	Program Title	Institute(s)/ Partner(s)
Antel, Jack	McGill University	Integrated training program in basic and clinical aspects of neuroinflammation	CIHR Institutes of Infection and Immunity and Neurosciences, Mental Health and Addiction/ Fonds de la recherche en santé du Québec
Chow, Anthony W.	University of British Columbia	UBC training program for translational research in infectious diseases	CIHR Institute of Infection and Immunity
Heathcote, Elizabeth Jane Lindsay	University Health Network (Toronto)	A national hepatitis C research training program grant	CIHR Institute of Infection and Immunity/ CIHR/Health Canada Hepatitis C Initiative

**Table 2 – New Emerging Teams
Host Susceptibility and Resistance to Pathogens in Health and Disease**

Principal Investigator(s)	Host Institution	Program Title	Institute(s)/ Partner(s)
Tremblay, Michel	Centre hospitalier de l'Université Laval	Transcriptome and proteome analyses of human lymphoid tissue cultured <i>ex vivo</i> as a new experimental model system to study host susceptibility to HIV-1 infection	CIHR Institute of Infection and Immunity
Vidal, Silvia	University of Ottawa	Forward genetics to identify novel pathways in host response to infection: From mouse models to patients	CIHR Institute of Infection and Immunity

Antimicrobial Resistance, Health System Implications and Health Outcomes

Principal Investigator(s)	Host Institution	Program Title	Institute(s)/ Partner(s)
Loeb, Mark	McMaster University	Antimicrobial use and resistance in seniors	CIHR Institutes of Infection and Immunity and Health Services and Policy Research/Canadian Bacterial Diseases Network
Mulvey, Michael	University of Manitoba	Community acquired antimicrobial resistant bacteria in northern Canadian communities	CIHR Institutes of Infection and Immunity and Population and Public Health/Canadian Bacterial Diseases Network

Self-Regeneration, Repair and Replacement of Damaged and Diseased Cells, Tissues and Organs in Circulatory and Respiratory Diseases

Principal Investigator(s)	Host Institution	Program Title	Institute(s)/ Partner(s)
Gutkowska, Jolanta	Université du Québec	The cardiomyogenic action of oxytocin and applications in cell therapies of cardiac pathologies	CIHR Institutes of Infection and Immunity and Cardiovascular and Respiratory Health/Heart and Stroke Foundation of Canada



Interdisciplinary Capacity Enhancement (ICE) Teams Program

This program was designed to provide support for new or existing groups who are committed to trans-disciplinary research. The groups are expected to attract, engage and mentor junior researchers or established researchers who have not worked extensively in health research in the past. One of the 11 successful teams is funded by III, the Natural Health Products Directorate of Health Canada and the CIHR Institutes of Musculoskeletal Health and Arthritis

(IMHA) and Health Services and Policy Research (IHSPR). Led by Dr. Heather Boon from the University of Toronto, the team will promote high-quality collaborative complementary and alternative health care research (CAHC) that focuses on evaluating CAHC and its use by Canadians, including vulnerable populations and, further, will assess the integration of CAHC into the Canadian health care system.

Local MPs and officials celebrate the formal opening of the Institute of Infection and Immunity. From left, Joe Fontana, MP; Dr. Bhagirath Singh, III Scientific Director; Sue Barnes, MP; Dr. Carol Herbert, Dean of the Faculty of Medicine and Dentistry, The University of Western Ontario; and Dr. Nils Petersen, Vice-President (Research), The University of Western Ontario.





Partnerships and Public Engagement

During the past year, the Institute has developed and nurtured a number of partnerships and increased the profile of the Institute among the infection and immunity communities. Several distinct initiatives and programs have arisen as a consequence of these activities.

Partnership Forum

The Institute hosted a two-day Partnership Forum in Toronto at the end of January 2003. The Forum was aimed at promoting communication among the organizations and with III, to enable the development of new partnerships. The Forum laid the foundation for future discussions of opportunities for working together to enhance each other's research initiatives and for the potential development of a partner-based network in the areas of infection and immunity.

