# Report on GHRI Indicators

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October 28, 2

**EVALUATION** 

Canada is a world leader in health research in many ways; the Global Health Research Initiative is one of them. Launched 10 years ago, its innovative approach to the challenging issues of health in a global society remains unique. The initiative set out to bring a new perspective to global health research by bringing together researchers from Canada and low- and middle-income countries to generate evidence to meet global health challenges.

But GHRI goes further, focusing on knowledge translation — working with knowledge users and decision makers in Canada and low-and middle-income countries, to keep research relevant and change practice and policy to improve health for all. At the same time, GHRI encourages flexible, transdisciplinary research, to bring greater breadth to complex health issues — recognizing the variety of both their causes and potential sources of effective solutions.

Five partners came together to create the Global Health Research Initiative: the Canadian Institutes of Health Research, the Canadian International Development Agency, Health Canada, the International Development Research Centre and the Public Health Agency of Canada. By working together, the partners have extended the reach of what can be done and added to Canada's international reputation for knowledge creation, capacity building and knowledge translation.

The Global Health Research Initiative is not a large program by international standards. In the course of its first 10 years it has invested approximately \$71 million, funding projects and programs of work in Canada and in more than 80 low- and middle-income countries. Close to 10,000 people have received some kind of training through GHRI programs worldwide and some 65 Canadian academic institutions have played a part. Work funded by the initiative includes 36 projects on infectious diseases, 11 pertaining to non-communicable diseases and 42 related to the health-related Millennium Development Goals. 24 of GHRI projects are related to the Muskoka Initiative that Canada spearheaded.

Enough time has passed since GHRI's first research funds were distributed for some of the Initiative's impact to emerge. We know decision makers (in Mexico, Georgia and Nigeria, among other countries) are starting to call on researchers on GHRI projects to supply evidence. Practice is being affected — from how Quebec's worker's compensation board reports mental health claims to how Zambia does public health education. And the Initiative is building capacity for research, knowledge translation and use in Canada and around the world.

I hope you enjoy this report on some of GHRI's accomplishments over the last decade.

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## **Acronyms**

**AHSI-RES** Africa Health Systems Initiative Support to African Research Partnerships

CHVI Phase 1 HIV/AIDS Prevention Trials Capacity Building Grants – Phase 1
 CHVI Phase 2 HIV/AIDS Prevention Trials Capacity Building Grants – Phase 2

CIDA Canadian International Development Agency

**CIHR** Canadian Institutes of Health Research

CIII2 Canadian International Immunization Initiative – Phase 2
CIII2-Haiti Canadian International Immunization Initiative for Haiti

**GHRI** Global Health Research Initiative

HIV/AIDS Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

**IDRC** International Development Research Centre

LAC Latin America and the Caribbean
LMIC Low- and Middle-Income Country
MDG Millennium Development Goal
MENA Middle East and North Africa
PHAC Public Health Agency of Canada
PMP Performance Monitoring Plan

**PMTCT** Prevention of Mother-to-Child Transmission

SSA Sub-Saharan Africa

TC Team Grant Teasdale-Corti Partnership Team Grant

## **Executive Summary**

The report presents some of GHRI's contributions to the advancement of global health research and to tackling world health challenges. Indicators were collected at GHRI Secretariat level and from 23 projects awarded by four Programs developed and implemented by the initiative since 2003. Due to the short duration of implementation of many projects currently funded, they are so far mainly reporting outputs and outcomes. However, some have reached the stage of influencing decision-making. Analysis indicates that GHRI is contributing to advancement in many areas, including the following six:

GHRI is contributing to building a global community of researchers and research-users dedicated to global health research. Projects have been funded in over 80 low and middle income countries (LMICs) as well as in some First Nations communities in Canada. Yet, there remains a great demand for more funding for global health research, as evidenced by the fact that GHRI has only been able to award half of the Full Proposals recommended for funding by its merit review committees. In addition to conducting research in many countries around the world, GHRI grantees are increasing the visibility of global health research by organizing and participating in scientific conferences, professional meetings or international meetings where they showcase their research approaches and findings. Also, the GHRI strategy of involving research-users from project inception is leading to the creation of many collaborations and partnerships, and partners are coming from LMICs and developed countries over and far beyond the countries where the research was conducted.

GHRI is contributing to advancing knowledge on global health research and to disseminating information. Projects are publishing articles in peer-reviewed journals. A Supplement issue of the BMC International Health and Human Rights has been dedicated to CIII2 projects. Projects team members also contribute to authoring books and conferences proceedings. Contribution to the grey literature is important as well. Outside of the scientific community, GHRI grantees are making presentations about their research to audiences such as policymakers, senior management of institutions and in communities where research was conducted. Their works has also been cited in newspapers, posted on websites other than their own, and discussed during radio and television interviews.

GHRI is contributing to building individual and organizational capacity in global health research, including through supporting formal and informal trainings. Projects have funded a relatively small number of individuals to pursue graduate studies, but a much larger number of people had their capacity build through more informal trainings such as workshops, mentoring by more senior professionals, etc. Similarly, projects reported building the capacity of organizations in LMICs as well as in Canada.

GHRI is contributing to stimulating funding in global health. Together, the five Canadian federal departments and agencies invested approximately \$71 million to fund global health research through the GHRI programs and Secretariat. In addition to the five partners, external funding agencies, such as AusAID, are starting to invest in GHRI programs. By pooling their resources together, the five Partners are able to yield a much higher investment budget in global health research than each would have individually.

Due to their involvement with GHRI, the funded projects have leveraged millions of dollars of additional funds for their research activities. Most of the funds leveraged by LMIC partners were obtained through non-peer-reviewed selection processes, but they would not have been available had not it been for the involvement of the grantees with the GHRI-funded projects. Meanwhile, several projects were awarded peer-reviewed grants that helped increase their research funds.

GHRI is contributing to Canada's global commitments. Since 2003, GHRI hasfunded36 projects that are related to infectious diseases, 11 pertaining to non-communicable diseases (NCD) and 42 contributing to the health-related Millennium Development Goals. 13 projects related to infant health and 8 to maternal health are also in alignment with the Muskoka Initiative spearheaded by Canada. Furthermore, an additional 3 projects on women's health are related to the broader Global Strategy for Women's and Children's health.

GHRI is contributing to influencing decision-making. Several instances of influence on decision-making have been reported, including appointment to policy related commission, task force or advisory panel; policymakers calling upon a GHRI funded project for consultation; or other cases where an official request was made by a policy maker or an unequivoqual policy influence was documented. The following report presents examples demonstrating how GHRI is making a difference in global health research through:

- CHANGES IN PRACTICE. Examples include the Workers' Compensation Board in Quebec modifying their reporting practices concerning mental health claims in light of discussions with a GHRI-funded project team; or the Department of Public Health in Zambia accepting the recommendations of a project on the suitability and relevance of the Master of Public Health degree offered at the University of Zambia and undertaking reform which led to significant changes in the way the department and School of Medicine conduct education in Public Health;
- CHANGES IN HEALTH SYSTEMS. For example, all seven participating hospitals in a project in Thailand developing a pain management policy to tackle more effectively pediatric pain; or the Director of Health Services of the Ministry of Health of Uganda requesting a GHRI-funded project to draft a policy on Village Health Teams implementation;
- UTILIZATION OF RESEARCH EVIDENCE FOR DECISION-MAKING. For example, the Nigerian State Ministry of Education AIDS Committee calling on a GHRI project for advice on improvements to family life and HIV education (FLHE) program; or The Ministry of Health in Mexico requesting technical advice from a GHRI project team, which led to a ban on junk food sales in Mexican schools; and
- CHANGES IN APPROACHES TO INTERNATIONAL DEVELOPMENT WORK. Examples include the experiences of the veterinary public health project in Sri-Lanka being shared with the World Bank, which is developing the National One Health assessment tool; or the scaling up to national level of an immunization project in the Republic of Georgia that was done in cooperation with UNICEF within the framework of a USAID-funded program

As funded projects progress in their implementation and report regularly on GHRI indicators, examples of GHRI contribution to global health research will become more and more abundant. The report contains recommendations for future evaluation activities.

## I. Introduction

The Global Health Research Initiative (GHRI) was created 10 years ago, in September 2001. In the first few years, GHRI developed and implemented programs, including:

- Building Canadian Support for Global Health Research, which funded 7 projects
- Global Health Research Pilot Project Grants, 29 projects
- Global Health Research Program Development and Planning Grants, 27 projects.

For the purpose of evaluation these programs are called "GHRI early programs". Access to documentation on the projects funded by these programs is limited and the information available is too scanty to inform GHRI Evaluation<sup>1</sup>. Consequently, data from early programs is not included in this report.

Since 2003, GHRI has developed and implemented 7 major programs, each of which has funded several research projects<sup>2</sup>:

- Teasdale-Corti Partnership (TC) 2006-2012. The TC program is composed of:
  - Team Grants (TC Team grant), funding 14 projects around the world
  - Global Health Leadership Awards (GHLAs), funding 13 leaders worldwide
  - And other smaller grants such as the KTE and the "Learning and synthesis" grants
- Africa Health Systems Initiative Support to African Research Partnerships (AHSI-Res) 2008 2013. This program funds 10 projects and 3 smaller synergy grants in Africa
- Canadian International Immunization Initiative Phase 2 (CIII2) 2003 2009. This program funded 6 projects worldwide. This GHRI program was effectively implemented by the Governance, Equity, and Health program of IDRC
- Canadian International Immunization Initiative Phase 2 in Haiti (CIII2-Haiti) 2008 2013. This program funds 4 projects in Haiti
- HIV/AIDS Prevention Trials Capacity Building Grants Phase 1 (CHVI1) 2007-2010. This program funded 3 projects in Africa
- HIV/AIDS Prevention Trials Capacity Building Grants Phases 2 (CHVI2) 2009-2014. This program funds 9 projects in Africa
- Ecohealth Emerging and Infectious Disease Initiative (EcoEID) 2009-2014. This program funds 3 projects in Southeast Asia. This GHRI program is being implemented by the Ecosystems and Human Health program of IDRC

<sup>&</sup>lt;sup>1</sup>More information can be found on these programs in Michelle Campbell & Mark Bisby. 2010. Global Health Research Initiative: Outcomes from 2002-2003 developmental programs.

<sup>&</sup>lt;sup>2</sup>The grants provided by GHRI are termed differently depending on the Program. TC uses the term "Program of work"; CHVI, AHSI-Res, CIII2-Haiti, and EcoEID use "project"; and CIII2 used "Research grant". In this report, a grant is termed "project", regardless of Program.

In February 2010, the Steering Committee of GHRI approved in principle the Evaluation Strategy developed for the initiative<sup>3</sup>. One of the objectives of the evaluation strategy is to measure results and document what GHRI has achieved. For that purpose, a list of indicators has been developed. Some indicators are collected at Project level and aggregated upwards while others are compiled directly from GHRI Secretariat or Programs levels<sup>4</sup>. Since GHRI evaluation activities started several years after the initiative started, it was necessary to compile the indicators retroactively in an attempt to capture previous as well as current achievements.

The evaluation team prepared a Performance Monitoring Plan (PMP) to facilitate and systematize data collection. The 5-column PMP records the name and definition of the indicator (columns 1 and 2). Column 3 is used to list the data collected and the source(s) of the information. Column 4 is used to provide the value of the data point, and column 5 is used for comments. For indicators pertaining to GHRI Secretariat and Programs levels, data was collected internally. For indicators pertaining to Projects level, the evaluation team peruse all available projects documents and coded a separate PMP for each project. A PMP was then sent to each project team for review and completion. Up to two series of correspondence exchanges were engaged with the project team to obtain as much data as possible. Data missing after the second exchange was considered lost and the PMP was considered completed. Based on the completed PMP available in the first 6 months of the implementation of the Evaluation Strategy, a first Indicators report was produced in June 2010 with 6 projects. This report includes data from 23 projects.

