



# **Building the Life Foundation**

**Canadian Institutes of Health Research (CIHR)**  
**INSTITUTE OF HUMAN DEVELOPMENT, CHILD AND YOUTH HEALTH**

**IHDCYH Strategic Plan 2001-2006**

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## IHDCYH Executive Summary





## EXECUTIVE SUMMARY

The Institute of Human Development Child and Youth Health (IHDCYH) is one of 13 institutes of the Canadian Institutes of Health Research (CIHR). In August 2001, the Institute embarked on a strategic planning process to set the direction and identify strategic research priorities for the next 5 years, and to target the actions that would position the Institute as an international leader.

## VISION, MISSION AND VALUES

**Vision, mission and values statements were confirmed through the planning process.**



### **Vision**

To ensure the best start in life for all Canadians and the achievement of their potential for optimal growth and development.

### **Mission**

To promote and facilitate research at the highest international standards in reproductive and developmental biology, pregnancy and birth, and the health and development of newborns, children, youth and their families.

### **Values**

- Leadership, innovation and excellence
- Multidisciplinary and international collaboration
- Partnership
- Inclusivity and outreach
- Ethics and integrity in all of our endeavours
- Respect for couples, parents, children, youth and the essential role of families and communities

## STRATEGIC RESEARCH PRIORITY THEMES

The Institute identified the following six strategic research priority themes for the next five years:

- 1 Healthy gametes and great embryos
- 2 Reproductive aging
- 3 Fetal growth and preterm birth
- 4 Reducing the burden of congenital abnormalities
- 5 Developmental trajectories of children and youth
- 6 Causes, prevention and treatment of acute and chronic illness in children and youth

## THE FIVE CIHR OVERARCHING GOALS

The Institute's strategic research priorities fit well within the five CIHR overarching goals. The Institute has developed specific goals to align directly with the CIHR goals.

### 1 Building international leadership through national excellence in health research

Building investigator capacity

- Ensure a sufficient number of investigators with interest and skills in a wide spectrum of disciplines and methodological approaches to conduct research relating to human development, reproductive and developmental biology, and newborn, child and youth health.
- Establish training initiatives, co-sponsor New Emerging Team (NET) awards to build a critical mass of investigators in areas of strategic priority.
- Establish international exchange programs.

**2 Integrating the biomedical, natural and social sciences, engineering, mathematics and the humanities**  
Building transdisciplinary teams in areas of emerging science

- Establish transdisciplinary research teams in the following priority areas: healthy gametes and great embryos; reproductive aging; fetal growth and preterm birth; congenital abnormalities; developmental trajectories of children and youth; and causes, prevention and treatment of acute and chronic illness in children and youth
- Initiate and co-sponsor NET programs that are focused, transdisciplinary and benefit maximally from newly and emerging trends in science and technology.
- Integrate ethics into all aspects of Institute strategic priorities.

**3 Improving the health status of vulnerable populations**  
Building the foundations of life

- Create, evaluate and apply knowledge of developmental origins of health disparities, including socioeconomic, ethnic and geographic factors. This will help in developing strategies to reduce or eliminate disparities, beginning with differences in fetal and infant mortality rates and extending to developmental outcomes as children mature.
- Examine factors leading to increased vulnerability of children during times of transition, such as birth and beginning school and adolescence, including emotional, behavioural conduct and social developmental difficulties and the subsequent effects of these difficulties upon adulthood.

**4 Strengthening health research and the health system in the genomics era**  
Building from the cutting edge of bio-molecular research

- Create, evaluate and apply knowledge and technology to understand better the developmental and biological processes influencing the physical well-being and growth of fetuses, infants, children, and adolescents.
- Exploit and further develop biotechnology that is emerging from functional, structural and comparative genomics, proteomics, bioinformatics and advanced imaging and computer technology.
- Examine ethical and social issues relevant to genomics and post-genomic research and applications within the health system as related to human development, pregnancy and child and youth health.



#### 5 **Unique challenges**

Building unique opportunities to provide inter-institutional leadership in research in pregnancy and child and youth health issues

Priority areas include:

- environment and health
- rural health
- substance use and abuse
- obesity and physical inactivity
- prevention of injury
- exposure to violence and development of violent behaviour



**Developing and  
advancing a  
robust research  
agenda, and  
building a strong  
infrastructure.**

The Institute will be targeting its actions and strategies into two major streams of activities:

- 1 developing and advancing a robust research agenda, and**
- 2 building a strong infrastructure.**

Two distinct groups of research initiatives will be supported: strategic research in which the Institute will take the lead; and investigator-initiated research, which the Institute will facilitate and support through various mechanisms, such as workshops and coalition building. The Institute has identified specific strategies to support both streams of activities and the two types of research initiatives. In addition, the Institute has proposed action plans for partnerships and alliances, research transfer, dissemination, policy and ethics that are critical to its success in advancing its strategic agenda.