Representatives of non-governmental organizations, health charities, professional societies and III attended the Forum. Events over the course of the Forum included discussions about guiding principles for successful partnerships and opportunity areas for new partnerships. Identified opportunity areas included capacity building, development of unique resources, healthy public policy, knowledge transfer, new technologies and public and political awareness, education and support. Within these opportunity areas, working groups made up of individuals with congruent

interests developed examples of actions they could pursue jointly. Among the suggestions received was that a partner-based research network should include a broad communications functionality that could support working groups in particular opportunity areas, as well as the exchange of information on topics of mutual interest.

III is committed to supporting and facilitating partnerships with all organizations working in the areas of infection and immunity and will continue to build on the foundation achieved at this Forum.

Engaging the Research Community and Building Research Capacity

In addition to directly organizing and funding workshops and conferences, the Institute sponsored and, in many cases participated in, more than 20 externally organized workshops, meetings and symposia with relevance to infection and immunity (see Appendix 2). These events developed partnerships, encouraged communication among researchers and helped organizations to set research agendas.

Canadian Research Coalition for Safe Food and Water

Beginning in the summer of 2001, the Institute extended invitations to members of Canada's food and water research community and related industry sectors to join it



in developing a national research agenda on safe food and water. The Canadian Research Coalition for Safe Food and Water is a 16-member coalition of federal organizations, funding agencies and private sector partners (Table 3).

Table 3 – Members of the Canadian Research Coalition for Safe Food and Water

Agriculture and Agri-Food Canada
Canadian Agri-Food Research Council
Canadian Aquaculture Industry Alliance
Canadian Bacterial Diseases Network
Canadian Food Inspection Agency
Canadian Institutes of Health Research
Canadian Pork Council
Canadian Veterinary Medical Association
Canadian Water Network
Chicken Farmers of Canada
Dairy Farmers of Canada
Environment Canada
Genome Canada
Health Canada
National Research Council Canada
Natural Sciences and Engineering Research Council of Canada

The Coalition was formalized in October 2002 through the signing of a Memorandum of Understanding at a meeting of the Coalition at Meech Lake, Quebec. It established “cooperation in the research agenda of science and technology related to food and water safety in Canada”.

Partnerships with Other CIHR Institutes

III was a partner on three multi-Institute strategic initiatives in 2002-2003 – “Improving Access to Appropriate Health Services for Marginalized Groups” with IHSPR, IAPH and the Institute of Gender and Health (IGH), “Building Healthy Communities Through Rural and Northern Health Research Initiative” with all Institutes and numerous other partners and “Reducing Health Disparities and Promoting the Health of Vulnerable Populations” with five other CIHR Institutes, Health Canada and the Heart and Stroke Foundation of Canada.

Public Engagement

The Scientific Director and IAB members have given several television, radio and newspaper interviews over the year. Through these interviews, the Institute has directly provided the public with information concerning public health, infection and immunity research and the activities of the Institute. Requests for media interviews increased greatly at the end of March 2003, following the outbreaks of SARS in Toronto. On a single day, March 25, Dr. Singh handled 26 media requests, highlighting the critical role of the Institute in communicating health research information to the public.



Participants in the Oct. 31, 2002, meeting of the Canadian Research Coalition for Safe Food and Water. Seated, from left to right: John ApSimon, Kim Elmslie, Primal Silva, Judith Bray, Lorne Babiuk, Carol Richardson. Standing, from left to right, Mansell Griffiths, Paul Sockett, Michelle Gagnon, Steve Leach, Lynda Wood, Jim Richards, Catherine Armour, Grahame Farquhar, Linda Poste-Flynn, Ying Gravel, Gordon Dittberner, Mohamed Karmali, David Rideout, Marc Ouellette, Bruce Moor, Tess Laidlaw. Missing from photo: Bonnie Jean MacDonald, Patrick Haag.

Translation and Use of Knowledge

In 2002-2003, the Institute engaged in a number of activities to promote communication among researchers and to build links for the transfer of research knowledge to users such as health care workers, policy makers and the general public.