The report analyzes the indicators to describe GHRI achievements and impacts using various lenses. The report is intended for the GHRI Secretariat and Steering Committee, and relevant stakeholders in GHRI partner organizations.

# II. Methodology for data collection

Since the first Indicators report was produced, the Evaluation team received constructive feedback from the GHRI Secretariat, the Steering Committee, IDRC Evaluation Unit, and some of the funded projects. One recurring comment was that there were too many indicators and that the list should be shortened. Through a series of consultations with the Secretariat staff, the Steering Committee, and the IDRC Evaluation Unit, the list of indicators was reduced from 39 to 17, of which 5 are specific to the Secretariat and Programs levels. The PMP was revised in accordance. However, at the same time as the number of indicators was reduced, the description of some of the indicators changed. Therefore, data that had been collected and analyzed previously needed to be re-coded. The shortened list of indicators is provided in Appendix 1. The

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<sup>&</sup>lt;sup>3</sup> See report "Evaluation Strategy for the Global Health Research Initiative. January 2010 – November 2011". The strategy includes the conceptual framework adapted from the Canadian Academy of Health Sciences new impacts framework and preferred menu of indicators and metrics. January 2009.

<sup>&</sup>lt;sup>4</sup> There are three levels of evaluation within GHRI. 1) the overall level, therein called the Secretariat level: data is collected about GHRI's achievements as an entity. Examples include Number of projects funded, or Research funding level through GHRI by the five Partner agencies and departments, 2) the Program level: each Program within GHRI is responsible for its own evaluation. For example, did they achieve their objectives? and 3) the Project level: each grantee is responsible for its evaluation, including if they achieve their objectives.

results in this report are based on the new definitions. Comparisons with results reported in the first report may not be appropriate for some indicators.

# III. Projects included in the report

Indicators are presented for GHRI Secretariat and, when applicable, results of an in-depth analysis of 23 GHRI-funded projects are included. These projects were selected because their PMP are considered completed. They are from 4 GHRI Programs: TC Team Grants (10), AHSI-Res (8), CIII2 (4) and CIII2-Haiti (1). The TC team Grants have been running for 4to 5 years, while the AHSI-Res and CIII2-Haiti projects have been implemented for only about a year.CIII2 has ended in 2009. Its projects are closed. The list and brief description of the 23 projects is provided in Appendix 2.

# IV. Looking at GHRI achievements through various lenses

The analysis below examines GHRI results through selected topics relevant to GHRI objectives. In particular, the report explores GHRI achievements in relation to building a global health community; advancing knowledge on global health research and building capacity of individuals and organizations; addressing Canada's global health commitments; stimulating more funding in global health research; and influencing decision-making.

## A. **Building a global community**

GHRI is contributing to building a worldwide community of researchers and research-users interested in global health research.

#### 1. GHRI expands global health research throughout the world

Together, the 7 GHRI programs created since 2003 have funded more than 62<sup>5</sup> projects in 80 LMICs and in Canada. This includes:

- 48 projects in 32 countries in Latin America and the Caribbean (LAC)
- 10 projects in 10 countries in the Middle East and North Africa (MENA)
- 58 projects in 23 countries in Sub-Saharan Africa (SSA)
- 32 projects in 14 countries in Asia-Australia-New-Zealand
- 2 projects in 1 country in Europe (Republic of Georgia)
- 1 project in Canada

<sup>5</sup>A number of smaller grants are not included in the 62 projects listed here. In particular, the TC Knowledge Translation grants and Ethics grants; and the AHSI-Res Synergy Grants.

Appendix 3presents the list of countries outside Canada and the number of projects funded per country.

#### 2. GHRI contributes to fulfilling a great demand for global health research

Projects funded by GHRI are selected through a competitive merit review process. After a Call for proposals is launched, the selection process follows a 1-step or 2-step method. In the 1-step method, applicants are requested to submit a Full Proposal (FP) with all the details of their research project. Selection is done immediately after review of the proposals. In the 2-step method, applicants are requested to first submit a short Letter of Intention (LOI) that is an abstract of their proposal. Most promising LOIs are selected by a review committee and asked to submit a Full Proposal. The final selection of projects to fund is made among the FPs received.

Appendix 4 presents the number of LOIs and FPs received for various Calls for proposals launched by GHRI Programs. The hundreds of LOIs submitted to GHRI highlight the high interest for global health research. However, GHRI was only able to fund about one-tenth of eligible LOIs, and half of the FPs recommended for funding. Many relevant and high quality projects had to be rejected.

#### 3. GHRI contributes to increasing the visibility of global health research worldwide

GHRI is increasing visibility of global health issues around the world. Data from the 23 projects indicates that they have showcased their research approaches and findings in at least 230 presentations done at more than 191 scientific conferences, professional meetings or international meetings. These events were held in over 29 countries all around the world. With 64 of the events held in Canada, the country has the highest number of events at which the presentations were made. It's also in Canada that the highest number of presentations (72) was done. Nevertheless, many presentations were given at international events in LMCIs as well as in other developed countries. Appendix 5 shows the number of scientific conferences, professional meetings or international meetings attended by the 23 projects and the number of presentations made at those events, by country of event.

#### 4. GHRI is a fertile platform for the creation of partnerships and collaborations

One of GHRI's principles is the implication of research-users since project inception in order to bring together researchers and users of research evidence, two groups that usually work separately, to produce research that is useful and will more likely be used for policymaking. This strategy is leading to the creation of many collaborations and partnerships. For example, the 23 projects show that just among them, they have created more than 180 collaborations and partnerships between researchers and research-users. The partners came from more than 40 LMICs and developed countries, over and far beyond the countries where the research was conducted.

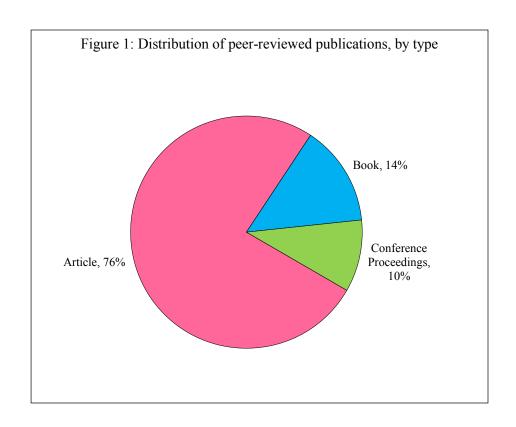
## **B.** Advancing knowledge

GHRI is contributing to advancing knowledge on global health research and to disseminating information about their research. So far, the 23 projects have reported:

- Publishing 50 peer-reviewed documents, including 38 journal articles, 7 books or book chapters, and 5 conference proceedings. Figure 1 presents the distribution of peer-reviewed publications by type of publication. The articles were published in a large spectrum of scientific journals as indicated in Appendix6. There is even a Supplement issue of the *BMC International Health and Human Rights* dedicated to the CIII2 projects.

  The impact factor of several journals is not available. In some cases, this is because they are newer journals that have not been published long enough to have an impact factor. E.g. The journal *Spatial and Spatio-temporal Epidemiology*. The 38 articles are listed in Appendix 7. Most of them are very recent and have been cited only a few times by other authors. The article most cited was the one by McIntyre, Thiede and Birch on access as a policy-relevant concept in LMICs. This 2009 article published in the journal *Health Policy, Economics and Law* has been cited 17 times.
- Producing 119 non-peer-reviewed publications, ranging from literature reviews, to guidelines and handbooks, and newsletters. These publications contribute to the grey literature on global health. Figure 2 presents the distribution of non-peer-reviewed publications by type of publication. Included in the category "Other" are publications such as pamphlets; course materials published on paper, CD or online; and undergraduate theses by students related to a project
- Organizing, or participating in the organization of, more than 8 scientific conferences, professional meetings or international meetings to provide forums for knowledge transfer. Examples of such conferences are:
  - The Conferencia: Principios de Bioseguridad, organized in Hondurason May 24, 2010 by the TC Team Grant "Increasing Capacity to Achieve Millennium Development Goal 6 in Honduras: Combating Honduras Infectious Diseases". 48 professionals attended the conference;
  - The International Research Seminar on Psycho-social Hazards and the Role of Labour Inspectors and Workers' Representative in their Prevention: Reflections through a gender lens, organized in Chile in January 11-13, 2010 by the TC-Team grant "Research, Policy and Practice With Regard to Work–Related Mental Health Problems in Chile: A Gender Perspective". Participants came from several countries, including the UK, Australia, Spain, Chile, Brazil, and Canada; or
  - The Reunion Consulta Regional de Alto Nivel de las Americas, that the TC-Team grant "Unraveling the Emerging Childhood Obesity Epidemic in Mexico: The Nutrition Transition and the Double-Edged Sword" help organized in Mexico City in February 2011. The conference was a 36 country event.

Moreover, the more that 230 presentations at scientific conferences, professional meetings or international meetings were opportunities for the GHRI-funded projects to share/exchange knowledge and experience, thus further contributing to advancing knowledge.



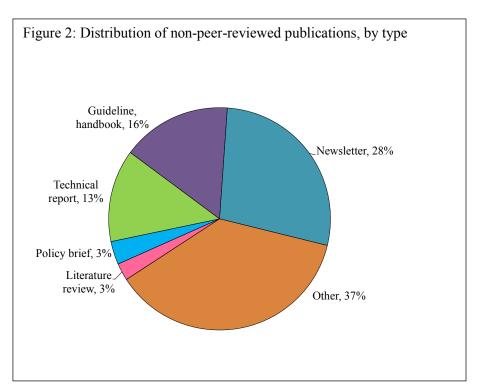
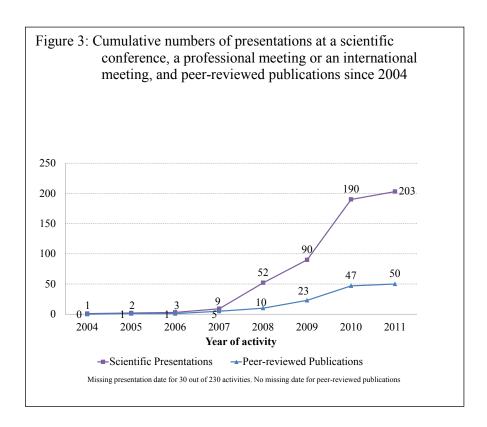


Figure 3 presents the cumulative distribution of the number of peer-reviewed publications and scientific presentations over time. There was a steady increase in the number of scientific presentations between 2007 and 2009 followed by a steep jump between 2009 and 2010. Although the year 2011 is not yet completed, the continued increase in the number of scientific presentations is foreseeable. The number of peer-reviewed publications is also increasing, although at a slower pace.



Also, the projects made more than 162 presentations to non-scientific (general) audiences, such as communities, senior management of institutions, policymakers, or at deliberative dialogues, etc. These presentations contribute to increasing awareness of the projects and understanding of the challenges that they address. Examples of presentations are:

• The AHSI-Res project "Healthy Child Uganda: Impact And Reproducibility of a Village Health Volunteer Child Health Program In Southwest Uganda" organized eleven awareness and sensitization meetings and workshops at national, district and Kyabugimbi Sub-county to sensitize the communities about the project and participation modalities of all stakeholders among others. These meetings involved political and civil servants.

- The series of community meetings organized by the TC-Team grant "Poor Land use and Poor Health: Primary Prevention of ill Human health trough sound land use for small scale farmers of the humid tropics" in Brazil; and
- The presentation of the TC-Team grant "Research, Policy and Practice With Regard to Work–Related Mental Health Problems in Chile: A Gender Perspective" to the European Trade Union Institute for Research, Education and Health and Safety (ETUI-REHS) in Brussels, Belgium, on "Le droit québécois régissant le harcèlement psychologique: développements récents".

