Duke Aging Center
Duke University School of Medicine

Claude D Pepper Older Americans Independence Center

Subject: Request for Pilot Study Proposals

The Duke Pepper Older Americans Independence Center (OAIC)

Pilot Studies Program in Aging Research

Background

The Duke Pepper Older Americans Independence Center (OAIC) (NIA P30 AG028716) aims to enhance and support research and promote research career development in aging research through its Core resources. The central theme of our OIAC, based in the Duke Center for the Study of Aging and Human Development (aka the Aging Center), is **to understand and enhance reserve and resilience to promote recovery from stressors in late life**. The three Research Cores include:

- Analysis Core, which provides statistical and technical support for projects as well as furthering statistical and analytical science.
- Molecular Measures Core, which provides comprehensive biomarkers phenotyping to characterize biochemical, metabolic and genetic bases for aging research.
- Health & Mobility Measures Core, which provides expertise, devices, equipment and protocols for functional, physical and psychological measures.

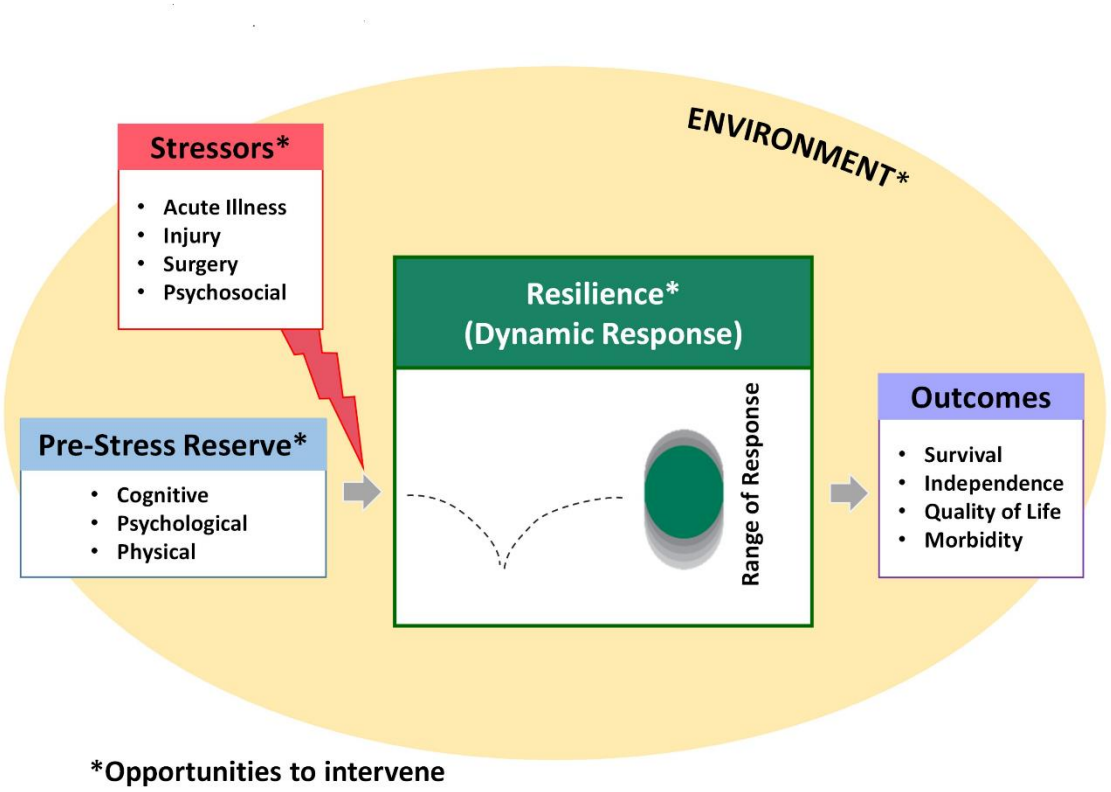
Objective

The objective of this solicitation is to seek the highest quality pilot studies in aging research from within Duke University. The scope of the Pilot Studies Core includes, but is not limited to, feasibility studies (i.e., for interventions or other research methodology), development of new methodologies or technologies, analysis of existing data, and exploration of high risk but innovative ideas.