Canadian Research Coalition for Safe Food and Water

To support the researchers interested in applying for the second RFA in this area, the Institute held an Application Development Workshop on December 11, 2002 in Ottawa. The workshop brought together researchers from government and academic sectors across Canada. Representatives from the CIHR Research Portfolio were on hand to discuss the application process. According to subsequent discussions with researchers who attended the workshop, one significant outcome was the development of several new research collaborations.

Food for Health Exhibit

As part of a broader education and outreach program, III is a major supporter of a travelling museum exhibit with a working title of "Food for Health",

currently being developed by the Canada Agriculture Museum. III was instrumental in developing the participation of sponsors for this exhibit, including four CIHR Institutes and seven members of the Canadian Research Coalition for Safe Food and Water. The exhibit is scheduled to open at the Canada Agriculture Museum in Ottawa in March 2006 and, over the following four years, will travel to many venues across Canada, including Canada's major agricultural fairs. It will provide advice on food safety and the links between diet, exercise and susceptibility to chronic diseases such as diabetes, heart disease and cancer. Organized events at tour venues will include opportunities to feature the science of local researchers and other experts in the area of food safety.



Institute Newsletter

To communicate with the infection and immunity research community and galvanize support for the Institute and its activities, III has launched a newsletter called “Microcosm III”. Three issues of the newsletter were published in fiscal year 2002-2003. The Institute was the first of the CIHR Institutes to publish a newsletter, a tangible demonstration of its leadership role in engaging the research community.

Knowledge Translation Strategies for Health Research

It is critical to have mechanisms in place that allow for the translation of knowledge from researchers to users. To promote effective knowledge transfer and its application, the Institute is participating in an RFA in support of knowledge translation research. As one of its goals, the initiative seeks to promote research on

how best to integrate knowledge translation principles and practice into the training and continuing education of health professionals.

III is also participating in an initiative led by the CIHR Institute of Population and Public Health (IPPH) and IHSPR to describe the current status of databases in Canada that are used for population-based health and health services research and to show their potential for important and innovative health research. The Request for Proposals entitled “Population-based Health and Health Service Data in Canada: Current Status and Future Health Research Potential” was launched in June 2002.





Organizational Excellence



In the past year, the Institute has demonstrated organizational excellence in enhancing its communication strategy, engaging the research community and the public and playing a leadership role in national health research issues.

An excellent opportunity to communicate the role of the Institute was afforded at the official opening of the Institute held at The University of Western Ontario on May 3, 2002. A symposium entitled “Current Topics in Infectious Disease and Immunity” marked the occasion and featured outstanding presentations by both local infection and immunity scientists and members of the IAB. The event was attended by more than 150 people, including representatives of local and national research communities and stakeholder groups, federal members of parliament and representatives from The University of Western Ontario and CIHR.

IAB meetings were held in London, Ontario in May 2002, in Winnipeg in September 2002 and in Ottawa in January 2003. The meetings provided an opportunity for Institute staff and board members to meet with local researchers and government officials, including provincial and federal ministers. In Winnipeg, board members and Institute staff toured the National Research Council Institute for Biodiagnostics and the Health Canada National Microbiology Laboratory.

To enhance its communication strategy, the Institute appointed Ms. Tess Laidlaw as Communication Assistant in April 2002. Ms. Laidlaw has developed material for the Institute newsletter, managed Institute media relations and written several profiles of researchers in the areas of infection and immunity.

In the past 12 months, the Institute’s Scientific Director and staff members have participated in more than 100 national and international meetings, consultations, open forums, presentations and conferences.

In another initiative, driven by the IAB with the support of the President of CIHR and the CIHR Research Priorities and Planning Committee, III has initiated the creation of the CIHR HIV/AIDS Research Advisory Committee (CHARAC). The purpose of the committee is to systematically examine and act on HIV/AIDS research priorities and to encourage communication among individuals interested in HIV/AIDS research. CHARAC will be a sub-committee of the IAB and will have members representing multiple CIHR Institutes, HIV/AIDS researchers, Health Canada, the Ministerial Council for HIV/AIDS and community organizations involved in responding to the epidemic. In March 2003, the Institute called for nominations of qualified individuals to become members of the committee and the first meeting is planned for the fall of 2003.