In addition to publications and presentations, the work of the projects have been cited by more than 50 media sources, including at least 15 newspapers citations, 11 radio interviews, 8 television interviews and 17 postings on websites other that the projects'.

# C. Building global health capacity

Since 2003, GHRI has contributed to building individual and organizational capacity in global health research though formal as well as informal trainings. Together, the 23 projects have built the capacity of close to 10,000 individuals:

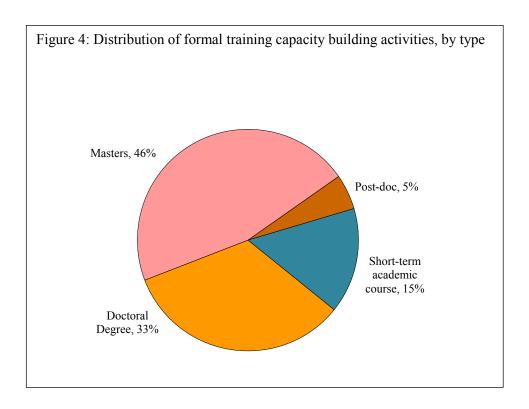
#### 1. Capacity building of individuals

#### Formal training

Formal training of individuals is defined here as higher level education in academic institutions. These include studies at the Masters, doctoral and post-doctoral levels as well as short-term academic course. 18% of the capacity building activities of the 23 projects related to formal training of individuals through academic institutions. The distribution of the 110 individuals funded by the projects to pursue formal training is as follows:

- 46 individuals engaged in a Masters degree
- 27 individuals pursued a doctoral degree
- 4 individuals undertook post-doctoral studies
- 33 individuals attended short-term academic training

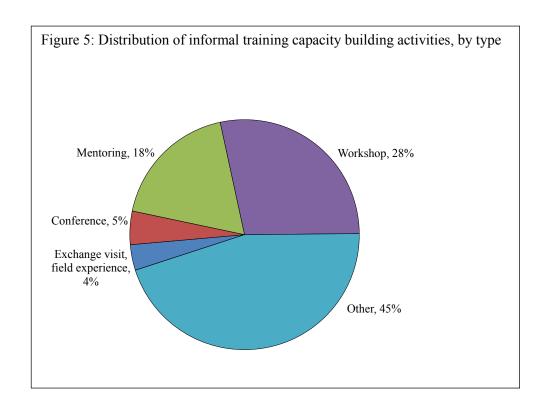
Figure 4 presents the percent distribution of the formal trainings by types of method.



### Informal training

The vast majority (82%) of the capacity building activities were done through less formal formats such as workshops, conferences, seminars, on-the-job training, and so on.

- A variety of formats were used to build the capacity of more than 9,700 individuals engaged with the 23 GHRI projects.
- Figure 5 shows that 33% of informal training was done through workshops and conferences while 18% consisted of mentoring of junior individuals by more seasoned professionals.



#### 2. Capacity building of organizations

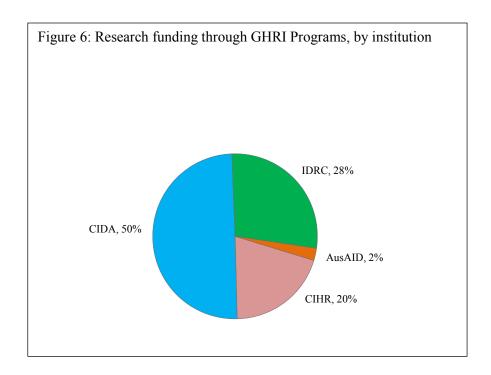
It is often suggested that building the capacity of individuals in an organization contributes to building the capacity of the organization as a whole. However, more specific capacity building activities can be targeted to the organizations themselves. GHRI contributed to build the capacity of more than 266 organizations in 26 LMICs as well as developed countries. This includes at least 65 Canadian universities and intuitions. Appendix 8 presents the number of organizations those capacity was built, by country. The types of capacity building provided by the projects were not detailed in many cases, but examples of activities are:

- The TC-Team grant"Unraveling the Emerging Childhood Obesity Epidemic in Mexico: The Nutrition Transition and the Double-Edged Sword" reports ethics review capacity building for four Mexican hospitals: Hospital Civil Fray Antonio Alcalde, Hospital de la Ninez Oaxaquena, Hospital de la Madre y el Nino Guerrerense, Hospital de la Madre y el Nino Indigena Guerrerense; and
- The TC-Team grant "Increasing Capacity to Achieve Millennium Development Goal 6 in Honduras: Combating Honduras Infectious Diseases" created an administrative and financial platform at the Universidad Nacional Autonoma de Honduras (UNAH)

### D. Stimulating funding in global health research

Together, the five Canadian federal departments and agencies allocated \$62.86 million to fund global health research through the GHRI programs. The distribution of funds by partner is presented in Appendix 9, Table 1. While all five partners contribute to funding the management structure of GHRI, Figure 6 shows that research itself is funded by three of the partners. Nearly half of the research funds are provided by CIDA. Meanwhile IDRC invests close to 28% and CIHR close to 20%. In addition to the five partners, external funding agencies are starting to invest in GHRI programs. That is the case of the Australian Agency for International Development (AusAID) who is co-funding EcoEID, GHRI newest program.

As shown in Appendix 9, Table 2, by pooling their resources together, the five Partners are able to yield a much higher investment budget in global health research than each would have individually. The table shows that CIDA has access to twice as much funds as they have invested, IDRC to nearly 4 times as much and CIHR to 5 times as much. Health Canada and PHAC have a huge leveraging factor since they do not contribute research funds, yet, as partners in GHRI, they are associated with the entire \$62.86 million research funds.



In addition to GHRI Secretariat research funds, GHRI grantees are also leveraging additional money for global health research. For example, as the result of their involvement with GHRI, LMIC partners of the 23 projects leveraged more than \$1 million additional funds for their research activities. The projects reported 39such successful leveraging activities. Examples are:

- The ASHI-Res project "Healthy Child Uganda: Impact And Reproducibility Of A Village Health Volunteer Child Health Program In Southwest Uganda" leveraged 44, 800,000

Ugandan Shillings from Save the Children Uganda. The funds were used to do initial training of Village Health Teams in new communities;

- The TC-Team grant "Pediatric pain Management in Urban and Rural Thailand" received funding from Thai National Health Security Office. This team also received funding from the Khon Kaen University, Thailand;
- The TC-Team grant "Research, Policy and Practice With Regard to Work–Related Mental Health Problems in Chile: A Gender Perspective" received a bursary to conduct a study on Chilean maternal leave policy; and
- As part of the TC-Team grant "Researching Equity in Access to Health Care (REACH)", the Discovery Foundation awarded a 1 year academic fellowship to a team member in the new clinical specialist research career development category.

While most of the funds included in the paragraph above did not undergo a peer-reviewed selection process, the 23 projects were also awarded over 20 peer-reviewed grants as the result of their involvement with GHRI. This amounts to more than \$1.5 million additional research funds. Examples of peer-reviewed grants are:

- The TC-Team grant "Revitalizing Health for All: Learning from Comprehensive Primary Health Care Experiences" was awarded a CIHR Meetings, Planning and Dissemination Grant to explore common strategies to sustain CPHC in Canada and Latin America;
- In Honduras, a team member of the TC-team grant "Increasing Capacity to Achieve Millennium Development Goal 6 in Honduras: Combating Honduras Infectious Diseases" was awarded a grant from the UNAH's Directorate for Scientific Research; and
- A team member of the TC-Team grant "Strengthening Nurses' Capacity for HIV Policy Development in sub-Saharan Africa and the Caribbean" was awarded a 2010 Sigma Theta Tau International Small Grants award.

# E. Contributing to Canada's global commitments

The Government of Canada is committed to several international endeavors to improve the health and well-being of people around the world. Some of those commitments are the fight against infectious diseases and non-communicable diseases; the United Nations Millennium Development Goals; the Muskoka Initiative and the broader Global Strategy for Women's and Children's Health. GHRI is contributing to meeting those commitments.

### 1. Infectious diseases and non-communicable diseases (NCD)

Since 2003, GHRI has funded:

- 36 projects related to infectious diseases in 56 countries
- 11projects pertaining to NCDs in 13 countries

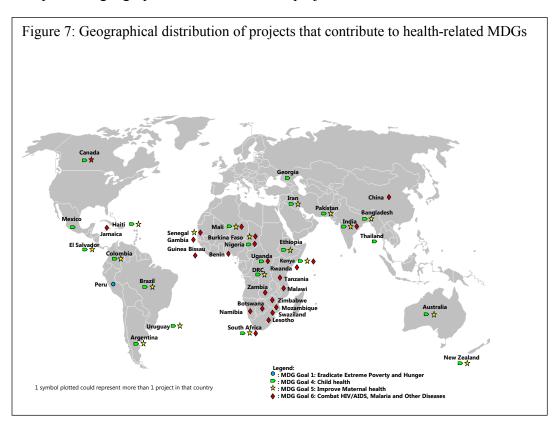
The list of projects contributing to these commitments are provided in Appendix 10

## 2. Millennium Development Goals (MDGs)<sup>6</sup>

Since 2003, GHRI has funded 42 projects contributing to the health-related MDGs. This includes:

- MDG1: Eradicate Extreme Poverty and Hunger: 1 project in 1 country
- MDG4: Child health: 13 projects in 23 countries
- MDG5: Improve Maternal Health: 8 projects in 20 countries
- MDG6: Combat HIV/AIDS, Malaria and Other diseases: 20 projects in 23 countries

Figure 7 depicts the geographic distribution of the projects.



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<sup>&</sup>lt;sup>6</sup>http://www.un.org/millenniumgoals/of October 27, 2011

# 3. The Muskoka Initiative and the Global Strategy for Women's and Children's Health<sup>7</sup>

In addition to the 21 projects related to child health and maternal health, GHRI has supported 3other projects related to women's health in 12 countries.

## F. Influencing decision-making

Despite the short duration of implementation of most of the 23 projects included in the in-depth analysis, at least 29 instances of policy influence have been reported, including 1 research appointed to policy related commissions, task force or advisory panel, 10 instances where a policymaker called upon a GHRI funded project for consultation, and 18 other cases where an official request was made by a policy make or an unequivoqual policy influence was documented. Examples of influence reported by the projects are presented below<sup>8</sup>, categorized by various ways how the projects are making a difference in global health research:

#### 1. GHRI is leading to changes in practice

- From the TC-Team grant "HIV Prevention for Rural Youth: Mobilizing Nigerian Schools and Communities": the Director of National Youth Service Corps (NYSC) in Edo State, Nigeria, is developing HIV/AIDS training as a regular component of NYSC training, based on the project experience
- From the TC-Team grant "Research, Policy and Practice With Regard to Work–Related Mental Health Problems in Chile: A Gender Perspective": in Québec, the CSST (workers' compensation board) modified their reporting practices concerning mental health claims in light of discussions with the project team regarding acceptance rates
- From the AHSI-Res project "Evaluating the Availability Of Adequately Trained Health Care Providers In Rural Zambia":the Department of Public Health accepted the recommendations of the project on the suitability and relevance of the Master of Public Health degree offered at the University of Zambia and engaged in reform which led to significant changes in the way the department and School of Medicine conduct education in Public Health. The project was conducted by a Canadian student hosted by the Zambia team. The findings were disseminated to the Department of Public Health "which unreservedly accepted the recommendations".
- From the AHSI-Res project "Harnessing mobile phone usage for HIV and horizontal health systems improvement: PMTCT": in Kenya, the project observations were shared with Pumwani hospital staff and led to positive changes in hospital practices. There was a marked decrease of missing data from PMTCT programs and a decrease in the number of women leaving without nevirapine at the first antenatal care visit.

http://www.acdi-cida.gc.ca/acdi-cida/ACDI-CIDA.nsf/eng/FRA-127113657-MH7 of October 27, 2011

<sup>8</sup> Some GHRI projects achievements are described by the GHRI Program Officer in charge in a document called GHRI Accomplishments by Program.docx available at GHRI Secretariat

- From the CIII2 project "Effectiveness of supportive supervision in improving the performance of national immunization programs in Georgia": the intervention was scaled up to the national level. Immunization managers were trained in supportive supervision nationwide.

