

In this issue

Message from the Scientific Director	1
Influenza in the Spotlight	2
The Cochrane Collaboration in Canada	3
Events in I & I	5
What's New?	5
III Strategic Funding Decisions	6
Institute Advisory Board Members 2006-07	7
III Publications	8
Contact Us	8

Message from the Scientific Director

Facing the future

Periodically reflecting on one's accomplishments and analyzing ways to improve can be an exciting opportunity for individuals and organizations alike, sometimes leading to dramatic changes in direction. With the quinquennial mid-term and international reviews of CIHR just complete [<http://www.cihr-irsc.gc.ca/e/31680.html>], the Institute of Infection and Immunity is no longer a "newcomer" to the health research funding scene. The collection of data for the reviews was a significant undertaking in spite of the relatively short life of the Institute, and highlighted both achievements and areas for development. But the process also suggested that a "reality check" was in order – there are many potential areas that the Institute could address, but alignment of resources and activities demands a context and considered priorities.

Accordingly, beginning in January 2006, the Institute and its Advisory Board initiated a process to create a new strategic plan. Most of the May 2006 Board meeting was dedicated to examining the values and objectives that would guide the Institute over the next five year period. A draft strategic plan document is being developed and will be made available for consultation and input from the infection and immunity community in November 2006. The plan will be critical in determining future directions for III, and I look forward to receiving comments to help us refine it.

While a new strategic plan will provide a rational context for new directions, the Institute continues to respond to current

challenges and opportunities. New federal research funding for pandemic influenza preparedness has been earmarked for CIHR, and the Institute has been intimately involved in this initiative from its inception. As described in a later article, an advisory planning group has been struck by the Institute, and this group has commissioned and released a consultation document which outlines potential priorities for this funding. Input received will aid the Institute in launching high impact strategic programs later in the year.

Over the past 20 years, CIHR/MRC has played a significant role in building Canadian HIV research capacity. HIV/AIDS remains a major research priority area for the world and in Canada the Institute has become a focus for much of the research-related activity. Enabled by dedicated funding from the Federal Initiative to Address HIV/AIDS in Canada, a number of

Continued on page 2

We want to hear from you!

III will work with researchers, institutions and funding partners to help promote research developments and results.

In an effort to foster the outstanding work of CIHR-III funded researchers, we encourage any researcher or trainee who anticipates publishing their research work to inform us at their earliest convenience.

Email us at iii@uwo.ca



SD's message (continued)

new RFA have been launched in the last eighteen months and a community-based research program specific to HIV has been established at CIHR. A strategic planning process for HIV/AIDS research is underway, guided by the CIHR HIV/AIDS Research Advisory Committee and a significant effort is being made to coordinate disparate national and international interests related to the research and development of HIV vaccines. We will continue to seek ways to synergize with the large scale international funding initiatives in this area.

Finally, concern over funding for health research in Canada is ongoing for members of the III community. In spite of the substantial increase in federal funding to CIHR over the last 6 years, the number of quality applications remaining unfunded continues to expand. When possible, the Institute has funded several meritorious grants for the short term. In July 2006 we

launched a priority announcement to continue this strategy, but this can only be an interim measure. We are dependent on support from the federal government to ensure sufficient resources are provided to maintain a vibrant research community and prepare future generations for new research challenges. Please take the time to tell the story of your research to your community, members of the media and decision makers. Your advocacy in support of research, especially to your local members of Parliament, remains a crucial factor in communicating the importance of research to health and economic growth.

Bhagirath Singh, PhD
Scientific Director
CIHR Institute of Infection and Immunity



Influenza in the Spotlight

Influenza has been on everyone's minds lately. The avian influenza H5N1 has been in the newspapers frequently over the past year, with updates from around the world on both animal and human cases. Although there is no immediate threat to the health of people in Canada, research is needed to develop strategies to protect Canadians from a potential pandemic outbreak. In May 2006, the federal government responded to that need by announcing in Budget 2006 that it would provide \$21.5 million over five years to CIHR to support pandemic preparedness activities. These funds will be used to support a Pandemic Preparedness Research Initiative which the Institute of Infection and Immunity (III) will lead.