Over the next eighteen months, Consensus Workshops will be conducted in each of the six strategic research areas. These will be pivotal in determining the focus and investment that is appropriate to targeted training, NETs or seed grants. The expected annual growth in funding for the CIHR Institutes will support one to two major Requests for Applications (RFAs) per year over the next five years. Each RFA should yield 3 to 4 successful multidisciplinary awards of \$500,000 to \$1 million per year for five years.

Five year implementation plans, based on a number of key planning assumptions, have been developed for both strategic initiatives and operating initiatives.

The Institute is committed to monitoring and measuring its progress and achievements against its goals and objectives. Initial measures have been identified and others will be developed as a requirement of the Consensus Workshops.

This first strategic plan has been developed as a framework to guide development of the Institute. The strategic plan will be reviewed on an annual basis and revised as necessary. The plan should continually include a three to five year horizon and provide sufficient flexibility to respond to opportunities and challenges which present themselves to the Institute and its members.





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## IHDCYH Introduction and Background





## INTRODUCTION AND BACKGROUND

The Institute of Human Development Child and Youth Health (IHDCYH) is one of 13 institutes of the Canadian Institutes of Health Research (CIHR) that, together, share responsibility for achieving the principal objective of CIHR, which is:

"... to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products, and a strengthened Canadian health care system." (CIHR Act)

### NEW MANDATE

**This new mandate espouses three key messages:**



- 1 focus on internationally competitive research supported by significantly growing resources;
- 2 new focus on translation of research as an important component of CIHR; and,
- 3 transformation of medical research to health research, integrating the four pillars of biomedical, clinical, and health services research, and research into the societal, cultural and environmental dimensions of health.

The institutes have been created to promote and build upon Canada's firm foundation of research excellence. They are expected to engage the research community and encourage interdisciplinary, integrative health research. Through their Scientific Directors and Institute Advisory Boards (IABs) and under the guidance of the Governing Council, the institutes will work together to forge a health research agenda across disciplines, sectors, and regions that embraces scientific opportunity and reflects the emerging health needs of Canadians, the evolution of the health care system and the information needs of health policy decision-makers. Each institute is expected to facilitate partnerships and work to accelerate the transfer of new knowledge into benefits for Canadians.



**The transition of the developing fetus through infancy, childhood and adolescence, is influenced by multiple, complex factors.**

Dr. John Challis, former Chair of the Department of Physiology, University of Toronto was appointed Scientific Director of the Institute of Human Development, Child and Youth Health in December 2000. Dr. Michael Kramer, Professor of Pediatrics and of Epidemiology and Biostatistics, McGill University, was appointed Chair of the IAB for IHDCYH in January 2001.

The case for an institute dedicated to human development and child and youth health is compelling. In Canada there are more than 5 million women of childbearing age, and their offspring will add to the 8 million children and youth in Canada that represent the future of our country. The transition of the developing fetus through infancy, childhood, adolescence and eventually adulthood is influenced by multiple, complex factors.

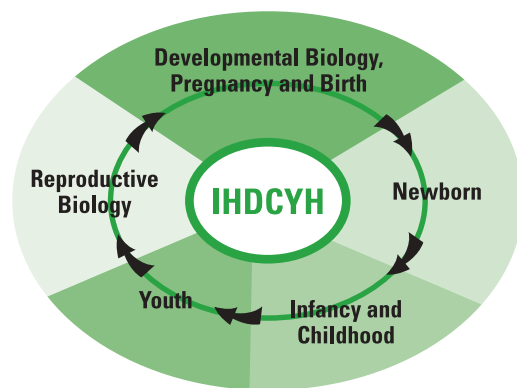
Strong evidence indicates that the course of events experienced by pregnant women and their infants and young children influences development, well-being and health throughout later life. Healthy development is influenced by a variety of familial, socioeconomic and environmental factors, and by nutritional status, chronic disease and disability. All populations have critical periods of increased vulnerability during the development process that are predictive of long term health; and additionally certain populations (for example, the offspring of parents with mental illness) are at high risk throughout development. It is during these developmental periods and at times of transition that an unhealthy developmental pathway or disorder can be magnified and result in lifelong adverse consequences.

Disorders occurring during the early stages of the lifecycle have the potential for severe impact on individuals and families across lifetimes and generations. Examples include infertility and difficulties in early pregnancy that lead to preeclampsia (in 5-7% of all pregnancies) or preterm birth (6-10% of pregnancies, accounting for more than 75% of neonatal mortality and morbidity, and considerable later disability and neurological handicap). Child and youth physical and mental health problems carry a heavy burden for the affected individuals and their families. For example, at least 20% of children or adolescents have clinically important emotional or behavioural problems or chronic medical illness.



