

General background to Canadian KidNey KNowledge TraNslation and GGeneration NeTwork (CANN-NET):

Over the past decade, the research community within Nephrology in Canada has been developing the necessary capacity to support initiatives to enhance the care of CKD patients. Recognizing that challenges exist in caring for patients with CKD, including the absence of an active knowledge translation plan within Canadian Nephrology and the paucity of relevant clinical trials to guide therapy in many areas, there have been commitments to improving capacity through 2 conferences: Horizons 2000 and Horizons 2015. These Horizons conferences represented a joint initiative of key organizations including The Kidney Foundation of Canada, the Canadian Society of Nephrology, the Canadian Society of Transplantation, and the Canadian Institutes for Health Research. Their purpose was to consult with key stakeholders in the kidney research community on the development of a national, strategic research agenda for kidney disease in Canada.

At the Horizons 2000 meeting, participants agreed to develop a transdisciplinary, translational research training program to enhance capacity for kidney research in Canada. The Kidney Research Scientist Core Education and National Training Program (KRESCENT) program is testimony to the ability of the Canadian kidney health community to conceive and execute a vision to meet an identified need (www.krescent.ca).

In 2007, the Horizons 2015 conference was held to further define research directions for the Canadian kidney health community. The objectives for this meeting were:

- To identify and describe key strategic directions to guide kidney research from 2008 - 2015 with a longer term outlook to 2020,
- To describe areas where capacity building is required to support the identified strategic directions in a national kidney research agenda (i.e. developing collaborative approaches, knowledge translation, training programs, technology, platform development, networks), and

A total of 109 individuals participated in this conference and six strategic kidney research directions were identified including three relevant to the CANN-NET proposal: a) mechanisms, prevention, and progression of CKD, b) innovative models to enhance kidney health care and quality of life, and c) CKD as a risk factor for cardiovascular disease. In addition to these research directions, several key initiatives were recommended and prioritized for action in this and subsequent meetings through surveys disseminated to kidney researchers and knowledge users. Two of the initiatives prioritized for action, and relevant to this proposal, included creating a network of researchers across Canada who were conducting kidney research, and creating stronger links between researchers and knowledge users.

Recent guidelines for care and management of patients with CKD were published in 2008, and the CSN clinical practice guidelines committee is active, having produced 8 sets of guidelines, and 2 commentaries over the past 5 years. While an impressive amount of work and effort went into producing these guidelines, there have been no resources available for associated knowledge translation, resulting in a missed opportunity to optimize care for patients with CKD. Moreover, given our urgent need for better data on how to care for patients with kidney disease, it is notable that there is no Canadian Clinical Trials Network for kidney diseases.

A funding opportunity became available at CIHR in the early fall of 2010 (Catalyst Team grant competition) which seemed relevant to this initiative. Although the timelines were short, a meeting of the CSN Scientific Committee was organized shortly after the competition was announced and it was agreed that this could be an opportunity to further the goals set forth in

Horizon's 2015 (specifically establishing a network of clinical researchers and knowledge users in Nephrology). A committee was set up to facilitate an application to this competition (see Outline for submitted application in Appendix 1), working with the CSN and KFOC as partners.

We were successful in this competition and have established the Canadian Kidney Knowledge Translation and Generation Network (CANN-NET), linking Canadian kidney disease guideline producers, knowledge translation specialists and knowledge users to improve knowledge dissemination and care of patients with kidney disease. Given the urgent need for new knowledge, CANN-NET will bring together a national group of experienced Canadian researchers to address knowledge gaps by coordinating and executing multi-centre randomized trials. We have established an organizational structure for CANN-NET (Appendix 2) and terms of reference for each of the committees. CANN-NET will interact with the CSN Guidelines committee, who will remain an independent committee with its own terms of reference.

We are now inviting applications for membership on four CANN-NET committees including:

a) Knowledge Translation Committee:

Purpose: The CANN-NET Knowledge User Committee will work with the Executive Committee and all of the CANN-NET working committees to guide CANN-NET priorities, and to facilitate knowledge translation activities

Detailed terms of reference for this committee are available at ([add weblink](#) CANN-NET KTC TofR draft7 July 20.docx). Meetings will occur four times per year, with one face to face meeting (at the CSN), and the other meetings occurring by teleconference or videoconference.

b) Knowledge User Committee:

Purpose: The CANN-NET Knowledge User Committee will work with the Executive Committee and all of the CANN-NET working committees to guide CANN-NET priorities, and to facilitate knowledge translation activities

Detailed terms of reference for this committee are available at ([add weblink](#) CANN-NET knowledge user cmmt TOR July 20.docx). Meetings will occur up to four times per year, with one face to face meeting (at the CSN), and the other meetings occurring by teleconference or videoconference.