To effectively utilize this resource and also to examine the broader implications for research, III has created a Pandemic Preparedness Research Task Group (PPRTG). The PPRTG is comprised of active researchers carrying out pandemic-related work as well as members positioned to apply the new research knowledge to help Canada prepare for a pandemic. The PPRTG will make recommendations on key pandemic preparedness research priorities and mechanisms to support research in these areas.

The PPRTG has links to the Canadian Rapid Research Response Team (C3RT) which has representatives from multiple CIHR Institutes, Health Canada, the Public Health Agency of Canada, the Canadian Food Inspection Agency, the Council of Chief Medical Officers of Health, infectious disease researchers, private sector, provincial health ministries, and international health agencies. The C3RT will review and comment on the PPRTG research recommendations. C3RT will also facilitate the creation of linkages with researchers and users of research knowledge nationally and internationally.

The first stage of the Initiative will support two-year operating grants on priority areas including those identified in the Influenza Research Priorities Workshop held in September 2005. This Pandemic Preparedness – Operating Grant RFA was launched in June 2006 with an anticipated start date of March 2007. The Initiative will also provide some support for Development/Planning Grants and Collaborative Grants under the International Opportunities Program. Watch the III web page <http://www.cihr-irsc.gc.ca/e/13533.html> for future activities related to this initiative.

The Cochrane Collaboration - Knowledge Translation in Action

"I am often asked how people should decipher the contradictory health research evidence they hear. The answer is to look at broad international evidence through systematic reviews, and that is just what the Cochrane Collaboration does," said Dr. Mark Bisby, former Vice-President Research for CIHR. "The Cochrane Collaboration plays a crucial role in ensuring the knowledge gained through thousands of international clinical trials can be used by health professionals and patients to improve prevention and treatment, as well as by the health research community to guide future research."

After years of ad hoc funding by CIHR, the Cochrane Network and Centre in Canada received a major multi-year infrastructure grant from CIHR in April of 2006. The CIHR Knowledge Translation Branch together with the Canadian Coordinating Office for Health Technology Assessment and six CIHR Institutes agreed to provide \$7.8 million over five years to fund the infrastructure support for the Canadian Cochrane Centre and Network and for the Cochrane Review Groups and Fields located in Canada. This support will allow these Groups to contribute more effectively to knowledge synthesis and translation.



III is a partner in this funding, supporting both the important role of the Canadian Cochrane Centre and in particular the Inflammatory Bowel Disease and Functional Bowel Disorders Review Group based at the University of Western Ontario. We asked the leader of that review group, Dr. John McDonald, to describe, in brief, the nature of the Cochrane Collaboration and the contributions of the London-based review group.

Cochrane Collaboration Quick Facts

- 15,000 people working in over 90 countries
- Accurate information about the effects of healthcare available worldwide
- Free access to abstracts of systematic reviews
- The Cochrane Library
 - 2,785 complete reviews...and growing!
 - Over 478,000 controlled trials
 - Free access to the full library for most Canadian health professionals working in academic or healthcare centres
 - Free full access in the Northwest Territories, Nunavut, Saskatchewan, New Brunswick and Yukon, and to health professionals in Nova Scotia
- www.cochrane.org

The Cochrane Collaboration in Canada

By Dr. John McDonald

The need for systematic reviews

Advances in therapy for diseases arise from important fundamental research focused on genetic mechanisms and immune responses, and depend also on clinical trials that determine whether new therapies are effective. Knowledge translation, the transfer of research findings into practice, is a process that can be surprisingly slow, and often out-of-step with actual evidence. "Care gaps" exist between the care that would be consistent with current evidence, and that which is actually provided to patients. The best information to guide physicians in making therapeutic decisions comes from randomized trials. However, the volume of these has become overwhelming, and

practitioners rely more on clinical practice guidelines, the advice of local experts and recommendations presented in traditional review articles. Unfortunately the quality of the synthesis of knowledge in these sources has been proven to be highly variable. The need for better reviews has led to the development of 'systematic reviews' which employ specific methods that encourage thoroughness in the search for relevant data and avoid bias in the extraction and interpretation of the data. Systematic reviews can provide better guidance to clinicians and patients, and also assist policy makers and those charged with allocating scarce dollars to research and patient care.