## LIFECYCLE AND POTENTIAL DISORDERS

Examples of the periods of the lifecycle and potential disorders within the Institute research mandate are:



- Before conception (infertility, inherited diseases)
- During pregnancy (preeclampsia, fetal alcohol syndrome, other birth defects, miscarriage)
- At birth (preterm birth, intrauterine growth restriction, neonatal diseases)
- As an infant or child (autism, mental retardation, learning disabilities, mental and emotional illness, infection, cancer, chronic disease, obesity and physical inactivity, injury, and infection)
- In youth (eating disorders, trauma/injuries, violent and risky behaviours)

During this first year of operation, the IHDCYH has functioned under a broad mandate established by CIHR. This includes: support of research to enhance maternal, child, and youth health and address causes, prevention, screening, diagnosis, treatment, short- and long-term support systems, and palliation for a wide range of health concerns associated with reproduction, early development, childhood, and adolescence. A major objective of the strategic planning process, of which this report is a product, is to establish a strategic research agenda in which the strategic priorities of the Institute are clearly defined.





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## IHDCYH Strategic Planning Process



## STRATEGIC PLANNING PROCESS

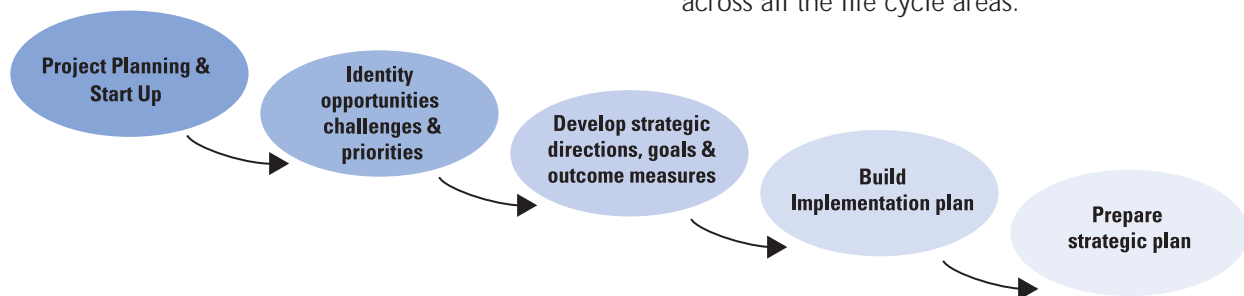
In August 2001, the Institute embarked on a strategic planning process to set the direction and identify strategic research priorities for the next 5 years. The planning process was designed to build on the extensive consultation conducted during the start-up phase of the Institute.

### 4 KEY PREMISES

The strategic planning proceeded within the context of four key premises:



- 1 CIHR funding is expected to grow to \$1 billion by 2005-06, providing a resource base of \$20 to \$25 million for each Institute to address its strategic initiatives.
- 2 IHDCYH will plan for a slate of strategic initiatives through Requests for Application (RFAs) that identify with the broad disciplinary base of the Institute.
- 3 IHDCYH expects to fund 3 to 4 multidisciplinary research initiatives at approximately \$0.5 to 1 million annually out of 5 to 6 submissions flowing from 10 to 12 letters of intent.
- 4 IHDCYH is committed to capacity building across all the life cycle areas.





**Identify and refine the key research themes of importance for the next five years.**

Within this context, the strategic planning process sought to identify and refine the key research themes of importance for the next five years and to target the actions that would position the Institute as an international leader in its field. The process engaged broad consultation and input throughout and included a number of steps:

- Interviews and focus groups of constituents, key stakeholders, societies, membership organizations, and health charities
- Review of key CIHR documents and child and youth health reports, including those which preceded the establishment of the IHDCYH
- National planning retreat in October 2001 with a broad, multi-stakeholder group
- Development of criteria for establishing research priorities
- Establishment of strategic research priorities
- Identification of mechanisms for advancing the research agenda
- Development of implementation framework and timelines
- Finalization of a strategic plan for submission to CIHR in December 2001

A Strategic Planning Committee comprising the Chairs of the five standing committees of the Institute, the Chair of the IAB and three additional members of the IAB guided the planning process. The full IAB reviewed and approved the final plan, which was forwarded to the President of CIHR in December 2001.



## FRAMEWORK FOR PLANNING AND IHDCYH OBJECTIVES



The objectives provide the framework to guide the work of the Institute.

At the beginning of the process, the IAB articulated for IHDCYH the following objectives, which provided the framework for planning. These are:

- ① Promote, facilitate and conduct health research at the highest international standards in the areas of reproductive biology, pregnancy and developmental biology, birth and neonatology, and the health and development of children, youth and their families.
- ② Foster inter-pillar collaboration in all areas of the Institute's work.
- ③ Enhance opportunities and achieve linkages and partnerships in research planning, funding and outcome delivery with other CIHR Institutes, health charities and foundations, private and public sector groups.
- ④ Establish mechanisms to build capacity through effective training programs for embracing the four pillars at all levels across the education continuum.
- ⑤ Serve as an advocate with various levels of government, private and public sector groups and lay organizations in all areas of investigation embraced by the mandate of IHDCYH.
- ⑥ Establish international collaborations and investigations in the areas of IHDCYH.
- ⑦ Develop mechanisms that promote research of the highest ethical standard, and that promote bioethical enquiry as an integral component of IHDCYH sponsored investigations.
- ⑧ Promulgate and translate the research of IHDCYH to improve health care services and public policy to better lifelong health.

The objectives were confirmed through the Strategic Planning process and continue to guide the work of the Institute.