c) Clinical Trials Scientific Committee:

Purpose: The CANN-NET Clinical Trials Scientific Committee advises the Clinical Trials Group regarding which submitted kidney clinical trials should receive CANN-NET support or endorsement based on their merits, including their feasibility and importance to Nephrology

Detailed terms of reference for this committee are available at ([add weblink](#) CANN-NET CTSC TofR draft 7 Aug 3 2011.docx). Meetings will occur up to four times per year, with one face to face meeting (at the CSN), and the other meetings occurring by teleconference or videoconference.

d) Ad-hoc Guidelines Working Group:

Purpose: The initial objective of this working group will be to create clinical practice guidelines on the optimal timing of dialysis initiation in outpatients with chronic kidney disease. Guidelines will be vetted through the CSN Guidelines Committee.

As this is an ad-hoc working group, meetings will occur at the call of the Chair, but will likely occur bimonthly during 2011/2012.

Members must be must be active members of the Canadian Society of Nephrology or a member of a society collaborating with CANN-NET as a partner (i.e. Canadian Society of Transplantation, Canadian Association of Pediatric Nephrology, Renal Pharmacist Network, Canadian Hypertension Education Program, or other relevant professional societies). Interested individuals should send a brief letter of intent before September 10th to Wim Wolfs (wim.wolfs@kidney.ca), stating which committee you seek membership in.

Appendix 1: Outline of CANN-NET grant funded by CIHR Network Catalyst Grant Competition:

Chronic kidney disease (CKD) is a common condition affecting more than 2 million Canadians. The care of CKD patients is neither optimal nor consistent with available evidence. Care gaps are partially due to the failure of Nephrologists and advocates for patients with kidney disease, including guideline producers, to disseminate best practices to family physicians, who provide care to most patients with CKD. In 2008, the Canadian Society of Nephrology (CSN) published clinical practice guidelines for the care of CKD patients. Their release highlighted two key issues: **1)** the impact of the guidelines was attenuated by the lack of formal linkages between kidney researchers, decision makers and relevant knowledge users; and **2)** the guidelines identified many areas where further knowledge is required to guide care. At present, no mechanism exists to adequately address either issue in Canada, and the impact of future guidelines will be similarly suboptimal unless action is taken.

We will establish the Canadian KidNey KNowledge TraNslation and GEneration NeTwork (CANN-NET), linking Canadian kidney disease guideline producers, knowledge translation specialists and knowledge users to improve knowledge dissemination and care of patients with kidney disease. Given the urgent need for new knowledge, CANN-NET will bring together a national group of experienced Canadian researchers to address knowledge gaps by coordinating and executing multi-centre randomized trials.

To ensure that our network is relevant and responsive to knowledge user needs, we will partner with: **key knowledge users** (Kidney Foundation of Canada and Provincial Renal Programs), and primary care (Public Health Agency of Canada and the College of Family Physicians of Canada); **partners** with a vested interest in kidney health (e.g. CSN); experts in **knowledge translation** (KT Canada and Li Ka Shing Knowledge Institute); and **global clinical trials** (Canadian Network and Centre for Trials Internationally (CANNeCTIN)).

The overall goal of CANN-NET is to improve the care and outcomes of patients with and at risk for chronic kidney disease by executing the following activities:

- linking an active clinical practice guidelines workgroup with relevant knowledge users
- ensuring best practice for patients with CKD through knowledge dissemination of important guidelines to knowledge users
- using existing laboratory and administrative databases to track the effectiveness of knowledge translation activity on process of care and clinical outcomes for CKD patients
- identifying knowledge gaps in kidney disease that can be addressed through randomized trials facilitated by a collaborative network of Nephrology researchers working with knowledge users and guideline producers

Using a structured process, knowledge users will determine CANN-NET priorities – guiding selection of guideline topics, knowledge translation (KT) initiatives, and selecting the most important new research topics. Our KT committee will work with the Li Ka Shing Knowledge Institute (with KT Canada) to produce KT tools focusing on the most important guidelines for the appropriate knowledge users (patients, family physicians, or renal programs). Our network is consistent with the third priority of CIHR's 2009-2014 Strategic Plan (Health Research Roadmap) since it will establish a platform through which researchers and knowledge users can leverage knowledge translation and partnerships to capture the health and economic benefits of health research for people with kidney disease. We are applying to the Institute of Nutrition, Metabolism and Diabetes (INMD) funding pool since our network is directly relevant to one of INMD's identified strategic priorities for this competition -- Improving the Continuum of Care.

Appendix 2: Organizational Chart

CANN-NET Organizational Chart
A CSN - KFOC Initiative