Continued on page 4

The Cochrane Collaboration in Canada (*continued*)

The Cochrane Collaboration

The Cochrane Collaboration, developed in response to the internationally recognized need for systematic reviews of all health care interventions, includes approximately 650 contributors at 17 academic health science centres. Included in this number are the specialists at the Canadian Cochrane Centre at the University of Ottawa (directed by Dr. Jeremy Grimshaw) and members at the editorial bases of five of the fifty international Collaborative Review Groups (that review interventions for specific diseases) and two 'fields' (that deal with defined groups of patients spanning clinical areas). The Canadian based Review Groups develop and maintain systematic reviews relevant to the following problems: inflammatory bowel diseases and functional bowel disorders, back disorders, musculoskeletal disorders, hypertension, and diseases of children. In addition, the Effective Practice and Organisation of Care (EPOC) Group produces systematic reviews of educational, behavioural, financial, organisational and regulatory interventions designed to improve health professional practices and health care services. Many Canadian investigators also contribute to the work of international Review Groups covering interventions for diabetes, cardiovascular disease, stroke, infectious diseases and cancer.

The Cochrane Library

The Cochrane Library is an electronic database of systematic reviews that is currently available free of charge to over 189 million citizens around the world. Abstracts and consumer synopses are available free via Medline and the Cochrane Collaboration and Wiley Interscience web sites. While the Cochrane Library is available to most clinicians and researchers in Canada through university and health sciences libraries, it is a key priority for the Canadian Cochrane Centre to secure a national license to make it available to all Canadian citizens as it is for a few provinces now. Members of the Canadian Cochrane Centre and the editors and contributors to Review Groups also work with other stakeholder groups to disseminate relevant and important systematic reviews to those who need access to the knowledge. For investigators, the review

groups also make available specialized registers of all relevant randomized trials in their specific domains.

The Inflammatory Bowel Disease and Functional Bowel Disorders (IBD/FBD) Review Group

Exploratory meetings held in 1994 led to the formation of four review groups for gastrointestinal diseases and an agreement that the editorial base for the review group for inflammatory bowel disease would be at the University of Western Ontario. The group agreed to concentrate on interventions for induction or maintenance of remission in both Crohn's disease and ulcerative colitis and in 1998 accepted responsibility for related topics including constipation and diarrhea related to irritable bowel syndrome. The group consists of 139 review authors, 14 peer reviewers, and six editors: John WD McDonald (Coordinating Editor), Lloyd Sutherland, Brian Feagan and John Marshall (Canada), Jorgen Rask-Madsen (Denmark), and Tony Akobeng (UK) who are all supported by an excellent Review Group Coordinator, John K MacDonald. Principal funding for the group has been provided by private donors, the University of Western Ontario, the London Health Sciences Centre and interim support from the CIHR Institutes of Infection and Immunity, and Nutrition, Metabolism and Diabetes. This support will be stabilized by the new CIHR grant.

As of 2006 the group has contributed 24 complete reviews to the Cochrane Library, and seven more are going through the rigorous editorial process. In the first three months of 2005 the Cochrane Library experienced over 389,000 user sessions, 2 million hits and half a million downloaded abstracts. There were 360,000 full text downloads on Wiley's internet servers. Some of our group's reviews have been listed in the top 50 most frequently accessed reviews and are regularly cited in more traditional publications. Even reviews can be reviewed – in 1998, the IBD/FBD group determined that, in a randomized blinded study, Canadian gastroenterologists preferred focused systematic reviews to traditional broad narrative reviews as guides to decisions on the use of specific therapy.

Events in I & I

Safe Food and Water Workshop, Calgary, AB September 26, 2006

The Institute of Infection and Immunity is hosting a workshop that will bring together all seven teams that were funded by the Safe Food and Water Research Initiative and its partners to share knowledge learned, explore opportunities for future collaboration on research projects of mutual interest and encourage network development for future grant applications.

Canadian-German Meeting on Infectious Disease, Montréal, QC November 6-7, 2006

This meeting, co-sponsored by the CIHR Institute of Infection and Immunity, the Helmholtz Centre for Infection Research and the Internationales Buero will bring together leaders in infectious disease research from Canada and Germany to identify key infectious disease issues and strengths along with mechanisms and opportunities to improve collaborations in these areas. Conference participants will include leading researchers in key research areas from both Canada and Germany. The outcomes from this meeting will be posted on the III website.