#### 2. GHRI is leading to changes in health systems

- From the TC-Team grant "Pediatric pain Management in Urban and Rural Thailand": each of the seven participating hospitals developed a pain management policy.
- From the AHSI-Res project "Healthy Child Uganda: Impact And Reproducibility Of A Village Health Volunteer Child Health Program In Southwest Uganda": the team was requested by the Director of Health Services of the Ministry of Health to draft a policy on Village Health Teams implementation which they submitted.
- From the AHSI-Res project « Les Tic pour un accès équitable aux professionnels de la santé qualifiés, motivés et soutenus en Afrique Francophone » : during a workshop on policy brief preparation, the Malian National Director of Health indicated his desire to work directly with CERTES [the project] in order to include an extension of the project in the new decennial health program.

#### 3. GHRI is leading to utilization of research evidence for decision-making

- From the TC-Team grant "HIV Prevention for Rural Youth: Mobilizing Nigerian Schools and Communities": the State Ministry of Education AIDS Committee called on the project for advice on enhancements to family life and HIV education (FLHE) program.
- From the TC-Team grant "Research, Policy and Practice With Regard to Work–Related Mental Health Problems in Chile: A Gender Perspective":
  - The team is advisor to Central Autonoma de Trabajadores (CAT) for the organization of the development of a proposal for the Comision Asesora Presidencial Mujer, Trabajo y maternidad to make proposals to amend the current legislation on maternity leave and related issues.
  - The project was invited to be part of "Nodo de Salud de los Trabajadores", (Workers' Health Node) convened by the Departamento de Salud Ocupacional y la Subsecretaría de Salud Pública del Ministerio de Salud. The Project was the only group outside of the government to be invited to participate.
- From the TC-Team grant "Unraveling the Emerging Childhood Obesity Epidemic in Mexico: The Nutrition Transition and the Double-Edged Sword":
  - The Ministry of Health requested technical advice from the project team. This led to a ban on junk food sales in Mexican schools.
  - The project did a consultation for the National Institute of Public Health to develop a program to address overweight, obesity in Mexican Youth.

- One of the project leaders was invited to attend INSP meetings regarding guidelines on physical activity/nutrition in schools. They are advisors to the Mexican government.
- One of the project leaders is an expert advisor for the Cinco Pasos initiative of the Ministry of Health.
- A project team member was appointed State Coordinator for the Physical Activity Program of the Health Promotion Department.
- From the TC-Team grant project "Veterinary public health as part of the global response to emerging diseases. Building a sustainable model in Sri Lanka with extension to South and Southeast Asia": the government of Sri-Lanka sought input from the team on public health priorities and on strategies to deploy 40 new public service veterinarians.
- From the CIII2 project "Development, validation and implementation of simple household instrument to measure immunization related childhood mortality among 7.6 million people in India followed from 2004-2015": research findings were given to Government of India to publish as "Special Fertility and Mortality Survey" report

#### 4. GHRI is leading to changes in approaches to development work

- From the TC-Team grant project "Veterinary public health as part of the global response to emerging diseases. Building a sustainable model in Sri Lanka with extension to South and Southeast Asia": veterinary public health experiences are being shared with the World Bank, which is developing the National One Health assessment tool
- From the CIII2 project "Effectiveness of supportive supervision in improving the performance of national immunization programs in Georgia": The intervention scaling up to national level was done in cooperation with UNICEF within the framework of a USAID-funded program.

### V. Conclusion

This document presents some of GHRI contributions to conducting global health research and tackling world health challenges since 2003. Although many of the indicators used in the document relate to outputs and outcomes, they remain important measures of progress towards making an impact. Examples of instances of policy/decision-making influence, which could be considered a better indication that research evidence is used for action, are starting to build up. It would be interesting to follow-up some of the funded teams after their projects are completed or during a next phase, if they obtain a follow-up grant, to document what happens after a longer time span has allowed research results to be disseminated and hopefully internalized by the research-users.

The retrospective data collection for the longest running projects and some already finished ones was tedious at times. However, this process was always intended to be time limited, and was necessary in order to be able to report on what GHRI has been accomplishing in the past 7 years.

Looking forward, the completion of the PMP will be smoother and not as time consuming. The newer programs have already incorporated the data collection for the indicators in the regular progress reports that their projects are required to do. If GHRI is renewed, we recommend that the GHRI indicators be included in the monitoring plan of new programs since inception. If the indicator database is updated consistently based on the projects reporting schedules, GHRI evaluation will be able to respond swiftly and accurately to requests made by GHRI management and staff from Partners' institutions about what we are doing and how we are progressing towards our objectives.

Another advantage of a regular completion of the PMPs is that GHRI evaluation will be able to spend more time investigating special topics or cross-cutting themes of interest to the Partners and the larger global health research community. The next Evaluation Strategy would elaborate on possible evaluation activities for the new GHRI.

# VI. Appendices

# **Appendix 1: List of GHRI indicators**

Code	Name	Definition	Comment
1	Collaboration between researchers and research-users in projects funded by GHRI	Number of collaborations established between researchers and research-users as a result of projects funded by GHRI	
2	Number of projects funded by GHRI	Number of projects to which GHRI provides partial or total funding	Information collected at GHRI Secretariat and Programs levels
3	GHRI research funding level	Amount of grants allocated by GHRI to projects it funds partially or totally	Information collected at GHRI Secretariat and Programs levels
4	Knowledge transfer activity by projects funded by GHRI	Number of knowledge transfer and dissemination activities conducted by GHRI-funded projects, by type of activity  Types of knowledge transfer and dissemination of interest are:  a) Organization of a scientific conference, a professional meeting, or an international meeting  b) Presentation at a scientific conference, a professional meeting or international meeting c) Organization of a policy forum d) Presentation at a policy forum e) Organization of a workshop f) Presentation at a workshop g) Maintenance of a website (i.e. information on updates made to the project website / uploads, not the creation of the website, per say)	
5	Publication counts	Number of peer-reviewed publications produced by projects funded by GHRI  Peer-reviewed publications refer to: a) Peer-reviewed articles b) Books c) Conference proceedings	
6	Non-peer-reviewed publication counts	Number of non-peer-reviewed publications produced by projects funded by GHRI  Non-peer reviewed publications are defined as: a) Literature review b) Technical report c) Working paper d) Newsletter e) Policy brief f) Guideline, handbook g) Other. E.g. pamphlet, etc.	

Code	Name	Definition	Comment
7	Capacity building of individuals by projects funded by GHRI	Number of individuals who engage in a capacity building activity as a result of their involvement with projects funded by GHRI	
		The types of capacity building activities of interest can be categorized as:  a) Masters degree b) Doctoral degree c) Post-doc d) Short-term academic course e) Exchange visit, field experience f) Workshop g) Conference, forum h) Mentoring i) Other. E.g. undergraduate study, internship,	
		seminar, special course, other training in non-academic curriculum, etc.	
8	Capacity building of organizations	Number of organizations that have received capacity building as a result of their involvement with projects funded by GHRI	
		The types of capacity building activities of interest are:  a) Research management skills b) Management of funds by LMIC organization c) Ethics review capacity d) Infrastructure building	
9	Additional research funding leveraged by LMIC partners on projects funded by GHRI	Amount of funding from external sources raised by a LMIC individual or organization as a result of their involvement with projects funded by GHRI	
10	Additional peer-reviewed grants awarded to projects funded by GHRI	Number of peer-reviewed grants from external sources awarded to GHRI-funded projects that are related to the project funded by GHRI	
11	Amount of peer-reviewed grants leveraged by projects funded by GHRI	Amount of funding leveraged from peer-reviewed grants from external sources awarded to GHRI-funded projects that are related to the project funded by GHRI	
12	Success rate of GHRI research programs	Number of grants that are actually awarded as a result of that call divided by number of applications received in response to a Call for proposals sent out by a GHRI program * 100	Information collected at GHRI Secretariat and Programs levels
13	Confirmed instances of policy influence	<ul> <li>Number of instances where a GHRI-funded project can claim influence on policymaking</li> <li>Instances are defined as:</li> <li>a) Preparation of a policy brief that lead to change in policy or legislation</li> </ul>	
		<ul><li>b) Policymaker calling on the project team for consultation</li><li>c) Researcher appointment to policy related</li></ul>	

Code	Name	Definition	Comment
		commissions, task force or advisory panel d) Other that can be confirmed as significant through documentation of official request by a policymaker or unequivocal policy influence	
14	Number of presentations given by projects funded by GHRI to general public audiences	Number of presentations given by projects funded by GHRI to general public audiences i.e. in non- scientific settings (e.g. community meeting)	
15	Media citation analysis	Number of citations of research from projects funded by GHRI  The media of interest are:  a) Newspapers b) Television c) Radio d) Website other that the project's own website	
16	Research funding level through GHRI by GHRI partner agencies and departments	Amount of research funds allocated to GHRI by GHRI partner agencies and departments as a result of the GHRI partnership	Information collected at GHRI Secretariat and Programs levels
17	Research investment leveraging factor by GHRI partner agency and department as a result of the GHRI partnership	Total amount of research funds leveraged by GHRI divided by amount of research funds allocated to GHRI by each partner agency and department  If denominator is 0, it is not possible to make the division. Replace the result by "-". This will indicate a huge leveraging factor by an agency or department member of the partnership that is not contributing funds for research yet is endowed with the entire research funds of GHRI	Information collected at GHRI Secretariat and Programs levels