## VISION, MISSION AND VALUES

The vision, mission and values statements were developed by the Strategic Planning Committee and broadly distributed for input through the planning process before being confirmed by the IAB.



### **Vision**

To ensure the best start in life for all Canadians and the achievement of their potential for optimal growth and development.

### **Mission**

To promote and facilitate research at the highest international standards in reproductive and developmental biology, pregnancy and birth and the health and development of newborns, children, youth and their families.

### **Values**

- Leadership, innovation and excellence
- Multidisciplinary and international collaboration
- Partnership
- Inclusivity and outreach
- Ethics and integrity in all of our endeavours
- Respect for couples, parents, children, youth and the essential role of families and communities

## STRENGTHS, OPPORTUNITIES AND CHALLENGES

The information gathered during the consultation process in September 2001 yielded significant insights into the strengths of the Institute, as well as the opportunities and challenges which it faces now and during the planning horizon of this strategic plan. A synthesis of the strengths, opportunities and challenges follows:



### Strengths, Opportunities and Challenges of IHDCYH

#### Strengths

- Human development, child and youth health topics are of great interest and appeal to a broad public
- CIHR established an institute for HDCYH
- International research strengths in areas of:
  - reproductive biology
  - fetal and neonatal research
  - childhood developmental, physical & mental disorders
  - adolescent health
- Child Health is high on federal and provincial government agendas, supporting Centres for Excellence for Children, and the National Children's Agenda identified in the Throne Speech
- Existing administrative and clinical databases, registries
- International collaborations in many areas
- Experience in multi-disciplinary and inter-pillar collaborations
- Extraordinary enthusiasm across a broad range of researchers and stakeholders
- Strong and committed potential partner organizations & communities



### Opportunities

- Training – broad interest and support for expanding and continuing programs for training and development, including partnership with academic communities
- Multiple areas of research strength to exploit for national and international impact
- Extensive databases – perinatology, tissue banks, child and adolescence, and others to catalyze new research initiatives
- Potential for partnerships and alliances with external groups, including public and private sector, societies and professional membership organizations and charities
- Extensive scope for research transfer through existing venues
- Potential for growing national and international linkages
- Potential for leadership in addressing many ethical issues
- Broad array of initiatives that cross institutes to leverage broader set of skills and expertise, share resources, infrastructure
- Advocacy on issues specific to IHDCYH



### Challenges

- Ensuring internationally competitive level of research funding for all high-caliber investigations
- Ensuring appropriate level of infrastructure support to conduct high-quality investigations
- Training, attracting and retaining new and established investigators through start-up funds, remuneration and recognized career structure
- Establishing a mechanism to continuously monitor and evaluate progress toward key objectives
- Ensuring effective communications to sustain the interest and support of the research community
- Reaching general public in raising profile and support for the Institute
- Facilitating good uptake and success rate in RFAs
- Facilitating new and effective linkages among the sectors of research, practice and policy
- Demonstrating a transformation in health research within the new CIHR model

## ADVANCING THE INSTITUTE MISSION

The IHDCYH mission to "**promote and facilitate research at the highest international standards...**" requires strategies and actions that flow in two streams:

- 1 **developing and advancing a robust research agenda, and**
- 2 **building a strong infrastructure for the Institute's many activities.**

The research activities can be considered in two distinct groups: **the strategic research** in which the Institute will take a leadership role in advancing; and **the investigator initiated research**, which the Institute will facilitate and support through workshops and coalition building.

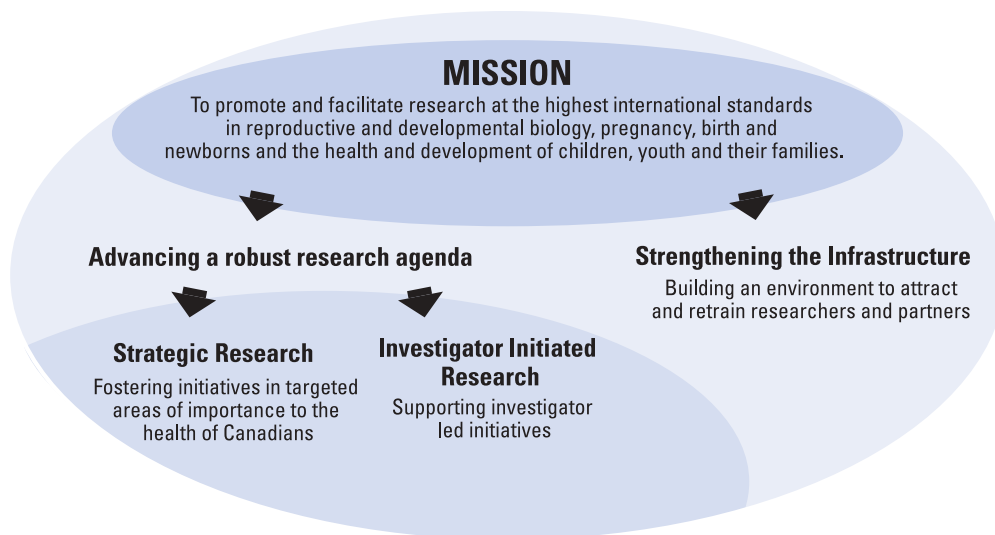
The Institute's undertakings to advance strategic research are expected to involve a range of initiatives that focus on building research capacity and pursuing targeted research priority themes.

