International Collaborative Research Strategy for Alzheimer’s Disease

(ICRSAD)

Toronto Dementia Research Alliance Site Visit
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Canada is highly competitive in Alzheimer/dementia research

- **Quantity**: Comparison of Alzheimer publications 2006-8 for different countries
- **Quality**: Citations per 2006-8 publication for different countries
- **Impact**: h-index for 2006-8 publications for different countries

Canada's performance is highlighted in various metrics compared to other countries like USA, UK, Germany, Italy, Japan, and Spain.
• Canada produces 5% of the world's new knowledge in dementia research

• Enhanced international collaboration is essential to leverage our investment
  ➢ Canadian researchers gain immediate access to the data, concepts, discoveries, and HQP emerging from the other 95% of the global effort
  ➢ Ensures Canadians will be among the first beneficiaries of new preventive, diagnostic and therapeutic approaches developed within multinational collaborations

• Need a concerted and coordinated research effort in ARD, as in other research-intensive nations

• CIHR’s response is the **International Collaborative Research Strategy for Alzheimer’s Disease**, to encourage the emergence of a global research network, and to coordinate funding programs on dementia.
Canadian Advantages

• Existing international linkages, e.g. France-Québec-Canada partnership, China, etc.

• Single-payer healthcare system, which makes Canada an ideal site for clinical trials and large population-based studies

• Dementia research particularly strong, relative to the rest of the world, in health services, public health and social sciences

• Unique Canadian research resources:
  ➢ animal models and identification of novel genes
  ➢ Canadian Longitudinal Study in Aging (CLSA)
  ➢ Consortium of Canadian Centres for Clinical Cognitive Research (C5R)
  ➢ Canadian Dementia Knowledge Translation Network

- **Risk Factor Identification**
  - genetics, nutrition & lifestyle, co-morbid conditions, etc.

- **Early Diagnosis**
  - genomics, biomarkers, imaging, psychological testing, validation in models, etc.

- **Early Therapeutic Intervention**
  - innovative clinical trials (drug and lifestyle), original design, global support to patients and caregivers, health services research, etc.

- **Prevention**
  - lifestyle, etc.
ICRSAD – Objectives

• Identify common priorities for research

• Encourage scientific international collaborations, to accelerate research efforts

• Establish funding partnerships with research organizations around the world

• Identify shared methodologies, technologies and platforms, to provide the greatest added value to research
ICRSAD - In line with other national initiatives

- US National Alzheimer’s Strategic Plan
  - Alzheimer’s Breakthrough Act of 2009
  - Prevent Alzheimer’s Disease by 2020
- French National Plan for AD and Related Disorders
- UK Dementia Strategy
- Australian National Dementia Initiative
- Norway “Dementia Plan 2015”
- “Swedish Brain Power” Network
- German National Center for Neurodegenerative Diseases
- Republic of Korea “War on Dementia”
- etc.
Discussions to date:

- National Institutes of Health (NIA, NINDS)
- Foundation for NIH
- Alzheimer’s Solution Project
- Alzheimer’s Association
- Prevent Alzheimer’s Disease 2020 Inc. (PAD2020)
- Canada-US Roundtable on AD and Dementia
  - hosted by Canadian Consulates - S&T – Chicago, Phoenix, San Diego, Society for Neuroscience Meeting, Chicago, October 2009
- Canada-US Meeting on Alzheimer’s Disease
ICRSAD Funding: ramping-up to $50M/yr

1: Competitiveness stream, equip Canadians to participate in international collaborations

2: Exploration stream, encourage collaboration on innovative approaches and concepts

3: Leadership stream, international projects led by Canada
Global Competitiveness Stream

Project costs and operation of core resources/facilities/platforms, for Canadian participation in international collaborations led from outside Canada, or sponsored through specific bilateral and multilateral agreements. e.g.:

- creation of 3-5 Canadian Alzheimer Centres for patient-oriented research, participating in the NIA ADC Network
- increasing Canadian involvement in ADNI
- add-ons to the CLSA
- enhancement of the Consortium of Canadian Centres for Clinical Cognitive Research (C5R)
- participation in the EU Joint Programming Initiative on Alzheimer’s Disease
Global Exploration Stream

Canadian component of collaborative Canada/international projects that are highly innovative, high risk, new approaches to any aspect of ARD.

• no preliminary data required
• rapid peer-review
• 1-2 year funding to establish viability of concept
• successful projects could convert in a second competitive phase into Leadership grants
International projects led by Canadians. Large, interdisciplinary, team-style grants for Canadian component of shared projects and for the team management and communication costs, e.g:

- biomarker validation trials
- genome-wide association studies
- novel imaging technologies
- comparative evaluations of home- or chronic-care studies, or caregiver support programs
- implications for palliative care organizations of a transition to longer-term support of the increasing numbers of Canadians with ARD
ICRSAD Coordination, Networking and Knowledge Translation

Coordinated and integrated approach to research, to maximize the yield and application of research knowledge, in collaboration with funding partners and end users, e.g.:

- Provide electronic platforms and meeting venues for optimizing interactions and sharing of knowledge and data among researchers and care providers

- Support the Canadian Dementia Knowledge Translation Network to synthesize outcomes from ICRSAD

- Work in partnership with provincial and federal policy-makers and ARD advocacy and educational groups to effect change in areas of research and healthcare policy

- Act as point of contact and assistance for Canadian participation in large-scale international collaborations
ICRSAD at the core of CIHR