

Request for Applications for the HIV/Aging Pilot Program

I. Basic Information

I.1. Background

This Pilot RFA is a collaboration between the Claude D. Pepper Older Americans Independence Centers (OAICs; aka "Pepper Centers") and the Centers for AIDS Research (CFARs) funded by 1R24AG044325-03. The OAICs were established to advance research into causes, mechanisms, prevention and treatment of functional decline and disability with aging. For over 20 years, OAIC investigators have developed and validated key measures of function, excelled in recruiting and retaining older research subjects, defined phenotypes and mechanisms of aging and disability, and gathered imaging, biologic sample and clinical data repositories in seniors. The CFARs integrate NIH-funded AIDS research across 20 sites with basic, clinical, and social-behavioral interests. Through these efforts, it has become clear that HIV-infected individuals are developing non-AIDS-defining but HIV-associated co-morbidities at rates much higher than HIV-uninfected populations. Age is the dominant risk factor for these conditions which include cardiovascular disease, neurocognitive decline, metabolic disease, osteoporosis, kidney disease and cancers, and manifestations of these chronic illnesses now account for the majority of morbidity and mortality in those with HIV, not opportunistic infections as previously seen. The increased burden of disease leads to early multi-morbidity, functional decline and geriatric syndromes (falls, fractures, frailty) in those with HIV.

It is anticipated that organized efforts and joint funding mechanisms such as pilots funded through this RFA will leverage accumulated knowledge of the OAICs in aging research - overcoming the pitfalls and difficulties of conducting studies in older, frail adults, measuring non-traditional/integrated outcomes of function and disability, defining transition states where individuals can move in/out of specific endpoints, and establishing uniform measures to demonstrate trajectories of decline and recovery. These lessons may be particularly relevant in racial and ethnic minority communities, hard-hit by HIV, and in whom substantial health inequities exist in seniors. Similarly, HIV-related acceleration of multi-morbidity has great potential to shed light on mechanisms of multi-morbidity and functional decline for all older adults. HIV-related research is a major driver of gains in immunology over the last 25 years. Similar gains in mitochondrial biology, inflammation-based mechanisms, and immune senescence are likely to benefit from HIV research focused through an aging "lens".

I.2. Purpose

The purpose of this funding mechanism is to promote aging research among the CFAR investigators and engage OAIC researchers in the field of HIV. Both CFARs and OAICs support pilot grants on their own, and both groups have previously funded a small number of research projects at the interface of HIV and aging, but this RFA is to specifically encourage interactions between OAIC and CFAR investigators and expand research in HIV/aging. There are a number of unique advantages to this RFA. For example, CFAR sites have significant access to patient samples from older HIV-infected subjects through the CFAR Clinical Cores and CFAR Network of Integrated Clinical Systems (CNICS). OAICs have established large image and biospecimen repositories in older HIV-uninfected subjects that are available for comparative studies. Coordinated efforts between these two networks have a much greater likelihood of substantially advancing the field than individual projects that lack such integration.

I.3. Eligibility and Mentoring

Pilot applications are welcome from any CFAR or OAIC investigator at any rank. Strong preference will be given to early stage investigators (ESI; per the NIH definition), applications that include both OAIC and CFAR investigators, and studies that utilize OAIC- or CFAR-supported specimen repositories and databases (i.e., Pepper Center bio-repositories, repositories at CFAR sites or CNICS). If applicants are

not able to identify Co-Investigators with HIV or aging/geriatrics expertise at their own institution, this should be noted in the online submission form submitted with the Concept Proposal and the funding program will help identify an individual from the OAIC/CFAR network to act as a co-Investigator and develop the full proposal.

I.4. Focus of Projects

Applications submitted for consideration by this RFA should be focused on areas of priority from the Office of AIDS Research (OAR) Working Group report on HIV and Aging (High, et al. *J Acquir Immune Defic Syndr.* 2012 Jul 1;60 Suppl 1:S1-18). The intent is that pilot data resulting from studies funded through this RFA will provide "feeder" data for more extensive investigation in high-priority areas via the NIA/multi-institute sponsored FOAs (PAR-15-280-281-282). Major areas of focus include:

- Mechanisms and risk factors for accelerated organ system aging and functional decline
- Biomarkers and clinical indices as predictors and surrogate outcome markers
- Multi-morbidity and clinical interventions to preserve or recover function
- Societal infrastructure/support and caregiver issues

I.5. Funding Available

It is anticipated that up to four pilot grants will be awarded through this RFA with funding up to \$30,000 - \$20,000 will come from this RFA; **\$10,000** in matching funds must be made available by the home CFAR and/or OAIC – and a letter of support from the CFAR/OAIC Director attesting to this matching support must accompany the full application. A letter of support is not necessary for the Concept Proposal. Refer to section III.4, page 4 for detailed budgetary considerations.