# Appendix 2: List of the 23 projects included in this report

<b>Project Title</b>	Description Documentation	ions included in analysis		
Program: Africa Health Systems Initiative Support to African Research Partnerships (AHSI-Res) 2008 - 2013				
Evaluating the Availability Of Adequately Trained Health Care Providers In Rural Zambia	In Zambia, an AHSI-Res project is carrying out research to evaluate existing retention and recruitment strategies in terms of their impact on health care workers and the health care system.	<ul> <li>Interim Report January 13- June 30, 2010</li> <li>First Annual Report July 1, 2010 – January 31, 2011</li> <li>Zambia Forum for Health Research</li> <li>University of Dalhousie Website: http://intlresearchdevelopment.dal.ca/International_Projects/Current_Projects/Zambia.php</li> </ul>		
Harnessing mobile phone usage for HIV and horizontal health systems improvement: PMTCT	In Kenya, an AHSI-Res project is harnessing mobile technology for PMTCT of HIV. The system is designed to improve antenatal linkage to care, provide reminders to take PMTCT medications, and improve postpartum and neonatal support and follow-up, even when mothers deliver at home.	- Annual Report 2011 - Interim Report January to July 2010		
Healthy Child Uganda: Impact And Reproducibility Of A Village Health Volunteer Child Health Program In Southwest Uganda	An AHSI-Res project in Uganda is using integrated community case management (iCCM) and expanding the scope of Village Health Volunteers to treat malaria, diarrhea and acute respiratory illnesses in children under-5.	<ul> <li>Full Proposal</li> <li>AHSI Report with edits 22nd 2010" (title as written in the W drive)- Reporting period Dec 09-Nov 2010</li> <li>Global Consultation on Community Health Workers, 29 - 30 April 2010, Montreux, Switzerland http://www.who.int/workforcealliance/knowledge/publications/alliance/chw_globalconsultation_provage nda.pdf</li> </ul>		
Les Tic Pour Un Accès Équitable Aux Professionnels De La Santé Qualifiés, Motivés Et Soutenus En Afrique Francophone	In Mali, an AHSI-Res project is looking at three areas: distance medical training and consultations; the transmission of medical images to permit the delivery of cardiological and obstetrical care from a distance; and the creation of knowledge to help implement simulation tools.	<ul> <li>Full Proposal</li> <li>Cover page</li> <li>Rapport du 24 novembre 2009 au 24 mai 2010</li> <li>Rapport du 25 mai au 24 décembre 2010</li> <li>Rapport du 25 mai au 24 décembre 2010 Final</li> <li>Rapport du 25 décembre 2010 au 25 mai 2011</li> <li>http://www.certesmali.org/equireshus</li> </ul>		
Linking community based health information systems and institutional health information systems for effective decision- making	An AHSI-Res project in Kenya is focusing on testing the applicability of an integrated community-based health information system (CBHIS) linked to an institutional health information system (HIS) in different contexts: rural, urban, and nomadic.	<ul> <li>Full proposal</li> <li>First Semi-Annual Report, January-June 2010</li> <li>Second Semi-Annual Report, January-June 2011</li> <li>First Annual Report 2010, January- December 2010</li> <li>Note: GLUK= Great Lakes University of Kisumu</li> <li>Web page http://www.gluk.ac.ke/research/</li> </ul>		
Régionalisation du recrutement du personnel de santé au Burkina-Faso : Quels Effets sur la distribution des ressources humaines en santé au niveau national et Régional n.a.	An AHSI-Res project in Burkina Faso is examining processes for regionalizing the recruitment of health personnel and their impact on the distribution of health-care providers. The project is also examining the factors associated with high levels of satisfaction for health personnel and how these are affected by the means of recruitment.	<ul> <li>Full Proposal</li> <li>Cover Page</li> <li>First Interim Report, December 2009- June 2010</li> <li>Annual Report 2010, 1st draft</li> <li>Annual Report 2010</li> <li>Second Interim Report; December 16, 2010 to March 15, 2011</li> <li>Third Interim Report; December 16, 2010, to June 15, 2011</li> </ul>		

<b>Project Title</b>	Description Documentat	ions included in analysis
Strengthening Human Resources for Health through Simplified Clinical Tools and Educational Outreach: A Cluster-Randomized Trial	In Malawi, an AHSI-Res project is developing, implementing, and evaluating an integrated clinical guideline and training intervention to facilitate the integration of adult HIV/AIDS and TB care within primary care and optimize the clinical effectiveness of, and improve the retention of, health care workers in rural health centres.	<ul> <li>Full Proposal</li> <li>Interim Report January-June 2010</li> <li>Interim Report July- December 2010</li> </ul>
Task Shifting In Mental Health – Innovative Approaches	In Kenya, an AHSI-Res project is evaluating whether existing primary health care personnel, community health workers, expert patients, and faith and traditional healers can be trained and be effective in providing mental health services at the community level.	<ul> <li>Full proposal</li> <li>Interim Report 24-12-2010</li> <li>Interim Report 21-01-2011</li> <li>PowerPoint presentation: Task Shifting in Mental Health</li> <li>Email response from Kenyan Team regarding MOU</li> <li>African Mental Health Foundation website: ttp://africamentalhealthfoundation.org/research/n.a.a mhfid=1</li> </ul>

#### Program: Canadian International Immunization Initiative - Phase 2 (CIII2) 2003-2009

Development of Novel
vaccination strategies
against helicobacter
pylori in Latin
America

A multi-country CIII2 project in Latin America and the Caribbean region involving Cuba, Chile, Paraguay, Bolivia, Peru, and Nicaragua carried out *H. pylori* vaccine development research. The research identified optimal bacterial structures in local isolates from both children and adult populations to determine what components have to be included in the *H. pylori* vaccine formulation for Latin American and the Caribbean countries. The research project also led to the establishment of a *H. pylori* surveillance system in the countries involved.

- Full Proposal
- Interim Technical Report May 2004-2005
- Final Technical Report May 2004-2006
- Altman E et al., Analysis of Helicobacter pylori isolates from Chile: occurrence of selective type 1 Lewis b antigen expression in lipopolysaccharide. 2008. J Med Microbiology., 57, 585-591

Development, validation and implementation of simple household instrument to measure immunization related childhood mortality among 7.6 million people in India followed from 2004-2015 In India, a CIII2 project developed lowcost, routine, and representative measurements of vaccine-preventable childhood mortality and established a surveillance system of vaccinepreventable diseases within India's mortality monitoring system.

- Full Proposal
- Technical Report II, July 2006
- Technical Report III, September 2007
- Website : http://cghr.org/index.shtml
- Jha et al. Low Male-to-female sex ratio of children born in India: national survey of 1.1 million households. Lancet 2006
- Jha P, et al. Prospective study of 1 million deaths in India: Rationale, design, and validation results. 2006. PLoS Med 3(2)
- Corsi DJ et al. Gender inequality and ageappropriate immunization coverage in India from 1992-2006. BMC International Health and Human Rights 2009, 9(Suppl 1):S3
- Government Million Death Study Report (Annex 1)
- Publication Draft for Million Death Study
- Added at coding

<b>Project Title</b>	Description Documenta	ations included in analysis
Effectiveness of supportive supervision in improving the performance of national immunization programs in Georgia	A CIII2 research project in Georgia strengthened the performance of immunization programs at the district level by documenting the implementation and the effectiveness of a model of "supportive" supervision.	<ul> <li>Memorandum of Grant Conditions</li> <li>Interim Progress Report</li> <li>Final Technical Report</li> <li>Djibuti M et al. The role of supportive supervision on immunization program outcome-a randomized filed trial from Georgia BMC International Health and Human Rights, 2009, 9 (Suppl 1)</li> <li>Esmail L Optimizing Human Resource Management: Lessons from the Georgian National Immunization Program, BMC Human Resources for Health 2007, 5:20</li> <li>Website: http://www.curatiofoundation.org/curatio/</li> <li>Added at coding</li> </ul>
Household cost-benefit equations and equity in immunization: strengthening local evidence to action for sustainable universal childhood immunization	In Pakistan, a CIII2 project identified the cultural and contextual barriers to vaccination in the context of household cost-benefit equations to address immunization uptake. The research project developed and implemented a low-cost knowledge translation intervention that significantly increased vaccination uptake without relying on improved services and despite poverty and limited accessibility to services.	<ul> <li>Full Proposal</li> <li>Interim Report1</li> <li>Interim Report2</li> <li>Final Interim Report 3</li> <li>BMC International Health and Human Rights 2009, 9(Suppl 1):S7</li> <li>Website: http://www.ciet.org/en/</li> </ul>

#### Program: Canadian International Immunization Initiative – Phase 2 in Haiti (CIII2-Haiti) 2008 - 2013

Modèle efficace de	A CIII2-Haiti project is working with the
provision de	Health Directions of the West and the
vaccination dans les	South to boost the low vaccination rates
zones de faible	of children and pregnant women in those
couverture en Haïti	2 departments. The project is analyzing
	the socioeconomic and cultural barriers
	and the operational difficulties in service
	delivery. It will subsequently develop an
	Operations Research to test two service
	delivery models in 3 locations and make
	suggestions for a delivery model that can
	help increase the number of children
	1 10 1 0 011

under 12 months of age fully vaccinated and the number of pregnant women vaccinated against tetanus.

- Proposition complète
- Rapport d'étape technique # 1
- Rapport d'étape technique # 2

#### Program: Teasdale-Corti Partnership (TC) Team Grants 2006 - 2012

HIV Prevention for	The goal of HIV Prevention for Rural	- Full Proposal
Rural Youth:	Youth (HP4RY) is to develop and use	- Interim Technical Report 1 2008-2009
Mobilizing Nigerian	research evidence to build and evaluate	- Interim Technical Report 2 2009-2010
Schools and	HIV prevention for youth, delivered	- Progress Report Dec 2, 2008
Communities	through schools and communities. The	- Report of Activities Feb 1-May 31, 2009
	research and evaluation of the school and	- Report of Activities Oct 1-Nov 30, 2009
	community programming answer two	- Progress Report 1 Data Summary
	questions: 1) How is youth vulnerability	- Pre-Post Evaluation of 2009 Teacher Training
	and risk situated within individual,	- Maticka-Tyndale E, Onokerhoraye A, Interim
	interpersonal and community dynamics	Technical Report 3, "HIV Prevention for Rural

<b>Project Title</b>	Description	Documentati	ons included in analysis
	n.a. and 2) To what degree of and community-based interviseparately, and in combinate contribute to reducing youth vulnerability n.a.	ventions ion,	Youth: Mobilizing Nigerian Schools and Communities," Feb 5, 2010 – Feb 1, 2011  - Makpor ME, CPED, Observations from FLHE Training Organized by Teachers in Edo State 2011: FLHE Training organized by the Ministry of Education under the leadership of the Director of HIV/AIDS unit in the Ministry from May 2-6, 2011  - Teachers Training Report for Control Schools of the HIV/AIDS Prevention for Rural Youths Project (HP4RY) held in Reliance Hotel Hall Ikpoba-Okha L.G.A. Edo State. May 1-6, 2011  - Report of activities for the month of January, 2011  - Report of activities for the month of February, 2011  - Dudu JE, A Report of activities for the month of May for the project: HIV Prevention for Rural Youths in Nigeria, 2011  - Added by project team
Increasing Capacity to Achieve Millennium Development Goal 6 in Honduras: Combating Honduras Infectious Diseases	In Honduras, a TC Team Grincreasing the capacity to coinfectious diseases by establinterdisciplinary Master's ir and Zoonotic Diseases at the program is providing a platformunication between ski researchers, community, civand policy makers; thereby the potential for changes in policies related to infectious including zoonoses.	ombat lishing an Infectious e UNAH. The form for illed vil society, strengthening practices and	<ul> <li>Full proposal</li> <li>Annual Progress Report 2007-2008</li> <li>Third Progress Report Oct 1, 2007-Jan 31, 2008</li> <li>Sixth Progress Report Aug 1, 2008-Sep 30, 2008</li> <li>Seventh Progress Report Oct 1, 2008-Nov 30, 2008</li> <li>Eighth Progress Report March 1-May 31, 2009</li> <li>Ninth Progress Report February – May, 2010</li> <li>Request for a No-Cost Time Extension Feb 19, 2010</li> <li>Summary Report of Annual Assessment April 14-15, 2008</li> <li>Midterm Self-Evaluation Report March 13, 2009</li> <li>Fourth Annual Technical Progress Report, "Increasing Capacity to Achieve Millennium Development Goal #6 in Honduras: Combating Infectious Diseases," Feb. 01, 2010 – Mar. 31, 2011 (June 14, 2011) PRY4</li> <li>http://almic.org/pdf/VIICLAM.pdf</li> <li>Biosafety Assessment and Training Report, May 16-29, 2010 (PRY4 Appendix, p. 21)</li> <li>Zelaya A. Plan Estrategico des Comite de Bioseguridad 2011-2014 (School of Microbiology Biosafety Committee Strategic Plan 2011-2014), Universidad Nacional Autonoma de Honduras, Escuela de Microbiologia Comité de Bioseguridad, March 2011</li> <li>Revista del Microbiologo (Microbiologist Magazine), www.revistadelmicrobiologo.org REVISTA</li> <li>Brillante hondureño contribuye al desarrollo de la ciencia en Honduras, La Tribuna. Retrieved Aug. 11, 2011 from http://www.latribuna.hn/2009/08/23/brillante-hondureno-contribuye-al-desarrollo-de-la-ciencia-en-honduras/, Aug 23, 2009</li> <li>Web page http://www.brocku.ca/globalhealth/</li> <li>Added by project team</li> </ul>