Studies of Interest

We are especially interested in studies that relate to our focus on "**Enhancing Physical Reserve and Resilience to Promote Recovery from Late Life Stressors**". The Center is interested in research on mechanisms and interventions that relate to older adults' resilience, which we define as the ability to maintain or recover physical function or "bounce back" following health stressors or injury. Studies that evaluate interventions, or support the development or dissemination of an intervention, are highly encouraged. Proposals that evaluate mechanisms of

resilience or methodology related to resilience research should clearly articulate how the findings of the study will eventually lead to interventions or new approaches to enhance and promote resilience in human patients.



Potential topic areas include but are not limited to:

- Factors that promote recovery of function or health (at the person-level or tissue/organ level), or the ability to resist functional decline in the face of stressors or challenges.
- Acute stressors or threats to physical activity and independence (e.g., surgery, anesthesia, cardiovascular events, falls and fractures, infections).
- Measurement of functional reserve or physiological resilience in older persons.
- Development of new models to study and test resilience interventions.
- Factors that alter pre-stressor reserve, or influence an older adult's readiness to exhibit resilience when faced with an acute or chronic stressor.
- Causes, prevention and treatment of episodes of functional decline.
- The effect of age on physiological resilience
- Investigations of health equity related to resilience and reserve
- Interactions of multiple diseases, disabilities, and interventions in older persons, and their relationship to recovery from acute or chronic health stressors.
- Biomarkers of Resilience

The proposed study may involve any level of inquiry including molecular, animal model, patient-oriented, and population-based research. We encourage studies that include measures or mechanisms of psychosocial factors and their role in recovering from health stressors. However, studies that evaluate only psychosocial resilience, which do not also address an aspect of physical health/independence, may not fall within the scope of our Center. Pilot studies are expected to utilize OAIC Research Core expertise and resources.

(See https://sites.duke.edu/centerforaging/claude-d-pepper-older-americans-independence-center/cores/ for core descriptions).

Investigators are strongly encouraged to contact the OAIC Pilot Studies Core Leader to discuss project ideas and explore ways to maximize suitability prior to submitting a letter of interest or proposal.

Commitment to Diversity and Equity

The Duke Pepper Center is committed to promoting health equity and adding value to our community through diverse perspectives. Scientists from traditionally under-represented backgrounds are especially encouraged to apply. Additionally, all applications should discuss how the proposed work may reduce health disparities. If human studies are proposed, the application should provide its strategy to promote inclusion and representation in the study population.

Duration and Funding

The duration of the pilot study may be for one or two years. The budget request for pilot studies is $25,000 - $40,000 per year in direct costs.

Deadlines and Timeline

- Letter of Interest (LOI) and Principal Investigator NIH Biosketch due **Sept. 11, 2023**
- Applicants will be notified by Sept. 22, 2023 if invited to submit a full application.
- Full application will be due **Nov. 10, 2023.**
- You will be notified of funding decisions by **Jan 19, 2024**

Content

The pilot study LOI should be a maximum of 2 pages and must include the following items:

- Proposed title of the project; name of principal investigator and key co-investigators
- Summary of objective, significance, innovation, design/methods
- Description of how this pilot project is likely to enable future external funding
- Relevance to the OAIC theme of physical resilience and reserve and plans to utilize OAIC Cores

* Principal investigator's NIH-style Biosketch should be submitted with LOI.

After our review of LOIs, we will notify applicants by September 22 whether full application is invited. Full applications will be due Nov. 10, 2023 and will include:

- Scientific Section - Study aims, scientific justification/background, study design and methods, analysis plan, and plans for external funding given the data from the pilot study. Investigators should describe how one or more OAIC Cores would be utilized to accomplish the proposed work and any other resources available to the investigator to ensure the success of the pilot study. This section is limited to no more than 5 pages, Arial 11 point font, not including references.
- References
- Investigator NIH Biosketch(s)
- Budget and Budget Justification (~1 page)

Please upload pilot proposal LOIs to:

https://strongbox.oit.duke.edu/strongbox/uploader/Pepper%20PESC%20LOIs%202023/217663632174

For administrative questions, please contact:

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For programmatic questions, please contact:

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