III New Investigator Forum, King City, ON, April 13-15, 2007

The Institute of Infection and Immunity is very pleased to announce the Institute's second New Investigator Forum. The Forum is intended to facilitate the career development of new investigators and aims to strengthen infection and immunity research by enabling the formation of peer networks of new investigators working in related or overlapping areas of research. For more information please contact Bethany Heinrichs at 519-661-3228 or via email at bethany.heinrichs@schulich.uwo.ca.

Other meetings of interest in I & I

- Salmonella: From Pathogenesis to Therapeutics Symposium, Victoria, BC September 9-13, 2006
- 2006 International Meeting on the Molecular Biology of Hepatitis B Viruses, Vancouver, BC September 17-20, 2006
- Filoviruses: Recent Advances and Future Challenges – An ICID Global Symposium, Winnipeg, MB September 17-19, 2006
- Canadian Federation of Biological Societies 50th Annual Meeting, Ottawa, ON October 10-13, 2006
- Infectious Disease Society of America 44th Annual Meeting, Toronto, Ontario October 12-15, 2006
- National Forum on Knowledge Transfer and Exchange, Toronto, ON October 24, 2006
- Canadian Society of Allergy and Clinical Immunology, Montreal, QC October 26-29, 2006
- Canadian Campylobacter Conference, Vancouver, BC November 2-3, 2006
- Canadian Immunization Conference, Winnipeg, MB December 3-6, 2006

III provides support for many national and international events held in Canada which have a direct relevance to research in the areas of infection and immunity. Details on our workshop program can be found at <http://www.cihr-irsc.gc.ca/e/26638.html>.

What's New

Funding Opportunities launched June 2006

- Pandemic Preparedness - Operating Grants
 - Operating Grants
 - International Opportunity Program
 - Seed Grants
 - Collaborative Research Grants
- Novel Alternatives to Antibiotics
 - Team Grants
 - Seed Grants
 - Fellowships
 - Randomized Control Trials
 - Proof of Principle
- HIV/AIDS
 - Emerging Team Grants
 - Priority Announcements
 - Community-Based Research
- Mexico-Canada Joint Health Research Program in Tuberculosis
- Global Health Research Initiative (GHRI) - HIV/AIDS Prevention Trials Capacity Building Grants
- CANADA-HOPE Scholarship Program

Funding Opportunities launched July 2006

- Operating Grant Priority Announcement: Infection and Immunity

Previously launched

- China-Canada Joint Health Research Initiative Grants Program
- Influenza Immunization Program Evaluation Study Grant
- National Research Partnership in Inflammatory Joint Diseases
- Regenerative Medicine and Nanomedicine
- Clinical Autoimmunity Team Grants

Upcoming launches

The Institute of Infection and Immunity expects to launch requests for application in December 2006 in the areas of HIV/AIDS and pandemic influenza.

Complete details on all these programs can be obtained through the III website <http://www.cihr-irsc.gc.ca/e/13533.html>.

XVI International AIDS Conference – AIDS 2006 – Time to Deliver

Successful is the word that best describes the XVI International AIDS Conference which took place from August 13th to 18th, 2006 in Toronto. It was the largest ever International AIDS Conference, with more than 26,000 delegates from 170 countries in attendance. The conference marked the 25th anniversary of the first reported case of AIDS in 1981. Since then, more than 25 million people have died of AIDS and today about 40 million worldwide are infected with HIV. *Time to Deliver* was the conference theme which underscored the continued urgency in bringing effective HIV prevention and treatment strategies to communities around the world. The Conference received a lot of media attention with more than 3,000 journalists from news organizations around the world that covered the entire 6 days of AIDS 2006. Conference attendees were all united for one cause: putting an end to AIDS.