<b>Project Title</b>	Description Documentati	ions included in analysis
Pediatric pain Management in Urban and Rural Thailand	Children are more at risk than adults for untreated pain and children in developing countries have even less access to pain care. A TC Team Grant has developed a community of practice among seven provincial and regional hospitals in northeastern Thailand with standardized approaches to ensure the best possible pain prevention and treatment for children. At the same time, the program is studying the process of disseminating information and changing practice, which will help develop approaches to controlling other diseases and conditions in Thailand and in other countries.	<ul> <li>Full proposal</li> <li>IDRC Report 2007-2008</li> <li>IDRC Report 2008-2009</li> <li>IDRC Year 3 Report (2009-2010), "Pediatric Pain Management in Urban and Rural Thailand" June 1, 2009-May 31, 2010, July 13, 2010.</li> <li>Update from the field #1</li> <li>Update from the field #2</li> <li>Update from the field #3</li> <li>Update from the field #4</li> <li>Update from the field #6</li> <li>Update from the field #7</li> <li>Update from the field #8</li> <li>Update from the field #9</li> <li>Update from the field #10</li> <li>Update from the field #11</li> <li>Update from the field #12</li> <li>Update from the field #13</li> <li>Update from the field #14</li> <li>Added by project team</li> </ul>
Poor Land use and Poor Health: Primary Prevention of ill Human health trough sound land use for small scale farmers of the humid tropics	In Brazil, a TC Team Grant is tackling mercury contamination and Chagas disease, both of which have been shown to be closely linked to environmental degradation caused by widespread "slash and burn" practices in the Amazon rain forest. The project is identifying areas of risk for exposure to mercury and infection with Chagas disease, and implementing and assessing better farming practices intended to reduce water and fish mercury levels and contain triatomine insect populations.	<ul> <li>Full Proposal</li> <li>Technical Report Year 1</li> <li>Technical Report Year 2 March 1, 2008-Feb 28, 2009</li> <li>Technical Report Year 3 ANNEX 1 March 1, 2009-Feb 28, 2010</li> <li>www.pluph.uqam.ca</li> <li>Added by project team</li> </ul>
Research, Policy and Practice With Regard to Work–Related Mental Health Problems in Chile: A Gender Perspective	This program of work is bringing together Chilean and Canadian researchers from a variety of disciplines (sociology, law, psychology, medicine and other health sciences) and a broad range of research users from both governmental and non-governmental organizations in Chile for the purpose of studying 1) the effects of paid and unpaid work on the mental health of Chilean workers, and 2) effective legislative and policy instruments designed to protect workers' mental health. All aspects of the study are being viewed through a gender lens.	<ul> <li>Full Proposal</li> <li>Year 1 Technical Report Feb. 1st 2007 – Jan. 31st 2008</li> <li>Year 2 Technical Report Feb. 1st 2008 – Jan. 31st 2009</li> <li>Year 3 Technical Report Feb. 1st 2009 – Jan. 31st 2010</li> <li>Fourth Technical Progress Report, "Research, Policy and Practice with Regard to Work-Related Mental Health Problems in Chile: A Gender Perspective," Feb. 01, 2010 – Jan. 31, 2011 (Feb. 14, 2011)</li> <li>Encuentro Internacional Sobre Analisis de Legislacion y Practica Juridica Sobre el Acoso Moral en el Trabajo</li> <li>Araucaria Project Documents, Araucaria Project Website. Retrieved August 17, 2011 from ARADOC</li> <li>Added by project team</li> <li>Added at coding</li> </ul>

#### **Project Title** Description Documentations included in analysis Researching Equity in This program, entitled Researching - Full Proposal Access to Health Care Equity in Access to Health Care - Interim Technical Report May 1st 2007 – 30th April (REACH) (REACH), is an integrated program of research, capacity strengthening and - Interim Technical Report May 1st 2008 – 30th April knowledge translation focusing on inequities in access to the health system, - Interim Technical Report May 1st 2009 – 30th April using the case of three health interventions – maternal health. - REACH - PR Y1 Data summary Zoe - 22 April 2009 tuberculosis care and anti-retroviral - Fourth Interim Technical Report, "Researching therapy for HIV. Through the three Equity in Access to Health Care (REACH) Project" 'tracer' services the research is mapping TR4 inequities in utilisation and access - Trip Report 7, Teasdale-Corti Team Grant 103460 nationally; conducting in-depth studies in 052, 053, 054 (REACH), 041 (Revitalizing Health four health 'sub-districts', representative for All) February 15-21, 2009. 27 Feb, 2009 of both urban and rural realities in South - Project Monitoring Report, "Researching Equity in Africa; and identifying relevant responses Access to Health Care (REACH) Project", 25 in the policy and practice environment. March, 2011 - "Researching Equity in Access to Health Care (REACH) Project", Project Information 1 pager - Centre for Health Policy, Health Economics Unit, McMaster University, "Phase 1 Results: Access Challenges in TB, ART and Maternal Health Services", REACH Phase 1 user brief - Added by project team - Full Proposal Revitalizing Health for A partnership of researchers from low, All: Learning from middle and high income countries. It is - Technical Report, 1 February 2008 Comprehensive based on the understanding that - 2nd Technical Report, "Revitalizing Health For All: Primary Health Care comprehensive primary health care holds Learning from Comprehensive Primary Health Care **Experiences** the greatest potential for health systems Experiences", February 27, 2009 in redressing critical health and - Year 3 Technical Report (Feb. 1, 2009 - Jan. 31, development issues. The program 2010), "Revitalizing Health For All: Learning from gathered existing evidence of the past Comprehensive Primary Health Care Experiences", accomplishments of CPHC and March 3, 2010 undertook studies of its current - Interim Technical Report "Trainings and Workshops achievements and possibilities. on Effective Researcher/Research-user Partnerships: Sharing Experiences and Drawing Lessons from Teams Carrying out CPHC", December 8, 2010 - Newsletter Issue 1: April 2007 - Newsletter Issue 2: August 2007 - Newsletter Issue 3: December 2007 - Newsletter Issue 4: October 2008 - Newsletter Issue 5: September 2009 - http://www.globalhealthinquiry.ca/projects/proj revi talizing /pres pub.shtml (website) - Added by project team Strengthening Nurses' A TC Team Grant in Jamaica, South - Full Proposal Capacity for HIV Africa, Kenya, and Uganda is - First Technical Progress Report Feb 1, 2007-Jan 31, Policy Development in strengthening nurses' capacity for HIV 2008 sub-Saharan Africa policy development. The goal of this - Year Two Interim Progress Report Feb 1, 2008-Jan and the Caribbean multidisciplinary program is to contribute 31, 2009

to health systems strengthening for HIV

and AIDS in sub-Saharan Africa and the

Caribbean by improving the quality of

- Addendum to Year 2 Progress Report Submitted

- Year Three Progress Report Feb 1, 2009-Jan 31,

March 5, 2009

### **Project Title**

#### **Description**

#### Documentations included in analysis

HIV and AIDS nursing care, supporting the scaling-up of innovative HIV and AIDS programs and practices, and fostering dynamic and sustained engagement of researchers and research users in the policy development process. It will provide a critical platform for developing research and leadership capacity among nurses and midwives.

2010

- Year Four Progress Report: February 1, 2010 -January 31, 2011, "Strengthening Nurses' Capacity in HIV Policy Development in Sub-Saharan Africa and the Caribbean", March 24, 2011
- Project e-Update #1, May 3, 2007
- Project e-Update #2, Sept 6, 2007
- Project e-Update #3, Jan 17, 2008
- Project e-Update #4, Mar 14, 2008
- Project e-Update #5, Sept 15, 2008
- Added by project team

Unraveling the Emerging Childhood Obesity Epidemic in Mexico: The Nutrition Transition and the Double-Edged Sword In Mexico, simultaneous under-nutrition and obesity are placing a double burden on public health as the population undergoes rapid economic and social changes, leading to a nutritional transition. The rapid emergence of obesity in Mexico has the potential to replace under-nutrition and infectious disease as the primary health concern in the coming years. The specific purpose of the proposed project is to develop an international, multi-disciplinary team of researchers with the combined expertise required to address the complex nature of obesity in Mexico within the context of the nutrition transition.

- Full Proposal

- Progress Report Year 1 2007-2008
- Progress Report Year 2 2008-2009
- Third Technical Report, "CAMBIO Canada and Mexico Battling Childhood Obesity, Unraveling the Emerging Childhood Obesity Epidemic in Mexico: The Nutrition Transition and the Double-Edged Sword"
- Fourth Annual Technical Report, Teasdale-Corti grant #103460-044, September 1, 2010 February 28, 2011. 22 July, 2011
- Brief Report #1 May 2007
- Brief Report #2 July 2007
- Brief Report #4 November 2007
- Brief Report #5 January 2008
- Brief Report #6 May 2008 (BR6)
- Brief Report #8 Sept 2008
- Project Overview Update Oct 2007
- CAMBIO Newsletter Fall 2009
- CAMBIO Newsletter Summer 2009
- CAMBIO Newsletter Spring 2009
- CAMBIO Newsletter Winter 2009
- www.cambio-red.net
- Added by project team

Veterinary public health as part of the global response to emerging diseases. Building a sustainable model in Sri Lanka with extension to South and Southeast Asia In Sri-Lanka, a TC Team Grant is developing a veterinary public health (VPH) system to effectively address emerging infectious diseases originating from animals. The program's goal is to provide evidence to enhance the prominence of veterinary public health within academia, governments and communities in South and Southeast Asia to create enthusiasm and sustainable support for regional veterinary public health research and action. The program will do this by developing the components of a VPH system in Sri Lanka and then extend this knowledge through a regional network.

- Full Proposal
- Interim Technical Report April 2007-March 2008
- Interim Technical Report April 2008-March 2009
- Interim Technical Report April 2009-March 2010
- Year 4 Interim Report, "Veterinary public health as part of the global response to emerging diseases: building a sustainable model in Sri Lanka with extension to South and Southeast Asia" IDRC Grant #103460-05, April 2010-March 2011, May 1, 2011
- Project Update July 28, 2008
- Project Update Feb 2009
- Midterm Peer-Evaluation Report
- Added by project team

### Appendix 3:Number of projects funded by GHRI outside of Canada

Sub-Saharan Africa (SSA)		Latin America and the Caribbean (	(LAC)
Benin	2	Antigua & Barbuda	1
Botswana	3	Argentina	3
Burkina Faso	2	Bahamas	1
Cameroon	1	Barbados	1
Democratic Republic of Congo	1	Belize	1
Ethiopia	2	Bermuda	1
Gambia	1	Bolivia	2
Guinea Bissau	1	Brazil	2
Kenya	8	Chile	4
Lesotho	2	Colombia	2
Malawi	3	Cuba	1
Mali	2	Dominica	1
Mozambique	1	Ecuador	2
Namibia	1	El Salvador	1
Nigeria	2	Grenada	1
Rwanda	1	Guatemala	1
Senegal	2	Guyana	1
South Africa	8	Haiti	4
Swaziland	1	Honduras	2
Tanzania	4	Jamaica	1
Uganda	5	Mexico	1
Zambia	4	Montserrat	1
Zimbabwe	1	Nicaragua	1
Total SSA		Paraguay	1
	30	Peru	3
		St Lucia	1
Asia-Australia-New-Zealand		St. Kitts and Nevis	1
Australia	3	St. Vincent and the Grenadines	1
Bangladesh	1	Suriname	1
Cambodia	2	Trinidad and Tobago	1
China	3	Turks and Caicos	2
India	4	Uruguay	1
Indonesia	2	Total LAC	48
Laos	2		10
Nepal	1	Middle-East and North Africa (ME	ENA)
New Zealand	1	Algeria	1
Pakistan	2	Egypt	1
Philippines	2	Iran	1
Sri-Lanka	2	Jordan	1
Thailand	4	Lebanon	1
Vietnam	3	Morocco	1
Asia	$\frac{3}{32}$	Occupied Palestinian Territories	1
Asia	34	Syria	1
Europe		Tunisia	1
Georgia	2	Yemen	1
Total Europe	$\frac{2}{2}$	Total MENA	10
i otai Europe	2	I Utai MILINA	10

