Alzheimer's
Drug Discovery
Foundation

Request for Proposals

CAPA Consortium: Cohorts for Alzheimer's Prevention Action

In order to translate epidemiologic research into actionable interventions, highly detailed research results are needed. For example, fish intake may associate with reduced risk of Alzheimer's disease but what type of fish and what "dose" or duration of intake? Type 2 diabetes may relate to cognitive decline but what treatments to manage diabetes or diabetes risk will have sufficient efficacy and duration to lower dementia risk? Does the efficacy of potential prevention treatments or risk factors vary depending on patient characteristics like age, cognitive status, genotype, or comorbidities?

These questions require extremely large sample sizes that might be best obtained by pooling or meta-analyzing the data from existing cohorts. The Alzheimer's Drug Discovery Foundation is interested in funding cross-cohort pooled analyses of actionable interventions to potentially protect against cognitive aging, Alzheimer's disease, and related dementias. **Outcomes of interest** include cognition (neuropsychologic testing), diagnosis of dementia or mild cognitive impairment, and relevant neurologic biomarkers. **Exposure/risk factor variables of interest** include drugs used to manage other health conditions, natural products, dietary supplements, nutrition and specific dietary choices, and biomarkers that can indicate these choices. Priority analyses may also address **the interaction of these variables with patient characteristics** such as age, cognitive status, genotype, and comorbidities.

Successful applications will incorporate data from 5 or more cohorts that contain quality data relevant to the proposed analysis. Cohorts participating in CAPA are listed below and, in detail, in the corresponding spreadsheet (other cohorts may be acceptable). Full applications should include a letter of support or proof of access to data for each cohort intended for inclusion. Projects can either pool data harmonized across cohorts in a single analysis or meta-analyze parallel analyses of individual cohorts with the help of a shared analysis script (or both).

Applications should include:

- Pre-specified protocols, hypotheses, and primary and secondary outcomes.
- The number of cohorts, total sample size, and sample size calculation to ensure sufficient power for the intended analyses. The inclusion of cohort data that is currently unpublished is strongly encouraged.
- Details of the analytical plan, including careful consideration of the challenges in harmonizing and combining data.
- Details of exposure variables and outcomes variables (cognitive assessment related biomarkers or diagnoses). Although long-term prospective follow-up is preferred, cross-sectional outcomes will be considered if that enables higher quality analyses on exposure variables.

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- The risks of confounding and biases such as selection bias, attrition bias, and measurement error bias. Applications should discuss how they plan to evaluate and address these issues as well as missing data.

ADDF welcomes applications from organizations from any country. Applications selected for funding will be expected to post their pre-specified protocol in a public database like www.clinicaltrials.gov or Prospero before starting analyses. Results of the analyses will be expected to be posted on a public website following the confidentiality period of a peer-reviewed scientific publication.

Mechanism(s) of support: For each successful application for this first round of applications, up to $100,000 is available in funding but must be commensurate with the work plan. Grant funds can be provided fully to the primary investigator or distributed across participating cohorts as needed. Successful analyses may serve as pilot projects to encourage further funds from ADDF, other non-profits, or the NIH.

Review Process: Submission of a Letter of Intent (LOI) is required by November 22, 2014. Following approval of the LOI, the deadline date for applications is March 5, 2015. While full applications will require a letter-of-support from every cohort planned to participate in the analysis, the LOI must simply specify which cohorts contain relevant data for the proposed analysis. Full applications will be confidentially reviewed by the ADDF and an external Scientific Review Committee.

Application Procedure: All letters of intent and applications must be submitted electronically at www.alzdiscovery.org. *NOTE: the website application instructions are currently tailored to our existing funding programs in drug discovery and development. Application instructions tailored to the CAPA consortium will be added to the website soon.*

To discuss scientific or financial aspects of proposals, please contact:
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For more information regarding the application process, please contact:
Danielle Popow, *Grants Coordinator*
Phone: 212-901-7998 Email dpopow@alzdiscovery.org

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Cohorts participating in the CAPA consortium, as of October 23, 2014

Adult Changes in Thought study (ACT)
Aging Gene-Environment Susceptibility – Reykjavik Study (AGES-Reykjavik)
Australian Longitudinal Study of Aging (ALSA)
Austrian Stroke Prevention Study (ASPS)
Canadian Study of Health and Aging (CSHA)
Erasmus Rucphen Family (ERF) Cohort
Framingham Heart Study (FHS)
Ginkgo biloba for Preventing Cognitive Decline in Older Adults (GEMS)
Gerontological and Geriatric Population Studies in Göteborg, Sweden (H-70)
Health, Aging, and Body Composition Study (Health ABC)
Hertfordshire Cohort Study (HCS)
Irish Longitudinal Study on Ageing (TILDA)
Longitudinal Study of Cognitive Change in Normal, Healthy Old Age (LSCC)
Longitudinal Study of Generations (LSG)
Mayo Clinic Study of Aging (MCSA)
Medical Research Council National Survey of Health and Development (MRC NSHD)
Midlife in the U.S. (MIDUS)
Minority Aging Research Study (MARS)
VA Normative Aging Study (NAS)
The Northern Manhattan Study (NOMAS)
Nurses' Health Study (NHS)
Osteoporotic Fractures in Men Study (MrOS)
Personality & Total Health (PATH) Through Life
Personnes Agees Quid (PAQUID)
The PROspective Study of Pravastatin in the Elderly at Risk (PROSPER)
Religious Orders Study (ROS)
Rotterdam Study I, II and III
Rush Memory and Aging Project (MAP)
Seattle Longitudinal Study (SLS)
Study of Health in Pomerania (SHIP)
Study of Osteoporotic Fractures (SOF)
University of North Carolina Alumni Heart Study (UNCAHS)
Uppsala Longitudinal Study on Adult Men (ULSAM)
Wisconsin Longitudinal Study (WLS)
Washington Heights/Inwood Columbia Aging Project (WHICAP)
Women's Genome Health Study (WGHS)
Women's Health Initiative Memory Study (WHIMS) - *ancillary study to WHI*
Women's Health Initiative Study of Cognitive Aging (WHISCA)- *ancillary study to WHIMS*
WHIMS MRI 1 & 2 - *ancillary to WHISCA*