During the conference the Institute of Infection and Immunity in partnership with the Ontario HIV Treatment Network (OHTN) and Canadian Aboriginal AIDS Network (CAAN), hosted a satellite session entitled: *Community-Based*

Research (CBR) in Canada: Innovations and partnership to improve health outcomes for people living with HIV/AIDS and communities at risk. The session highlighted the unique aspects of CBR and the important role it can play in developing local strategies to address the epidemic. Nine speakers from universities and community-based organizations across Canada emphasized how CBR engages communities in the fight against the HIV/AIDS epidemic. The speakers explored the guiding principles and values of CBR, some of the challenges faced when conducting CBR and also the benefits of this research model for affected communities, research institutions and users of research knowledge. The satellite session was well attended with participation by approximately 175 delegates and it was successful in generating dialogue on issues in CBR.

Even though the conference has come to an end, let's hope that the fresh ideas and enthusiasm generated by AIDS 2006 continue to generate momentum over the months and years ahead and that 2006 is truly seen as the Time to Deliver.

III Strategic Funding Decisions

Over the past year the Institute of Infection and Immunity has announced funding decisions in many areas of research within its mandate. Programs such as the "Models to Investigate the Link Between the Mucosal Immune Response in the Lung and Respiratory Tract and Disease Outcomes Operating Grants", multiple grants under the umbrella of the "HIV/AIDS Research Initiative" and the "Partnerships for Health System Improvement" are a few highlights of the 12 programs that have received funding this year. Overall, more than \$13.8 million in new research funding has been committed to over 100 projects in the area of infection and immunity. The funded initiatives are listed below with full details on funded projects available at <http://www.cihr-irsc.gc.ca/e/26644.html> .

- Models to Investigate the Link Between the Mucosal Immune Response in the Lung and Respiratory Tract and Disease Outcomes – Operating Grants
- New Investigators in Infection and Immunity – Pilot Project Grants
- HIV/AIDS Research Initiative
 - Pilot Projects in HIV/AIDS

- Capacity Building through Enhanced Operating Grants in HIV/AIDS
- Community-Based Research Program
- Priority Announcements
- Clinical Autoimmunity Research Teams – Application Development Grants
- Severe Acute Respiratory Syndrome (SARS) Small Molecule Pilot Project Grants
- Partnerships for Health System Improvement – Novel Alternatives to Antibiotics
- Kidney Transplantation Fellowship
- International Collaborative Indigenous Health Research Partnership on Resilience (ICIHRP)
- Global Health Research – Joint Priority Announcement
- Interdisciplinary Capacity Enhancement (ICE) Grants - Reducing Health Disparities and Promoting Equity for Vulnerable Populations
- Mexico-Canada Joint Health Research Program in Tuberculosis
- Regenerative Medicine/Nanomedicine – Team Grants and New Discoveries: High Risk Seed Grants

Institute Advisory Board Members 2006-2007

The Institute is pleased to welcome three new members to our Institute Advisory Board:



Dr. Robert Clarke,
Public Health Agency of Canada

Dr. Clarke is Deputy Chief Public Health Officer at the Public Health Agency of Canada where he is responsible for the Infectious Disease and Emergency Preparedness Branch. He recently completed a three year assignment as Visiting Professor of Epidemiology and Community medicine in the Faculty of Medicine, University of Ottawa and was also Executive Director of the McLaughlin Center for population health risk assessment at the Institute of Population Health. He has held senior executive and research positions at the Canadian Food Inspection Agency, Health Canada, and Agriculture and Agri-food Canada. Prior to his career in the government, Dr. Clarke was a private practitioner in British Columbia. He obtained his Doctor of Veterinary Medicine degree in 1976 and a Ph.D. in Veterinary Microbiology in 1985 from the University of Guelph.



Dr. Jana Stankova,
Université de Sherbrooke

Since 1988, Dr. Stankova has been on faculty at the Université de Sherbrooke, where she is currently Professor of Immunology and Director of the Graduate Studies Program in Immunology. She obtained her Ph.D. from the Université de Sherbrooke in 1986, followed by a Postdoctoral NCIC Fellowship in Immunology at the Mount Sinai Research Institute in Toronto with Dr. J. Roder. Dr. Stankova's research is in inflammation and involves structure-function studies and signaling pathways of G-protein-coupled receptors for lipid chemo-attractants. She has been supported by a Research Scholarship from the Fonds de la Recherche en Santé du Québec and by operating grants from the MRC, the NCIC, the Heart and Stroke Foundation, the Cancer Research Society and CIHR.