I.6. Travel Support

Pilot grant awardees are expected, and will be funded, to attend the OAIC Annual Meeting to present their results in a poster session and become "immersed" in aging research opportunities; this two-day meeting in April will include plenary sessions of focused topics in aging research, networking with OAIC Directors and Core Leaders as well as NIA Program personnel, a scientific poster session, and extensive junior faculty activities, such as a mock study section, junior faculty workshops on aging research, and junior/senior faculty match-ups. Note: funds for travel to the OAIC Annual Meeting will be provided outside the budget for direct grant dollars (i.e. do NOT include travel for this purpose in the grant budget).

II. Timelines and Contacts

The competition will be administered in a two-phase process: the Concept Proposal phase and the Full Proposal phase. The Concept Proposal phase is open to all eligible candidates. To be eligible to compete in the Full Proposal phase, the applicant must first successfully compete in the Concept Proposal phase.

TIMELINE FOR SUBMISSIONS AND NOTIFICATIONS	
RFA Release.	November 17 th , 2015
Concept Proposals Due	January 25 th , 2016
*Full Proposals Due	February 29 th , 2016 (*invited applicants only)
Estimated Award Date	March 14 th , 2016

II.1. Electronic Submission of Concepts and Applications

All concept proposals and invited applications must be submitted as a single electronic (PDF) package via the UAB CFAR website by 5:00 pm CST on the deadline dates listed above. Applications received after the deadline will not be considered accepted, even if the website link remains active.

II.2. Questions/Requests for more Information

Questions should be addressed to: Donna Porter, Ph.D. 205-934-8291 or <a href="mailto:decorate: decorate: decorate:

III. Application Instructions CONCEPT PROPOSALS

Concept Proposals are due January 25th, 2016

III.1. Concept Proposal Instructions

Concept Proposals will be submitted electronically in one, single Adobe PDF file via the R24 HIV and Aging Submission Form on the CFAR Developmental Core Page (linked here).

The Concept Proposal should be uploaded using the link above in a single Adobe PDF file, prepared in the order listed below. A cover letter is not required. Only one concept study may be submitted per lead investigator.

- 1. Two-page concept proposal outlining the hypotheses, specific aims, brief preliminary data (if any), and brief research design. As the criteria for selection in the Concept Proposal phase are primarily based upon the scientific merit, investigator, significance, approach, and innovation, concepts should address these topic areas.
- 2. Biographical Sketch for the applicant (SF424 (R&R) Format Download: MS Word) **New NIH Biosketch format is Required.

III.2. Review Process and Criteria

A Scientific Selection Committee (SSC) will review the Concept Proposals. Criteria for selection in the Concept Proposal phase are primarily based upon the scientific merit, investigator, significance, approach, and innovation. For full descriptions of these criteria, see page 5: Review Process and Criteria.

Researchers whose proposals are selected for the full proposal competition phase will be notified by email on or around February 8th, 2016 and will have 3 weeks to prepare and submit a full proposal.

FULL PROPOSALS

Full proposals are due February 29th, 2016. Only researchers whose proposals were selected from the concept proposal competition phase are invited to submit full proposals.

Successful awardees will be eligible for and encouraged to access OAIC and CFAR Cores for research tools and services. For more information about CFARs and CFAR Core services, see the NIH CFAR website. To access resources from the Claude D. Pepper OAICs, visit the national website.

III.3. Full Application Instructions

Full Proposals will be submitted electronically in one Adobe PDF file via the UAB CFAR website found here. A cover letter is not required or recommended. The full proposal will be on the forms used commonly for NIH grant applications (PHS 398 forms) and should follow a modified NIH investigator initiated grant application (R21) format (see specifics to include in the order listed below). For applications with human or animal subjects, approvals from the IRB or IACUC at the appropriate institution must be obtained before funds are released. Required letters to accompany the application are listed below.