## Appendix 4: Number of projects funded in relation to number of applications submitted to selected GHRI's Calls for proposals

Program	# LOI Eligible	# FA	# FP recommended for funding	# FP Funded	% LOI funded	% FAs	% recommended FAs that are funded
Teasdale-Corti Team Grants (TC Team grants)	256	31	30	14	5%	45%	47%
Teasdale-Corti Global Health Leaders Award (TC GHLAs)	149	83	22	13	9%	16%	59%
Africa Health System Initiative (AHSI-Res)	84	57	35	10	12%	18%	29%
Canadian International Immunization Phase 2 (CIII2)	38	17	15	6	16%	35%	40%
Canadian International Immunization for Haiti (CIII2-Haiti)	11	5	4	4	36%	80%	100%
HIV Prevention Trials Capacity Building Grants – Phase 1 (CHVI Phase 1)	NA	16	7	3	NA	19%	43%
HIV Prevention Trials Capacity Building Grants – Phase 2 (CHVI Phase 2)	16	10	9	9	56%	90%	100%
Ecohealth Emerging Infectious Disease Initiative (EcoEID)	10	6	3	3	30%	50%	100%
Total	564	225	125	62	11%	28%	50%

LOI: Letter of Intention FP:Full Proposal

Appendix 5: Number of scientific conferences, professional meetings or international meetings and presentations at those events by 23 GHRI projects

	Number of scientific conferences, professional meetings or	Number of presentations at scientific conferences, professional meetings or
Country	international meetings	international meetings per country
Austria	1	1
Botswana	1	1
Brazil	3	5
Canada	64 (33.5%)	72 (31.3%)
Chile	10 (5.2%)	10 (4.3%)
China	3	3
Colombia	1	1
Costa Rica	1	1
Denmark	1	1
Egypt	1	1
Ethiopia	4	4
France	4	4
Honduras	1	
India	1	1
Italy	1	1
Jamaica	4	4
Mali	2	2
Mexico	32 (16.8%)	34 (14.8%)
Netherlands	1	1
Portugal	2	2
South Africa	8	8
Spain	3	3
Sri-Lanka	1	1
Switzerland	6	7
Taiwan	1	1
Thailand	3	3
Uganda	1	1
UK	6	6
USA	17 (8.9%)	21 (9.1%)
Country not specified	7 (3.7%)	30 (13.0%)
Total	191	230

# Appendix 6: Journals in which38 articles from 23 GHRI projects were published

Journal	Number of articles published in this journal	Journal Impact factor
AIDS & Behavior	1	3.195
Australasian Medical Journal	1	n.a.
Australian Journal of Primary Health	1	0.408
BMC International Health and Human Rights	6	n.a.
BMC-Public Health	1	2.364
Canadian Journal of Nursing Research	1	n.a.
Canadian Journal of Public Health	1	1.35
Caribbean Journal of Nursing and Midwifery	1	n.a.
Comparative Labor Law and Policy Journal	2	n.a.
Emerging Infectious Diseases	1	6.859
Global Health Action	1	1.91
Health Policy	1	1.383
Health Policy, Economics and Law	1	n.a.
Human Resources for Health	2	1.38
International Journal of Health Geographics	1	2.34
International Journal of Nursing Education Scholarship	Ī	n.a.
International Journal of Social Security and Workers' Compensation	1	n.a.
International Nursing Review	1	0.588
Journal Health Services Research & Policy	1	1.453
Journal of Community Health	1	1.419
Journal of Sex Research	1	1.488
New Solutions: A Journal of Occupational and Environmental Health Policy	1	n.a.
Nursing Inquiry	1	n.a.
Revue Pistes	1	n.a.
Safety Science	2	1.637
Spatial and Spatio-temporal Epidemiology	1	n.a.
Caribbean Journal of Nursing and Midwifery	1	n.a.
Travailler	1	n.a.
Veterinary Medicine International	1	n.a.
Zoonoses and Public Health	1	2.2
Total number of articles	38	

# Appendix 7: Journal articles published by 23 GHRI projects and number of citations of the articles

Article Reference, by alphabetical order of first author's name	No. of times cited in Google Scholar	No. of times cited in Scopus
Andersson N et al. Evidence-based discussion increases childhood vaccination uptake: a randomized cluster controlled trial of knowledge translation in Pakistan. BMC International Health and Human Rights 2009, 9(Suppl 1) S8	9	n.a.
Andersson N, et al. Household cost-benefit equations and sustainable universal childhood immunization: a randomised cluster controlled trial in south Pakistan. BMC-Public Health 2005,5:72	8	n.a.
Atkinson, U., Grundy, Q., Harrowing, J. N., Hepburn-Brown, C., Mill, J. E., Minnie, K., Owino, J, Rae, T.& Richter, M. S. (2009). Gathering speed and taking flight [Abstract]. The Caribbean Journal of Nursing and Midwifery, 4, 34	n.a.	n.a.
Barnett JP & Maticka-Tyndale E, "The gift of agency: Sexual exchange scripts among Nigerian youth." Journal of Sex Research. 47, 1-11. 2010	n.a.	n.a.
Bernhard D, MacEachen E, Lippel K, Disability Management Experts and the Impact of Jurisdiction on Practice: an Ontario example, 2010, International Journal of Social Security and Workers' Compensation, 2(1):1-16	n.a.	n.a.
Cleary S, Silal S, Birch S, Carrara H, Pillay-van Wyk V, Rehle T & Schneider H, (2011) "Equity in the use of antiretroviral treatment in the public healthcare system in urban South Africa". Health Policy 99, pp.261-266	n.a.	n.a.
Cockcroft A, et al. One size does not fit all: local determinants of measles vaccination in four districts of Pakistan. BMC International Health and Human Rights 2009, 9(Suppl 1):S4	9	n.a.
Djibuti M et al. The role of supportive supervision on immunization program outcome-a randomized field trial from Georgia, BMC International Health and Human Rights, 2009, 9 (Suppl 1): S11	7	n.a.
Djibuti M, Gotsadze G, Mataradze G, Menabde G. Human resources for health challenges of public health system reform in Georgia. Human Resources for Health 2008, 6:8 doi:10.1186/1478-4491-6-8	2	1
Edwards, N. (2008). Leveraging Nursing Research to Transform Healthcare Systems. Nursing Inquiry, 15(2), 81-82	2	2
Edwards, N., & MacDonald, J. (2009). Building nurses' capacity in community health services. International Journal of Nursing Education Scholarship, 6(1), 1-18	n.a.	n.a.
Edwards, N., Kahwa, E., Kaseje, D., Mill, J., Webber, J., Roelofs, S. (2007). Strengthening health care systems for HIV and AIDS in Sub-Saharan Africa and the Caribbean: A program of research. Caribbean Journal of Nursing and Midwifery 2:29-36	7	n.a.
Edwards, N., Roelofs, S. (2007). Strengthening Nurses Capacity in HIV policy development in Sub-Saharan Africa and the Caribbean: An international program of research and capacity building. Canadian Journal of Nursing Research 39 (3):187-189	2	1

Article Reference, by alphabetical order of first author's name	No. of times cited in Google Scholar	No. of times cited in Scopus
Edwards, N., Webber, J., Mill, J., Kahwa, E., Roelofs, S. (2009). Building capacity for nurse-led research. International Nursing Review, 56, 88-94	8	6
Esmail L, Cohen JC, Djibuti M. Human resource management in the Georgian National Immunization Program: a baseline assessment. Human Resources for Health 2007, 5:20 doi:10.1186/1478-4491-5-20	4	3
Hanley J et al, Action Research for the Health and Safety of Domestic Workers in Montreal: Using numbers to Tell Stories and Effect Change, 2001, New Solutions: A Journal of Occupational and Environmental Health Policy, 20(4): 421-439	1	1
Hurley, C et al. 2010. Comprehensive Primary Health Care in Australia: Findings from a Narrative Review of the Literature. Australasian Medical Journal 1(2) 147-152	9	n.a.
Labonté, R et al. 2008. Implementation, Effectiveness and Political Context of Comprehensive Primary Health Care: Preliminary Findings of a Global Literature Review. Australian Journal of Primary Health 14(Suppl 3): 58–67	6	5
Laperrière È, Messing K, Bourbonnais R, 2010, "Pour être serveuse, tu dois avoir toute ta tête", Efforts et reconnaissance dans le service aux tables au Québec. Travailler 23: 27-58	1	n.a.
Ledogar R, et al. Knowledge synthesis of benefits and adverse effects of measles vaccination: the Lasbela balance sheet. BMC International Health and Human Rights 2009, 9(Suppl 1): S6	5	n.a.
Lippel K, "Le droit comme outil de maintien en emploi: rôle protecteur, rôle destructeur", Revue Pistes, 2010, 12(1) <a href="https://www.pistes.uqam.ca/v12n1/pdf/v12n1a2.pdf">www.pistes.uqam.ca/v12n1/pdf/v12n1a2.pdf</a>	n.a.	1
Lippel K, Quinlan, Regulation of psychosocial risk factors at work: an international overview, 2010, Safety Science, dio:10.1016/j.ssci.2010.09.015	n.a.	n.a.
Lippel K, Sikka A, Access to Workers' Compensation Benefits and Other Legal Protections for Work-Related Mental Health Problems: a Canadian Overview, 2010, Canadian Journal of Public Health, 101(s.1): S16-S22	4	2
Lippel K, The Law of Workplace Bullying: An International Overview, 2010, Comparative Labor Law and Policy Journal, 32(1):1-13	2	n.a.
Lippel K, Vézina M, Cox R, Protection of workers' mental health in Québec: Do generally duty clauses allow labour inspectors to do their job? 2010, Safety Science, doi:10.1016/j.ssci.2010.04.011	1	2
Lopez Fernandez D, "Legal Protection for Victims of Workplace Harassment in Chile", Comparative Labor Law and Policy Journal. 26 Nov. 2010. 32(9): 91-108	1	n.a.
McIntyre D, Thiede M & Birch S, (2009) "Access as a policy-relevant concept in low and middle-income countries." Health Policy, Economics and Law 4(2), pp.179-193	17	8
Mitchell S et al. Equity and vaccine uptake: a cross-sectional study of measles vaccination in Lasbela District, Pakistan. BMC International Health and Human Rights 2009, 9(Suppl 1):S7	9	n.a.

