Brain Canada *and* Famille Chagnon

Interventions for Prevention of Alzheimer Disease and Related Disorders (ADRD)

Multi-Investigator Research Initiative

Evaluation Information

SCOPE AND ELIGIBILITY

☐ Funding is exclusively for research dealing with interventions in human subjects, intended to lead to highly innovative preventive strategies and preventive treatments for ADRD.

- Primary prevention refers to reducing the probability that an individual will ever develop an ADRD
- Secondary prevention refers to delaying, arresting, or reversing the symptoms of ADRD in affected individuals at the onset of the disease

☐ Projects will assess the effectiveness of a range of innovative interventions:

- Primarily nutritional or pharmaceutical, individually or combined with behavioural, social, cognitive and activity-based approaches;
- Novel interventions, including those that are not generally considered part of conventional medicine, and alternative uses for existing medications approved for other conditions; and,
- Reflecting ideas substantially different from mainstream concepts.

☐ Projects will study a **high risk population** with a primarily focus on a asymptomatic individuals from families with a first or second degree familial history of ADRD disease, and on patients with ADRD at the early onset of their disease. However, other cohorts, such as individuals in the early stages of ADRD and with no family history, may be studied if they can be strongly linked to the goals of primary and secondary prevention.

☐ Funded projects must have multidisciplinary teams of health researchers and health professionals involve in project for primary and secondary prevention of ADRD. The partners encourage unusual alliances between disciplines, and novel collaborations between clinical scientists, biomedical researchers, academia and industry, including provision of in-kind support by industry.

☐ Funded projects must have a sound scientific rationale, including adequate evidence of safety in humans.

☐ Teams must compose two or more investigators, based at Canadian institutions, who are eligible to apply for research grants from the Canadian federal granting agencies (CIHR, NSERC and SSHRC). Collaborators in industry, government or outside Canada are welcome, but cannot be PIs.

EXCLUSION CRITERIA : Projects <u>exclusively</u> focused on the following topics are not eligible for funding

- ☐ Normal brain function,
- ☐ Basic disease mechanisms,
- ☐ Animal models of disease,
- ☐ Identification of biomarkers,
- ☐ Core facilities,
- ☐ Research platforms,
- ☐ Technology transfer,
- ☐ Business development activities.

SCALE

- ☐ Individual grants of up to $2M/year for up to 5 years.
- ☐ Applicants may provide a rationale for a different annual funding profile if this facilitates their proposed research activities.
- ☐ Applicants may propose a project with a budget greater than this, with the additional funding contributed by a supplementary funding partner that they have recruited
- ☐ Partners' funds will only support the portion of the work conducted in Canadian institutions eligible to receive funding from the federal granting agencies.
- ☐ Eligible costs: any aspect of the operating costs of the research project, including: supplies and materials, provision of special clinical services and user fees, subject recruitment and compensation for out-of-pocket expenses, maintenance of essential equipment, travel of team members and trainees for collaboration and presentation of results, publication costs, salaries for technical and clinical personnel, stipends of trainees, and equipment that is currently unavailable but essential for the project.
- ☐ Ineligible costs: salary payments to any team members who are eligible to apply for operating grants from the federal granting agencies, payment to clinicians for recruiting subjects, real property costs and lobbying activities.
- ☐ No institutional overhead.

Issues for Selection Committee to Consider

Impact

- Does the project address an important problem or a critical barrier to progress in the field of ADRD prevention?
- Does the project involve a high risk population?
- Will the project generate results that are valid, reliable, applicable to real-life populations, and will serve prevention strategies or preventive treatments?
- Is it expected that data generated in this project will move the preventive intervention forward into practice, bearing in mind the need for interventions that are affordable for individuals and the health care system?
- If intellectual property is likely to be generated, is it anticipated that it will be developed to maximize the benefits and provide such benefits at reasonable cost to the public?

Innovation and originality

- Does this proposal challenge and seek to shift current research or clinical practice paradigms by utilizing novel ("outside the box") theoretical concepts, approaches or methodologies?
- Does the proposal reflect ideas substantially different from mainstream concepts, and feature novel approaches, such as interventions involving complementary and alternative medicine, or alternative uses for existing medications approved for other conditions?
- Is the proposal of an international calibre of excellence, with a rationale solidly-based in scientific fact?

Feasibility :

- Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?
- Have the applicants provided a critical self-appraisal of the quality of the proposed study, addressing methodological issues relevant to an intervention study?
- Is the approach realistic, ethical and technically feasible?
- Is the project feasible within the time and budget of these MIRI grants (5 years)?
- Is there a realistic and effective plan for further development of the intervention at the end of the funding period?

Multidisciplinary and team work

- Does the team must include the range of expertise and experience required to carry out a proposed large-scale intervention study in a human population?
- Do the team members have a track record of innovative and relevant research, appropriate for their career stage?
- If there are team members who are at an early stage of their careers, do they have appropriate experience and training?
- Is there evidence that the applicants have worked as productive team members within this or other multidisciplinary collaborations?
- Do members from different health disciplines contribute specific value to the team, and is it likely that the team as a whole will achieve synergy of effort?
- If relevant, does the research project encourage the formation of novel collaborations, including those between clinical scientists biomedical researchers, academia and industry, and with researchers working outside Canada?