Reviewers will provide a written critique based in alignment with the goals of this R24, path to subsequent grant applications and research productivity, and the 5 NIH criteria to yield an overall impact score. After the review meeting, written critiques will be provided to the applicants. Pilot Project awardees will be required to provide a 6-month report on progress. A final report will be submitted by the awardees at the end of the funding year cycle. Awardees will be tracked for 2 years to monitor productivity (abstracts, publications, grants), and pilot award grantees will give a poster or slide presentation at the end of the funding period at the OAIC annual meeting.

The Full Proposal should include (in this order in a single Adobe Portable Document Format (PDF) file):

- 1. Face Page: (Download: MS Word or PDF) Include Institutional sign-off and eRA Commons ID.
- 2. Project Summary Page: (Download: MS Word or PDF)
- 3. Detailed budget for 12 month period: (Download: MS Word or PDF)
- 4. Complete budget and justification: (Download: MS Word or PDF)
- 5. Checklist including institutional indirect (F&A) costs: (Download: MS Word or PDF)
- 6. Resources page (Download: MS Word or PDF)

- 7. Biographical Sketch for the PI, Co-Investigators and all collaborators (Download: MS Word) **New NIH Biosketch format is Required.
- 8. Other Support for the PI (Download: MS Word or PDF)
- 9. Research Plan (Maximum 6 pages excluding Specific Aims and References). Use PHS 398 Continuation Format pages (Download: MS Word or PDF).
 - a. Specific Aims (suggested length 1 page)
 - b. Significance
 - c. Innovation
 - d. Approach

All research plans will undergo a biostatistical evaluation as part of the review process, therefore applicants are strongly encouraged to consult a biostatistician in the preparation of their application.

- 10. Description of the Research Environment (suggested length ½ page). Use PHS 398 Continuation Format pages (Download: MS Word or PDF).
- 11. Impact on the field: For studies focused on HIV, describe the impact of the study on the field of aging. For studies focused on aging, describe the impact on the field of HIV (suggested length ½ page or less). Use PHS 398 Continuation Format pages (Download: MS Word or PDF).
- 12. Bibliography and References cited (as needed) Use PHS 398 Continuation Format pages (Download: MS Word or PDF).
- 13. Protection of Human Subjects (if applicable; maximum 1 page). Use PHS 398 Continuation Format pages (Download: MS Word or PDF).
- 14. Vertebrate Animals (if applicable; maximum 1 page). Use PHS 398 Continuation Format pages (Download: MS Word or PDF).
- 15. Letters of Support
 - a. Each application must be accompanied by a letter of support and verification of matching funding by the CFAR or OAIC Director at the "home" institution.
 - b. Letters of support from co-investigators and collaborators essential to the proposed project should accompany the application.

Use this link (http://www.niaid.nih.gov/ncn/grants/app/default.htm) for detailed instructions on how to fill out these forms. Bibliography and References Cited sections do not count toward the page limit. No appendices are allowed. Do not submit Targeted/Planned Enrollment Tables. Applications must be in English.

III.4. Budget Development Guidelines and Restrictions

- 1. Maximum direct costs are allowed up to \$30,000. This includes \$20,000 awarded from this mechanism and \$10,000 in matching funds from the home CFAR or OAIC. Indirect costs (IDC) are allowed at 25% of the \$20,000 total amount awarded from this mechanism for all applicants no exceptions will be made for institutional policy. IDC on matching funds (i.e., \$10,000) from the home CFAR or OAIC are not allowed from this funding.
- 2. Travel to the OAIC Annual conference is provided by this funding mechanism and should not be included in the budget. Budgeting for travel to other conferences to present project research results is allowable and encouraged (travel budget limited to no more than \$2000).
- 3. Requested support for project collaborators who are NOT at the same institution as the awardee must be listed as consultant costs. If the collaborator cannot accept consultancy fees, a subcontract must be issued to their institution. These costs must be listed in the detailed budget as consortium costs with applicable indirect costs included.
- 4. No international components will be allowed through this mechanism.