### Mechanisms include:

- support for training centres
- funding New Emerging Teams of researchers
- identifying and developing strategic research themes for large interdisciplinary multi-year research grants, and
- establishing a pool of funds for smaller strategic initiatives and seed grants.

Building a strong foundation for IHDCYH researchers and partners is essential for moving forward the Institute's strategic agenda. **Workshops** provide a mechanism for linking investigators and building new coalitions of researchers that will support both strategic research opportunities and investigator initiated opportunities. Developing a **database of investigators** will facilitate bringing together research teams working in related areas, and provide an anchor for investigators who span multiple institutes.

**Communications and planning support** are also vital to the ongoing support and engagement of the research community.





**IHDCYH**  
**Strategic Research Themes**





## STRATEGIC RESEARCH THEMES

### Criteria for Selecting Research Priorities

Establishing scientific priorities is one of the greatest challenges to all Institutes. The information sharing and consultation process, undertaken at the inception of the Institute, yielded an extensive range of topics judged relevant and valuable to advancing knowledge in the fields of human development, child and youth health. The strategic planning process included a significant focus on the development of criteria for selecting research priorities, drawing on the input of many stakeholders during several steps of the process. The following two sets of criteria were key guides to identify and select research priorities, and to incorporate into the Request for Application (RFA) processes.



### Criteria to identify and select priority research themes

- 1 Has potential for impact in improving health of Canadians
- 2 Builds on areas of strength, or strengthens emerging capacity (competitive advantage)
- 3 Has potential for significant scientific advance (addresses gaps, areas of need)
- 4 Capitalizes on emerging scientific discoveries or technological advances
- 5 Requires a strategic, multidisciplinary approach (different from other funded CIHR research streams)

### Criteria to incorporate into design and evaluation of RFAs

- 1 Scientific excellence
- 2 Multi-disciplinary, inter-pillar involvement
- 3 Strategies and partnerships for research transfer / dissemination / policy
- 4 Potential for national and international partnerships
- 5 Bridges across institutes
- 6 Includes measures of outcome and impact

## STRATEGIC RESEARCH PRIORITY THEMES

Six strategic research priority themes have been identified through a process comprising input from a broad range of stakeholders. A preliminary set of research themes was compiled following the early consultation sessions across the country, and was subsequently refined through the strategic planning process.

**The strategic research priorities and examples of topic areas for the Institute for the next three to five years are:**

**1 Healthy gametes and great embryos**

Examples include:

- Environmental determinants
- Prenatal diagnosis
- Cost/consequences/ethics of ART
- Pregnancy outcomes, aging parents

**2 Reproductive aging**

Examples include:

- Andropause
- Ovarian failure/menopause
- Sexual dysfunction
- Genetic consequences of gamete aging

**3 Fetal growth and preterm birth**

Examples include:

- Pre-eclampsia and other diseases of pregnancy
- Intrauterine growth restriction
- Prematurity
- Impacts on the health and care of newborns, family and community
- Fetal origins of adult disease

**4 Reducing the burden of congenital abnormalities (genetic and nongenetic)**

Examples include:

- Brain and neurosensory development
- Aberrant development of other tissue and organ systems
- Psychosocial factors and their relationship to causation, prevention and treatment
- Prenatal factors in pregnant teens and associated with risky behaviors

**5 Developmental trajectories of children and youth**

Examples include:

- Determinants and trajectories of children with physical, emotional and mental health problems
- Resilience
- Relationship to transition challenges during adolescence
- Effects of puberty on brain development and on psychosocial development
- Early identifications and targeted interventions to alter and protect trajectories of children and youth

**6 Causes, prevention and treatment of acute and chronic illness in children and youth**

Examples include:

- Type I and type II diabetes
- Asthma
- Obesity
- Injury
- Secondary prevention and rehabilitation in chronic conditions with special reference to transition issues

In addition, a number of unique challenges cross multiple institutes. These include: environmental factors and health, rural health, substance use and abuse, injury prevention, obesity and physical inactivity, and exposure to violence and development of violent behavior. IHDCYH could provide inter-institute leadership in these research areas.

## FIT WITH CIHR GOALS

The IHDCYH strategic research priorities fit well within the overarching goals recently established by CIHR. These are:



- 1 Building international leadership through national excellence in health research
- 2 Integrating the biomedical, natural and social sciences, engineering mathematics and the humanities
- 3 Improving the health status of vulnerable populations
- 4 Strengthening health research and the health system in the genomics era
- 5 Unique challenges

## IHDCYH GOALS

IHDCYH has developed its own goals that align directly with the above goals and should allow it to achieve both the CIHR priorities and to fulfill its own strategic agenda. These include:

### 1 Building investigator capacity

- Ensure a sufficient number of investigators with interest and skills in a wide spectrum of disciplines and methodological approaches to conduct research relating to human development, reproductive and developmental biology, and newborn, child and youth health.
- Establish training initiatives, co-sponsor New Emerging Team awards to build a critical mass of investigators in areas of strategic priority.
- Establish international exchange programs.