Dr. Gillian E. Wu,
York University

Dr. Wu is Dean of the Faculty of Sciences and Engineering of York University. She was educated at McMaster University, the University of Toronto and the Basel Institute for Immunology, Switzerland. She received her PhD in 1984, joined the University of Toronto in 1986, and became a Professor in 1996 before moving to York University. Her academic interest is science and education in science. Her primary research focus is the generation of lymphoid diversity. Her research has been continuously funded by the major granting agencies including CIHR, NCIC, the Terry Fox Marathon of Hope, the Leukemia Society and the Cancer Research Society. She is and has been a member of national grant panels including NCIC (Chair 95-97), Banting (Chair '93, '94), MRC and CIHR. She is an associate editor of the Journal of Immunology and is currently President of the Canadian Society for Immunology.

The Institute would like to thank board members, whose term has expired, Drs. Joe Cox, Kevork Peltekian, Frank Plummer and Tania Watts for their dedication and contributions. The full Institute Advisory Board is:

Dr. Lorne A. Babiuk *University of Saskatchewan (Chair)*

Dr. Luis Barreto *sanofi pasteur*

Dr. Robert Clarke *Public Health Agency of Canada*

Dr. Warren Hill *BC Centre for Disease Control*

Dr. James Lavery *University of Toronto*

Dr. Mark Loeb *McMaster University*

Dr. Joaquin Madrenas *Robarts Research Institute / The University of Western Ontario*

Ms. Mary Catharine McDonnell *South Shore Health*

Dr. Allison McGeer *Mount Sinai Hospital*

Dr. Marc Ouellette *Université Laval*

Dr. Chris Power *University of Calgary*

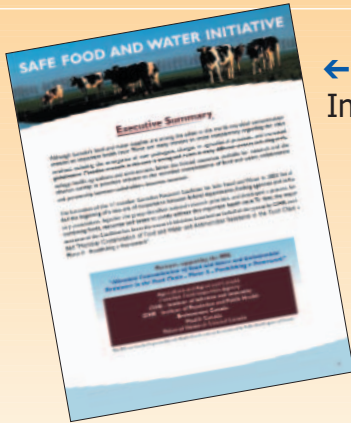
Dr. Noel Rose *The Johns Hopkins University School of Medicine*

Dr. David Speert *University of British Columbia*

Dr. Jana Stankova *Université de Sherbrooke*

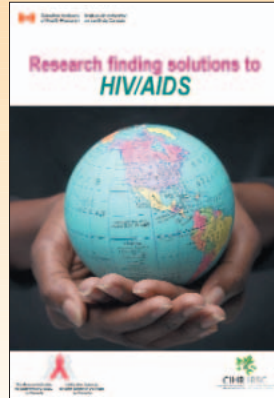
Dr. Gillian Wu *York University*

III Publications/Reports



← Safe Food and Water Initiative Review

Research finding → solutions to HIV/AIDS



Annual Report ↑ 2005-2006



↑ Proceedings of the Influenza Research Priorities Workshop

These reports are available on our website: www.cihr-irsc.gc.ca/e/13540.html

Contact us

CIHR Institute of Infection and Immunity
Suite 214, Siebens-Drake Research Institute
The University of Western Ontario, 1400 Western Road, London, Ontario, N6G 2V4
Tel: 519-661-3228
Fax: 519-661-4226
iii@uwo.ca
www.cihr.gc.ca/iii.html

Dr. Bhagirath Singh
Scientific Director

London

Bruce Moor
Assistant Director

Carol Richardson
Manager, Programs and Evaluation

Bethany Heinrichs
Administrative Officer

Tel: 519-661-3228
Fax: 519-661-4226

Ottawa

Dr. Judith Bray
Assistant Director

Amanda Devost
Institute Support Project Officer

Erik Blache
Associate, Strategic Initiatives

Tel: 613-941-4329
Fax: 613-954-1800

HIV/AIDS

Jennifer Gunning
Team Lead, HIV/AIDS & HCV Initiatives

Jennifer Ralph
Program Officer, HIV/AIDS Research Initiative

Mireille Baril
HIV/AIDS Research Initiative Officer

Susan Lalumière
Project Officer, HIV/AIDS & HCV Initiatives

Tel: 613-952-4263
Fax: 613-954-1800