Article Reference, by alphabetical order of first author's name	No. of times cited in Google Scholar	No. of times cited in Scopus
Moshabela M, Pronyk P, Williams N, Schneider H & Lurie M, (2010) "Patterns and Implications of Medical Pluralism among HIV/AIDS patients in rural South Africa". AIDS & Behavior Epub ahead of print	n.a.	n.a.
Munasinghe N., Stephen C., Abeynayake, P., and Abeygunwardena, I. (2010) Shrimp farming practices in the Putallam district of Sri Lanka: Implications for disease control, industry sustainability and rural development. Veterinary Medicine. Article ID 679130	n.a.	n.a.
Otieno C.F, Kaseje D, Ochieng' B.M, Githae M.N. (2011). Reliability of Community Health Worker Collected Data for Planning and Policy in a Peri-Urban Area of Kisumu, Kenya. Journal of Community Health, 1-6. <a href="http://www.springerlink.com/content/p3814371024565m3/fulltext.pdf">http://www.springerlink.com/content/p3814371024565m3/fulltext.pdf</a>	n.a.	n.a.
Robertson, C., Nelson, T.A. (2010) Review of software for space-time disease surveillance. International Journal of Health Geographics, 9:16	n.a.	7
Robertson, C., Nelson, T.A., MacNab, Y.C., Lawson, A.B. (2010) Review of methods for space-time disease surveillance. Spatial and Spatiotemporal Epidemiology. 1:105-116	0	3
Robertson, C., Sawford, K. Daniel, S., Nelson, T.A., and Stephen, C. (2010). Implementing Early Warning in Lower Resource Settings: Lessons learned from building infectious disease surveillance capacity in Sri Lanka. Emerging Infectious Diseases. 16(10):1524-1531	n.a.	n.a.
Schneider H, le Marcis F, le Grand J, Penn-Kekana L, Blaauw D & Fassin D, (2010) "Negotiating care: patient tactics at an urban South African hospital". Journal Health Services Research & Policy 15(3), pp.137-142	1	1
Shea B <i>et al.</i> , Increasing the demand for childhood vaccination in developing countries: a systematic review. BMC International Health and Human Rights 2009, 9(Suppl 1):S5	7	n.a.
Stephen C, Ninghui L, Zhang L, Yeh. F. 2010. Animal health policy principles for highly pathogenic avian influenza: Shared experience from China and Canada. Zoonoses and Public Health. DOI: 10.1111/j.1863-2378.2010.01351.x	n.a.	n.a.
Stephen. C, Diabes, I. (2010). Shared characteristics of 14 global health research teams: Implications for building the field of global health research. Global Health Action. 3:5188	n.a.	n.a.

n.a. = not available or 0 counts

Information retrieved October 17, 2011, by Sachiko Okuda, IMTD IDRC

## Appendix 8: Capacity building of organizations by 23 GHRI projects

Country	Number of organizations those capacity have been built
Barbados	2
Bolivia	1
Brazil	33
Canada	65
Chile	17
China	1
Columbia	1
Cuba	2
France	4
Georgia	4
Honduras	5
India	1
Jamaica	11
Kenya	4
Mexico	32
Nicaragua	1
Nigeria	34
Pakistan	3
Paraguay	1
Peru	1
South Africa	16
Sri-Lanka	5
Switzerland	1
Thailand	3
Uganda	7
UK	1
Total countries	256
Regional organizations	10
Grand Total	266

### Appendix 9: Research funds allocated to GHRI programs (in millions of **Canadian dollars**)

Table 1: Research funds allocated by Program and source of funding<sup>1</sup>

	CIHR	CIDA	Health Canada	IDRC	PHAC	Other	Total
TC	\$ 12.50			\$ 12.50			\$ 25.00
CIII2		\$ 2.30		\$ 0.05			\$ 2.35
CIII2-Haiti		\$ 1.00		\$ 0.06			\$ 1.06
CHVI1		\$ 3.00					\$ 3.00
CHVI2		\$ 16.00		\$ 0.65			\$ 16.65
AHSI-Res		\$ 5.00		\$ 0.90			\$ 5.90
EcoEID		\$ 4.00		\$ 3.40		$1.5^{2}$	\$ 8.90
Total	\$ 12.50	\$ 31.30	\$ -	\$ 17.56	\$ -	\$1.50	\$ 62.86

Table 2: Research investment leveraging factor by GHRI partner agency and department as a result of the GHRI partnership

CIHR	5.03
CIDA	2.01
HC	-
IDRC	3.58
PHAC	-

A "-" indicates that the institution does not contribute research funds, yet is endowed with the entire research funds of the partnership. See Appendix 1, indicator 17 for calculation details

<sup>&</sup>lt;sup>1</sup>: Totals are rounded up to next closest 2 decimal points amount <sup>2</sup>: Funds allocated by the Australian Agency for International Development (AusAID)

## Appendix 10: GHRI projects contributing to Canada commitment to the fight against communicable and non-communicable diseases

AHSI-Res - Linking Community-Based Health Information Systems and Institutional Health Information Systems for Effective Decision-Making (Kenya)	disease	disease
information bystems for Effective Decision Making (Renya)		
AHSI-Res - Healthy Child Uganda: Impact and Reproducibility of a Village Health Volunteer Child Health Program In Southwest Uganda		X
AHSI-Res - Harnessing Mobile Phone Usage for HIV and Horizontal Health Systems Improvement: PMTCT		X
AHSI-Res - Use of Task Shifting to Expand the Provision of Essential Surgical Services in Ugand	a	
AHSI-Res - Task Shifting in Eastern Africa: Assessing the Productivity and Quality of Eye Care Services to Assist Decision-Making		
AHSI-Res - Task Shifting in Mental Health – Innovative Approaches		
AHSI-Res - Strengthening Human Resources for Health through Simplified Clinical Tools and Educational Outreach: A Cluster-Randomized Trial		X
AHSI-Res - Increasing Availability of Adequately-Trained Health Care Providers in Rural Zambia	ı	
AHSI-Res - Les Tic Pour Un Accès Équitable Aux Professionnels De La Santé Qualifiés, Motivés Et Soutenus En Afrique Francophone		
AHSI-Res - Régionalisation du recrutement du personnel de santé au Burkina Faso : Quels Effets sur la distribution des ressources humaines en santé au niveau national et Régional ?		
CHVI1 - Canada-Africa Prevention Trials Network (CAPT)		X
CHVII - Renforcement des capacités de recherche en prévention du VIH en Afrique Francophone		X
CHVII - ADAPT Capacity: Southern Africa Development of AIDS Prevention Trials Capacity		X
CHVI2 - African Development of AIDS Prevention Trials Capacities, Phase 2 (ADAPT2)		X
CHVI2 - Canada-Africa Prevention Trials (CAPT) Network: Building African capacity for HIV/AIDS prevention trials (Phase 2) (CAPT2)		X
CHVI2 - Canada-Sub-Saharan Africa (CANSSA) HIV/AIDS Network: Building capacity for prevention trial research and clinical care in Africa		X
CHVI2- The Kenya AIDS vaccine initiative (KAVI): A centre of excellence for HIV vaccine/prevention trials in East Africa		X
CHVI2 - Building Capacity for Conducting HIV Prevention Trials in the Health Care Workplace: A South African-Canadian Workplace		X
CHVI2- West African Platform for HIV Intervention Research (WAPHIR)		X
CHVI2- TanZamBo Capacity Building for HIV Prevention Research Network		X
CHVI2- Mise en place des préalables aux essais randomisés d'interventions préventives du VIH		X
CHVI2- Creating a Common Platform for HIV Vaccine Research and HIV Care and Treatment Program		X

Project	Chronic disease	Infectious disease
CIII2 - Development of Novel Vaccination Strategies against Helicobacter pylori in Latin America		X
CIII2 - Household Cost-Benefit Equation and Equity in Immunization: Strengthening Local Evidence-to-Action for Sustainable Universal Childhood Immunization, Lasbela District, Balochistan, Pakistan		X
CIII2 - Effectiveness of Supportive Supervision in Improving the Performance of National Immunization Programs in Georgia		X
CIII2 - Development, Validation and Implementation of Simple Household Instruments to Measure Immunization-Related Childhood Mortality among 7.6 million People in India Followed from 2004-2015		X
CIII2-Haiti - Les déterminants de l'abandon de la vaccination dans le Département des Nippes		X
CIII2-Haiti - Epidemiology of HPV infection and feasibility of the implementation of an HPV vaccine in Haiti		X
CIII2-Haiti - Modèle efficace de provision de vaccination dans les zones de faible couverture en Haïti		X
CIII2- Haiti - Expérimentation d'une stratégie d'amélioration du contrôle des maladies évitables par la vaccination en Haïti		X
EcoEID - Innovative Strategies for Sustainable Control of Asian Schistosomiasis and Other Helminth Zoonoses through Socio-Ecosystem-Based Interventions		X
EcoEID - Eco-Health Assessment on Poultry Production Clusters for the Livelihood Improvement of Small Producers		X
EcoEID - Application of an Eco-Bio-Social Approach to Emerging Infectious Diseases in Southeast Asian Global Outreach Hot Spots: From Dengue to Chikungunya, SARS and Avian Flu		X
TC GHLA - Building Capacities for Knowledge Translation Activities for Better Health in Central Africa	X	
TC GHLA -Improving Equity and Efficiency of Health Systems in Latin America: Bridging Research and Policy in Health Resource Allocation by Strengthening Capacity and Application of Health Technology Assessment and Economic Evaluation	X	
TC GHLA -Social Control, Human Rights and Governance: A Health Promotion Approach to the Reduction of Health Risks Associated with Pesticide Use in Carchi, Ecuador	X	
TC GHLA -Strengthening Maternal and Child Health in Rural Uganda		
TC GHLA -Strengthening Capacities in Research Ethics in Honduras		
TC GHLA -Strengthening Food-Borne Diseases Surveillance Systems in the Turks and Caicos Islands		X
TC GHLA - Expérimentation d'une approche modulaire de formation de médecins généralistes en gynécologie et obstétrique (Sénégal)		
TC GHLA -Enhancing Capacity for Evidence-Informed Health Policy in Chile and Latin America		
TC GHLA -Scaling up HIV/AIDS Prevention in India: Access, Affordability and Priority-Setting		X
TC GHLA -Bridging the Gap between Evidence and Action: Capacity Building and Advocacy	X	

Project	Chronic disease	Infectious disease
Project to Face the Chronic Disease Epidemic in Colombia		
TC GHLA -Mentorship for Tobacco Control in Research in Argentina	X	
TC GHLA -Strengthening of Tobacco Control in Georgia through Multidisciplinary Studies and Advocacy Campaign	X	
TC GHLA -Building Individual and Institutional Capacities to Address Emerging Policy Relevant Research Questions in Nine Low and Middle Income Countries in the Middle East and North Africa Region		
TC Team – Equipe de recherche interdisciplinaire sur la vulnérabilité et l'équité en santé en Afrique		
TC Team - Political Violence, Natural Disasters and Mental Health Outcomes: Developing Innovative Health Policies and Interventions	X	
TC Team - Revitalising Health for All: Learning from Comprehensive Primary Health Care Experiences		
TC Team - Strengthening Nurses' Capacity for HIV Policy Development in sub-Saharan Africa and the Caribbean		X
TC Team - Research and Practice with Regard to Work-Related Mental Health Problems in Chile: A Gender Perspective	X	
TC Team - Unravelling the Emerging Childhood Obesity Epidemic in Mexico: The Nutrition Transition and the Double Edge Sword	X	
TC Team - Prevention, Care, and Support for Vulnerable Populations at Risk for HIV/STI in Shanghai, China		X
TC Team - Increasing Capacity to Achieve Millennium Development Goal 6 in Honduras: Combating Honduras' Infectious Diseases		X
TC Team - Veterinary Public Health as Part of the Global Response to Emerging Diseases.  Building a Sustainable Model in Sri-Lanka with Extension to South and Southeast Asia		X
TC Team - HIV Prevention for Rural Youth: Mobilizing Nigerian Schools and Communities		X
TC Team - Caribbean Eco-Health Programme: Public and Environmental Health Interactions in Food- and Water-Borne Illnesses		X
TC Team - Poor Land Use and Poor Health: Primary Prevention of Ill Human Health through Sound Land Use for Small Scale Farmers of the Humid Tropics (Brazil)	X	X
TC Team - Researching Equity in Access to Health Care (REACH)		X
TC Team - Paediatric Pain Management in Urban and Rural Thailand	X	
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