

## REQUEST FOR PROPOSALS

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**OAIC Biological Mechanisms Core Development Project****Due Date: March 1, 2020**

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The **Biological Mechanisms Core** of the National Institute on Aging-supported **Older Americans Independence Center (OAIC)** of the Johns Hopkins Medical Institutions is soliciting proposals from faculty members who seek support for research consistent with the mission to identify causes and develop interventions for physical frailty in older adults. Proposals that bring together interdisciplinary working groups from across the Johns Hopkins Medical Institutions are in keeping with the interdisciplinary mission of this center. Resources available are particularly targeted to support biological/mechanistic studies initiated by investigators who are junior or seek to establish a new focus in research on frailty and aging.

Proposals are encouraged to address molecular etiologies related to signature of frailty and related phenotypes of sarcopenia, inflammation, oxidative stress, and multisystem decline. Particularly sought is research that addresses: (1) mitochondrial changes, including those related to oxidative stress, DNA deletions or variations, or production of energy that might influence frailty and endophenotypes of muscle strength; (2) the development of epigenetic, genomic, or proteomic technologies and novel integrative approaches that might provide new platforms for molecular etiologic studies of human frailty; (3) animal model development for use in molecular studies and for intervention development studies; (4) bioengineering solutions to diagnostic and treatment issues related to frailty; and (5) dynamic studies including those related to in-vitro cellular stressor tests, mitochondrial dynamics (fission, fusion, localization) studies, changes in cellular structure/content in response to inflammation or oxidative stress. Support requested may range up to **\$35,000** for a one-year period.

Proposals should include specific aims, rationale, preliminary studies and methods for the proposed study, a statement of its *relevance to the OAIC mission*, requested resources, and timeline. Criteria include the importance and realistic nature of the anticipated frailty research program and whether the project goals are consonant with OAIC goals. Quarterly benchmarks must be stated; continuation of funding will be contingent upon meeting these benchmarks and reporting them in a timely fashion. Proposals should be **no longer than five pages** and are **due by March 1, 2020**. Please see Submission Guidelines document for further detail. Proposals should be submitted to the OAIC Administrator, Brian Buta, [bbuta@jhmi.edu](mailto:bbuta@jhmi.edu). Final selection is targeted for **June 1, 2020**, with funding start date approximately **July 1, 2020**.

We welcome the opportunity to discuss the appropriateness of proposed scientific goals. Please direct any questions about scientific/research issues to the Core Co-Leaders: Peter Abadir, MD, [pabadir1@jhmi.edu](mailto:pabadir1@jhmi.edu); and Dan Arking, PhD, [arking@jhmi.edu](mailto:arking@jhmi.edu).

✦ OLDER AMERICANS ✦  
INDEPENDENCE CENTER

**Johns Hopkins University Claude D. Pepper Older Americans Independence Center (OAIC)**

**PROPOSAL SUBMISSION GUIDELINES**

1. Title page: please include Title of project; PI; department and/or school; address; phone number; email address, list of collaborating investigators, including mentor; budget; starting and ending dates for project.
2. Abstract
3. Budget and justification (maximum \$35K direct costs)
4. Investigators (PI, mentor, collaborating investigators, affiliation, role in project, amount of time to be devoted to this project)
5. Biographical sketch of investigators (NIH format)
6. Research Plan (not to exceed page 5 pages for sections a-d)
  - a. Hypotheses and specific aims
  - b. Background and significance of the research to frailty and late-life decline
  - c. Preliminary information if applicable (should demonstrate ability to perform the research)
  - d. Research design and methods: describe subject selection, data collection, research procedures/measures, analysis plan, timetable for completion
  - e. Literature citations (limit 20)
  - f. Protection of human subjects (describe plans for obtaining informed consent and procedures for informing and protecting subjects to be enrolled in the study if applicable)

Please follow [PHS 398 guidelines](#) for budget, Biographical sketch, and human subjects information. If you have any questions, please contact OAIC administrator, Brian Buta, at [bbuta@jhmi.edu](mailto:bbuta@jhmi.edu), 410-502-3412.

**Please submit applications via e-mail attachment (Word or PDF format) to [bbuta@jhmi.edu](mailto:bbuta@jhmi.edu).**

**Applications are due by 5pm, on designated date within this RFP.**

Additional information on the JHU OAIC is available here: <https://coah.jhu.edu/oaic/>.