Financial Statements

Funding sources

CIHR is funded entirely through federal government appropriations, which totaled \$651.2 million for the year ended March 31, 2003. CIHR Governing Council delegates financial authority to each institute for managing a portion of these funds that are described below.

Institute Strategic Initiatives: Each institute is provided with funding annually to support strategic health research in its respective

scientific areas by awarding peer-reviewed grants and awards.

Institute Support Grant: Each institute receives a support grant of \$1 million annually to operate and to develop research capacity in the scientific community it represents through a wide array of collaborative activities.

The following tables provide financial results of operations for the year ended March 31, 2003 for each of these funding sources.

Institute of Infection and Immunity Investments in Strategic Initiatives

For the year ended March 31, 2003

Strategic Initiatives	Number	Contributions through Grants and Awards				Total
		2002-03	2003-04	2004-05	2005 and beyond	
Interdisciplinary Capacity Enhancement Teams	1	\$7,500	\$30,000	\$30,000	\$82,500	\$150,000
Global Health Research	2	149,480	50,000	-	-	199,480
Operating Grants to Open Competition	20	1,022,842	-	-	-	1,022,842
Health Research Programs of Excellence	2	729,480	746,230	751,480	1,315,090	3,542,280
New Emerging Team	2	118,117	158,625	158,626	344,443	779,811
Needs, Gaps and Opportunities	1	39,940	-	-	-	39,940
Institute of Aboriginal Peoples' Health Strategic Initiative	2	41,747	73,145	58,272	25,000	198,164
Host Susceptibility and Resistance to Pathogens in Health and Diseases	-	-	587,000	587,000	1,761,000	2,935,000
Anti-microbial Resistance, Health System Implications and Health Outcomes	-	-	476,177	590,719	1,642,464	2,709,360
CIHR Training Program Grants	9	638,084	629,500	632,834	1,857,249	3,757,667
Total	39	\$2,747,190	\$2,750,677	\$2,808,931	\$7,027,746	\$15,334,544

Note: Grants and awards in respect to these programs are approved for 1 to 6 years. Figures displayed represent CIHR financial commitments for these programs in 2002-03 and subsequent years. Availability of these funds in future years are subject to funding appropriations by Parliament. For some initiatives, partners also contributed to the funding of the grants and awards.

Institute of Infection and Immunity Institute Support Grant

For the year ended March 31, 2003

Available Funds	\$ 1,843,319
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Expenses

Institute Development		
Conference, Symposia and Workshops	213,122	
Institute Advisory Board	11,951	
Professional Services	31,458	
Travel Expenditures	110,881	
Expenditures Relating to the Official Opening of the Institute	4,119	
Presenting Sponsor – “Food for Health” Exhibition of the Canada Agriculture Museum	150,000	
RFP Support – Protocol Development for the Canadian Longitudinal Study on Aging	20,000	\$ 541,531
Institute Operations		
Salaries and Benefits	363,610	
Office Accommodations	10,908	
Telephone and Communication Services	9,493	
Supplies, Material and Other Services	87,168	
Office Furniture and Fixtures	3,601	
Computer Equipment and IT Support	19,108	
Professional Services	2,846	
Travel Expenditures	79,889	
Other Expenditures	205	\$ 576,828
Total Expenses		\$ 1,118,359
Unspent Balance*		\$ 724,960

*Note: The unspent balance as at March 31, 2003 is carried forward to the subsequent fiscal year.