- 5. Costs associated with Institutional Review Board (IRB) review of human research protocols, or Institutional Animal Care and Use Committee (IACUC) review of animal research protocols, are not allowable as direct charges.
- 6. Awardees who have support from K awards should discuss eligibility issues with their program officers and with institutional officials as eligibility may vary by NIH sponsor for the K award and institutional policies. The staff of this mechanism is not able to determine eligibility for K awardees.
- 7. All costs must conform to the NIH Grants Policy Statement (GPS) and applicable U.S. Office of Management and Budget OMB circulars for necessity and reasonability, allocability, conformance and consistency, as well as allowability. Please follow the link below to section 7.2 cost principles section of the NIH Grants Policy Statement.

III.5. Review Process and Criteria

Written Reviews:

The evaluation criteria includes:

- <u>Significance</u> What will be the potential effect of these studies on the concepts or methods that drive the field of research? Does the study address an important problem consistent with the objective to advance our understanding of HIV in the aging population? If the aims are achieved, how will scientific knowledge be advanced?
- <u>Investigator</u> Are the PI, mentor(s), collaborators, and other researchers well suited to the project? Do
 the PI and other investigators have appropriate experience and training? If the project is collaborative,
 do the investigators have complementary and integrated expertise, and are there both OAIC and CFAR
 researchers involved?
- <u>Approach</u> Are the conceptual framework, design, methods, and statistical analysis plan adequately developed, well integrated and appropriate to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternatives? Does the study design account appropriately for differences by sex or gender, if applicable?
- <u>Innovation</u> Does the project employ novel concepts, approaches, or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies?
- <u>Environment</u> Do the proposed methods take advantage of the unique environment and unique populations where appropriate? Are useful collaborative arrangements between resources in the institution(s) utilized where appropriate and described adequately?

Review Committee:

Applications will be reviewed by the Application Research Committee, consisting of CFAR and OAIC Investigators, with procedures analogous to an NIH Study Section. Each application will have a primary, secondary, and biostatistical reviewer. The reviewers will be asked to summarize the strengths and weaknesses of the proposal based on all of the above criteria. Each project is scored according to the NIH scoring system using overall impact as the metric for success.

Reviewers will provide a written critique based in alignment with the goals of this funding mechanism, path to subsequent grant applications and research productivity, and the 5 NIH criteria to yield an overall impact score. Each project is scored according to the NIH scoring system using scientific merit as the metric for success. After the review meeting, written critiques will be provided to the applicants. Those applicants who are selected for funding will be notified immediately.

IV. Award Requirements

IV.1. Pre-Award Requirements

Funding will be awarded via a subcontract from Wake Forest University. All questions regarding the awarding of funding should be directed to the contact listed in the notice of award. Prior to the awarding of funding, the following information should be provided, if applicable:

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1. <u>Human Subjects and Animal Care Approvals:</u> Animal Care and Institutional Review Board approvals, if applicable, must be obtained prior to **receipt** of an award, but are not required to submit an application. Prior to funding, a copy of all <u>Institutional Biohazard</u>, Animal Care and Institutional Review Board (IRB) approvals must be forwarded to the post-award administrator. Prior to receipt of an award involving human subjects, IRB approval from all participating sites and human subjects training certification for all key personnel will be required.

For more information about human subjects approval, see: http://www.hhs.gov/ohrp/ and http://funding.niaid.nih.gov/researchfunding/sci/human/pages/default.aspx.

For more information on animal care approvals, see: http://grants.nih.gov/grants/olaw/olaw.htm and http://grants.nih.gov/grants/olaw/olaw.htm and http://grants.nih.gov/grants/olaw/olaw.htm and http://grants.nih.gov/grants/olaw/olaw.htm and http://grants.nih.gov/grants/olaw.htm and http://grants/olaw.htm and http://grants/olaw.htm and <a href="h

IV.2. Post-Award Requirements

- 1. Awardees will be required to submit yearly progress reports at 6 months and at the end of the budget period. Awardees will be tracked for 2 years to monitor productivity (abstracts, publications, grants), and pilot award grantees will give a presentation at the end of the funding period at the OAIC annual meeting.
- 2. Support from this mechanism must be acknowledged in all publications and presentations.
- 3. If for any reason the awardee is unable to fulfill the requirements or adhere to the policies of the award, at the discretion of the funding mechanism leadership, the award may be revoked.