## **2 Building transdisciplinary teams in areas of emerging science**

- Establish transdisciplinary research teams in the following priority areas: determinants of pre- and post- implantation health; reproductive aging and pathology, adverse growth and preterm birth; congenital abnormalities; developmental trajectories of children and youth; and causes prevention and treatment of acute and chronic illness in children and youth.
- Initiate and co-sponsor New Emerging Team programs that are focused, transdisciplinary and benefit maximally from newly and emerging trends in science and technology.
- Integrate ethics into all aspects of Institute strategic priorities.

## **3 Building the foundations of life**

- Create, evaluate and apply knowledge of developmental origins of health disparities, including socioeconomic, ethnic and geographic factors. This will help in developing strategies to reduce or eliminate disparities, beginning with differences in infant mortality rates and extending to developmental outcomes as children mature.
- Examine factors leading to increased vulnerability of children during times of transition, such as birth and beginning school and adolescence, including emotional, behavioural conduct and social developmental difficulties and the subsequent effects of these difficulties upon adulthood.

## **4 Building from the cutting edge of bio-molecular research**

- Create, evaluate and apply knowledge and technology to understand better the developmental and biological processes influencing the physical well-being and growth of fetuses, infants, children and adolescents.
- Exploit and further develop biotechnology that is emerging from functional, structural and comparative genomics, proteomics, bioinformatics and advanced imaging and computer technology.
- Examine ethical and social issues relevant to genomics and post-genomic research and applications within the health system as related to human development, pregnancy and child and youth health.



**5 Building unique opportunities to provide inter-institutional leadership in research in pregnancy and child and youth health issues**

- environment and health
- rural health
- substance use and abuse
- obesity and physical inactivity
- prevention of injury
- exposure to violence and development of violent behaviour



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## **IHDCYH** **Strategies for Implementing the Research Agenda**





## STRATEGIES FOR IMPLEMENTING THE RESEARCH AGENDA



Consensus Workshops will develop and refine a comprehensive approach to research in each priority area

### Consensus Workshops

Each of the above goals and six strategic research priorities will be pursued over the next three to five years. As a first step, Consensus Workshops will be organized to include representation from multiple disciplines, pillars and potential partner organizations. These Consensus Workshops will develop and refine a comprehensive approach to research in each priority area, addressing the following topics:

- Potential for impact in improving the health of Canadians
- Current capacity and emerging talent
- Opportunities for scientific advance
- Scope of research questions and research themes
- Specific scientific goals
- Linkages and partnerships across disciplines and pillars
- Ethical issues in pursuing research questions
- Outcomes and measures of impact

Position papers or reports will be published as an immediate outcome of each Consensus Workshop. It is expected that the Consensus Workshops will recommend strategies that incorporate one or more mechanisms to advance science in the specific priority area. Strategies may include funding of research projects, targeted training strategies, new emerging teams, seed grants and others.



**Develop specific strategies to foster and strengthen linkages and partnerships**

### **Partnerships**

IHDCYH recognizes that many organizations, professional associations and societies, charities, private sector organizations, and government agencies share the goals and interests of the Institute. These groups bring valuable expertise, commitment, enthusiasm and resources to potential research initiatives directed at improving the health of pregnant mothers and their infants, children and youth. The Institute will develop specific strategies to foster and strengthen the linkages and partnerships with other Institutes, external organizations and groups.

IHDCYH will pursue the following action plan:

- 1 Establish a sub-committee of the IAB to help execute the research agenda with potential partners. The development of a partnership strategy will consider the following actions identified throughout the consultation and strategic planning process:
  - Develop criteria to guide the Institute in developing partnerships
  - Work with CIHR, Strategic Partnerships and Alliances Branch, in identifying and developing potential partnerships
  - Include potential partners in all of the Institute's activities, including development of training centres, creating or supporting workshops, formulating RFAs on specific research themes, information dissemination, research transfer, monitoring and measuring outcomes and communications
  - Establish a database or inventory of organizations, agencies, groups and consortia that may be potential partners
  - Conduct workshops with industry representatives to explore opportunities
  - Explore the central clearinghouse model for linkages with industry
  - Develop industrial internships and exchanges



**Fostering the translation of research to inform policy makers, health care providers and the Canadian public.**

### **Research Transfer / Dissemination / Policy**

The Institute recognizes the importance of fostering the translation of research to inform policy makers, health care providers and the Canadian public. It is critical to achieving the national and international impact expected to accrue from high-caliber CIHR research. A number of strategies and actions have been proposed through the strategic planning process. IHDCYH will pursue the following action plan:

- ① Develop a process that informs and engages policy-makers.
  - To be coordinated by the Scientific Director, Assistant Director and IAB
- ② Establish a sub-committee of the IAB to develop a work plan for research transfer/ dissemination for education and outreach that targets the health provider community and the general public.
  - Explore non-government organizations and private sector communication and educational vehicles
  - Explore potential partnerships to leverage existing outreach and dissemination mechanisms
  - Develop a team of experts in research translation and communication



**New scientific advances may create new ethical dilemmas.**

### Ethics

Ethical issues arise in the context of clinical care, research and policy making across all the life cycle areas of concern to the Institute. New scientific advances frequently create new ethical dilemmas, both those inherent in the research itself, or in the prospective applications of the research to clinical care. Researchers are aware of the special sensitivity involving work in human reproduction and that affecting infants, children and youth. IHDCYH will encourage and support research that contributes to scholarship in theoretical and applied ethics relevant to treatment, research and policy applications in human development and child and youth health.

IHDCYH will also build further linkages with other CIHR ethics activities across the full range of the Institute's activities.



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**IHDCYH**  
**Strengthening the Infrastructure**



## STRENGTHENING THE INFRASTRUCTURE



Advancing research in the area of human development, child and youth health must be supported by a strong foundation within the Institute. The scientific community will need to come together to explore common interests and to identify and refine new research themes and opportunities. The Institute will continue to play a major role in supporting workshops that build new coalitions and develop new research teams.

### STRENGTHENING THE INFRASTRUCTURE

#### Workshops

- Strengthen Linkages
- Build Coalitions
- Refine potential research themes

#### Consortia and Networks

- Strengthen emerging teams of investigators
- Support collective efforts at stimulating new research initiatives

#### Database

- Understand capacity and opportunity
- Support partnership activities
- Link with broad base of researchers
- Measure change in capacity

#### Communication Strategy

- Build sense of belonging and loyalty
- Engage new talent
- Foster interest in new opportunities
- Support mentoring

#### Advocacy

- Raise awareness and interest in CIHR
- Promote research agenda
- Attract new potential partners
- Enhance researcher and clinical support



**Building a strong  
foundation for  
IHDCYH  
researchers  
and partners**

In addition, IHDCYH will encourage and promote applications pertaining to the CIHR investigator initiated grants. The workshops, technical travel grants and seed grants should be viewed as mechanisms to facilitate applications to CIHR funding which has been allocated separately from the individual institute's funding.

IHDCYH recognizes the consortia that have been formed in recent years and that have provided valuable mechanisms to stimulate and foster interdisciplinary research discussion and planning. These consortia are important to the Institute's goals of building capacity, linking the research community and stimulating new research. Such consortia will be supported by small grants to continue their networking and exploration of research questions.

The Institute is building a database of researchers and research activities that will provide a valuable mechanism to link investigators, engage partners in research and knowledge transfer, and facilitate communication with the broad research community. The database will also assist in understanding capacity and in measuring the change in capacity over the five-year period.

The Institute will continue to build major inter-institute collaborative ventures and continue to explore opportunities that can best leverage the talent and resources of the partnering institutes.







CIHR IRSC

**IHDCYH**  
**Implementation**

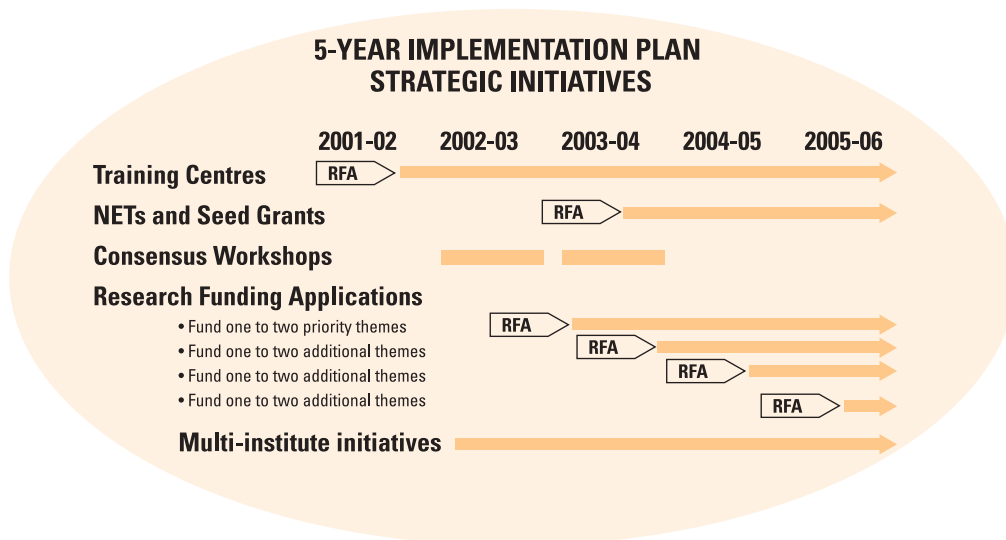


## IMPLEMENTATION

The Strategic Plan charts the course for the Institute over the next 5 years. To achieve the goals of the Institute, the focus in the first year will be to target activities that build a strong foundation for supporting the Institute's mandate: providing for workshops, developing the database and strengthening communication mechanisms.