Appendices

Appendix 1

Institute of Infection and Immunity Advisory Board

Researcher	Institution
Dr. Lorne A. Babiuk, Chair	Director, Vaccine and Infectious Disease Organization Professor, Department of Veterinary Microbiology, University of Saskatchewan
Dr. Michel G. Bergeron, Vice-Chair	Professor and Director, Division of Microbiology and Infectious Diseases Research Center, Université Laval
Dr. Chris Bleackley	Professor, Department of Biochemistry, University of Alberta
Dr. Abdallah Daar	Director, Program in Applied Ethics and Biotechnology, Public Health Sciences and Surgery, University of Toronto
Dr. B. Brett Finlay	Professor, Biotechnology Laboratory, University of British Columbia
Dr. Jack Gauldie	Professor and Chairman, Department of Pathology & Molecular Medicine, McMaster University
Dr. Kevin Glasgow	Chief Executive Officer, Cardiac Care Network of Ontario Assistant Clinical Professor, Department of Family Medicine, McMaster University Lecturer, Department of Public Health Sciences, University of Toronto
Dr. Philip Halloran	Director, Division of Nephrology and Immunology, University of Alberta
Dr. Noni MacDonald	Dean, Faculty of Medicine, Dalhousie University
Dr. Danielle Malo	Associate Professor, Centre universitaire de santé McGill, Hôpital général de Montréal
Dr. William E. Paul	Chief, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases
Dr. Francis Plummer	Scientific Director, National Microbiology Laboratory, Canadian Science Centre for Human and Animal Health, Health Canada Professor, Medical Microbiology, University of Manitoba
Ms. Helaine Shiff	Member, Research Partnership Program for the Juvenile Diabetes Research Foundation Partner, Focus on You Consultants
Dr. Steffanie Strathdee	Associate Professor, Infectious Diseases Program, Department of Epidemiology Johns Hopkins School of Hygiene and Public Health
Dr. Robyn M. Tamblyn	Associate Professor, Department of Medicine and Department of Epidemiology and Biostatistics, McGill University

Appendix 2

Workshops, Conferences and Symposia Supported by the Institute of Infection and Immunity

Organized by the Institute of Infection and Immunity	
June 7, 2002	Antimicrobial Resistance Meeting
December 11, 2002	Safe Food & Water Application Development Workshop
January 31-February 1, 2003	Partnership Forum
February 15, 2003	Socio-Behavioural/HCV Research Conference
Organized by External Groups	
April 19-21, 2002	Canadian Tobacco Control Research Summit
April 21-24, 2002	University of Alberta – University of Calgary Conference on Infectious Diseases
May 2-5, 2002	Canadian Research and Development Centre for Probiotics – Open Forum on Probiotics and Prebiotics: Critical Issues in Advancing the Science
May 10, 2002	Stanier Symposium – University of Western Ontario Linking Hygiene to Health: Old Foes and New Challenges
May 29, 2002	Canadian Blood and Marrow Transplant Group Clinical Trials Network Meeting
June 12-15, 2002	45 th Annual Meeting of the Canadian Federation of Biological Societies – Bioterrorism Science Policy Forum
June 14-15, 2002	Oral Health Research Priorities Planning Workshop
June 23-24, 2002	Nanotechnology and Microfabricated Devices for Humans and Diseases Workshop
October 3-6, 2002	1 st International Conference on Inner City Health – Improving the Health of the Disadvantaged
October 5-7, 2002	Canadian Committee on Antibiotic Resistance – National Policy Conference on Antibiotic Resistance
November 7-10, 2002	Canadian Society of Allergy and Clinical Immunology Meeting and Research Priorities Workshop
November 22, 2002	Stanier Symposium – University of British Columbia Vaccine Preparations and Vaccination Through Understanding Pathogenesis
November 22-23, 2002	Economic Analysis of Food and Water-Borne Disease in Canada
November 28-29, 2002	Ontario HIV Treatment Network Annual Research Day

Organized by External Groups (continued)

February 22-23, 2003	Canadian Pre-eclampsia Network Workshop
March 16-17, 2003	CIHR Workshop on Regenerative Medicine In Canada – Defining the National Strategy for Tissue Engineering and Artificial Organs
March 27-28, 2003	Technology Enabled Knowledge Translation (TEKT) Workshop
March 28-31, 2003	Canadian Society for Immunology – 17 th Annual Meeting