Research training and career path development are supported across all IHDCYH areas, with the objective of adding to the critical mass of trained professionals available to conduct research in diverse, complex fields of investigation. The Institute will pursue multiple strategies to ensure that a sufficient number of investigators are attracted and retained in the areas relating to human development, reproductive and developmental biology, and newborn, child and youth health. As noted previously, strategies will include training initiatives, New Emerging Team awards and international exchange programs.

As the Institute looks to 2002/03 and beyond, the focus will be on supporting specific research priorities, continuing to conduct consensus workshops, pursuing research funding applications and capacity building through training support and NET or seed grants.





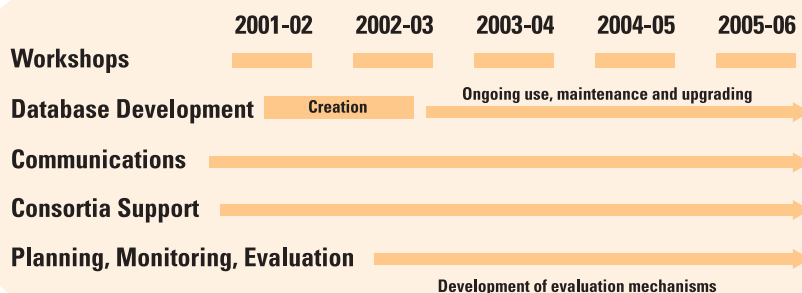
Consensus workshops pivotal in determining focus and investment

The Consensus Workshops in each of the six strategic research areas will be pivotal in determining the focus and investment that is appropriate to targeted training (to build capacity), NETs or seed grants. The expected annual growth in funding for the CIHR Institutes will support one to two major Requests for Applications (RFAs) per year over the next five years. Each RFA should yield 3 to 4 successful multidisciplinary awards \$500,000 to \$1 million per year for five years.

**The timing and amount of investment for the Institute's initiatives may be subject to a number of variables:**

- actual CIHR funding to the Institutes annually
- the availability of funds arising from partnership initiatives
- the ability to leverage support and funding from alternate sources
- emerging scientific advances that result in revising priority research areas
- the readiness and capacity of the research community for a specific initiative.

#### 5-YEAR IMPLEMENTATION PLAN OPERATING INITIATIVES



## EXPECTED OUTCOMES AND MEASURES OF IMPACT

IHDCYH recognizes the importance of monitoring and measuring its progress and achievements with its goals and objectives. The following are suggested as possible measures or indicators against the CIHR goals. Some measures may not be considered valid or may not be possible to quantify within the available resources of the Institute, and other measures may be required. IHDCYH will consider this starting point to further refine over the next year, assessing the relative merits of the measures and determining mechanisms to build its new database.

### IHDCYH Outcomes and Measures Of Impact in relation to CIHR Goal

#### Goal

Creation of new knowledge and its translation into improved health for Canadians, more effective health services and products, and a strengthened Canadian health care system.

Expected Outcome	Measures of Impact
Outstanding, ethical and responsive Canadian health research	<ul style="list-style-type: none"> <li>• Increased number of multi-disciplinary teams established &amp; supported</li> <li>• Increased number of publications in peer-reviewed journals</li> </ul>
Strong Canadian capacity for health research	<ul style="list-style-type: none"> <li>• Increased number of training programs in targeted areas of need</li> <li>• Increased number of residents recruited into clinical scientist program</li> <li>• Increased retention of leading Canadian investigators</li> <li>• Increased awards for Masters and Doctoral students</li> <li>• Increased number of NETs in priority areas</li> </ul>
Partnership on all aspects of Health research, including the engagement of the public	<ul style="list-style-type: none"> <li>• Partnerships established with Institutes, societies and agencies with communities common to IHDCYH</li> </ul>
Translation, dissemination & use of research results to yield maximum benefit	<ul style="list-style-type: none"> <li>• Increased number of citations in peer-reviewed journals</li> <li>• Dissemination strategies developed with partner agencies</li> <li>• Changes in standards and guidelines</li> <li>• Evidence of behaviour change by consumers &amp; providers</li> <li>• Evidence of Impact on policy</li> <li>• Mechanisms implemented to enhance public and professional awareness or research</li> </ul>
Effective national leadership on health research issues and innovative programs, structures and activities	<ul style="list-style-type: none"> <li>• Increased media, speaking engagements and position papers</li> </ul>

## CONCLUSION

The early consultation and the strategic planning process for IHDCYH have engaged a broad stakeholder group, a process which facilitated the direction setting and the identification of strategic research priorities for the next five years. IHDCYH expresses a deep appreciation and thank you to everyone who contributed their time, thoughts and energies as part of this important process.

This first strategic plan has been developed as a framework to guide the development of the Institute. The plan will be reviewed on an annual basis and revised as necessary. The intention is for the plan to include continually a three to five year horizon and to provide sufficient flexibility to respond to opportunities and challenges which present themselves to the Institute and its members.







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