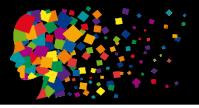
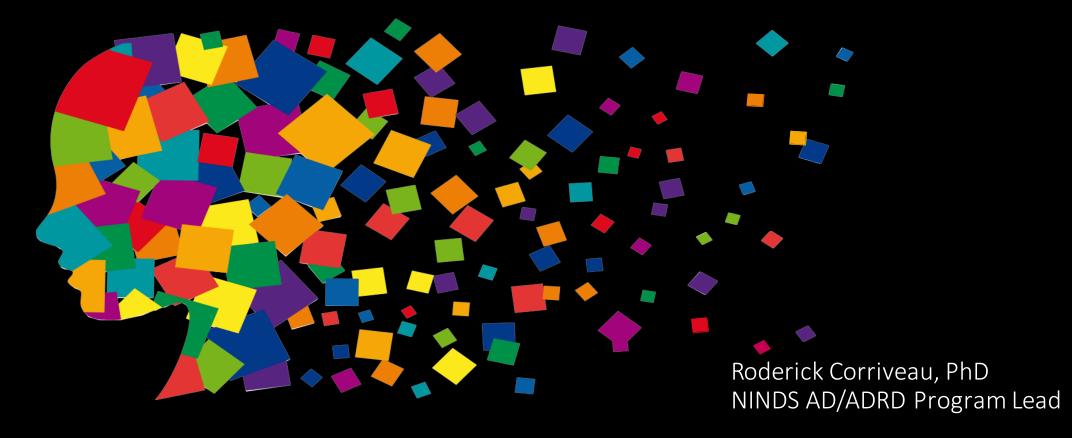
## Thank You for Attending Today's Webinar on RFA-NS-24-027: The NINDS VCID Center Without Walls



- You will have the opportunity to ask questions using the Raise Hand feature. When it is your turn, we will enable you to use your microphone to ask your question. We will address as many questions as time allows.
- A PDF of the slides and a recording of the webinar will be available, contact <u>kiara.bates@nih.gov</u>.
- This presentation is to provide a broad overview. For additional specifics follow-up with funding opportunity contacts.
- NINDS staff will not provide opinions on specific approaches, technologies and other specifics in the applicant's purview.
- The definitive authority on <a href="RFA-NS-24-027">RFA-NS-24-027</a> is the actual published NOFO.

# RFA-NS-24-027: VCID Center Without Walls for Understanding and Leveraging Small Vessel Cerebrovascular Disease Mechanisms in ADRD (R01 - Clinical Trial Not Allowed)





#### National Plan to Address Alzheimer's Disease



## Vascular Contributions to Cognitive Impairment and Dementia (VCID)

Field of research investigating hypothesis that significant AD/ADRD disease burden due to cognitive decline results from damage to brain function due to vascular insults of any type.

#### **Funding Opportunity RFA-NS-24-027**



#### **Purpose:**

 Generate, via a collaborative CWOW framework, foundational VCID knowledge needed for future development of interventions that prevent, treat and decrease the burden of dementia

#### This NOFO will support research:

- Designed to utilize in parallel human-based & model-based studies (at least 1 in vivo VCID animal model)
- Focused on molecular mechanisms of cerebral small vessel disease (SVD), including one or more of arteriolosclerosis, cerebral amyloid angiopathy (CAA), and atherosclerosis (direct or downstream impact) that contribute to dementia
- That uses multi-faceted approaches to understand cerebral SVD cross-sectionally and over time (including prodromal stages), including their relationships to VCID phenotypic and clinical outcomes
- From applicants that are committed to CWOW sharing of pre-publication ideas, data, methods, and results, in addition to standard NIH sharing requirements

Application Due Date: Feburary 1, 2024



#### **Budget and Project Period**



#### **Budget: Funds Available for NOFO and Anticipated Number of Awards**

NIH intends to commit up to \$7,500,000 total costs per year to fund up to five NINDS awards, contingent upon NIH appropriations and submission of sufficient meritorious applications.

#### **Budget: Individual Award Budget**

- Up to \$1,000,000 direct costs per year may be budgeted for the proposed research program.
- Up to \$200,000 in additional direct costs per year may be budgeted for the proposed Cross-CWOW Coordinating Team (CCCT).
- Budgets need to reflect the actual needs of the proposed project.

#### **Project Period**

Maximum project period is up to 5 years.

#### **Research Plan and Strategy**

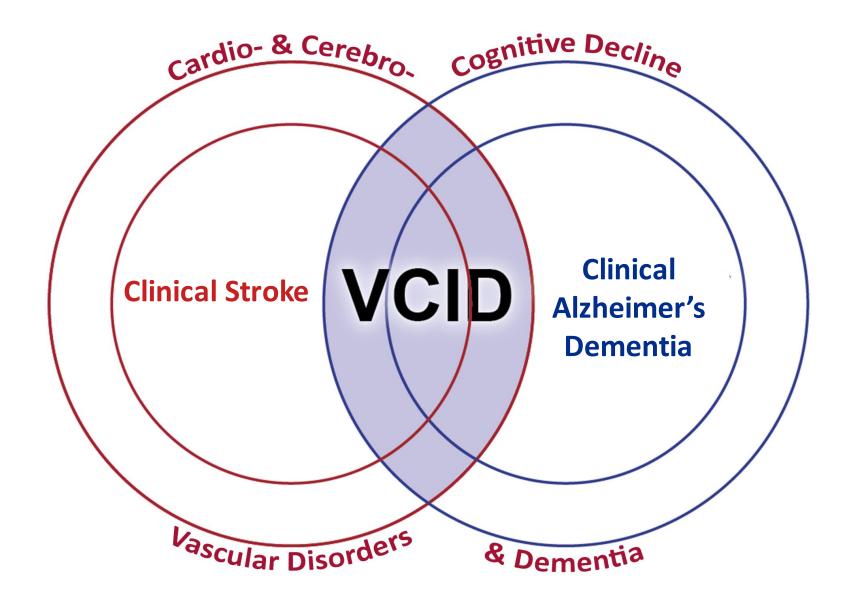


## Describe how the proposed research will use multi-faceted approaches to advance understanding of fundamental VCID knowledge:

- Examine relationship of brain small vessel disorders, both cross-sectionally and over time, to phenotypic and clinical outcomes (prodromal and after cognitive decline first develops)
- Use de-identified human tissue and clinical data in parallel with, and mechanistically cross-referencing with, studies in model-based systems (at least one animal model)
- Increase understanding of function and dysfunction of the neurovascular unit, synapses, circuits, and networks in the context of VCID and AD/ADRD overall, including in mixed dementias
- Include one or more components designed to increase understanding of interactions between small vessel VCID and at least one other AD/ADRD relevant pathology (for example, but not limited to, the following proteinopathies: beta-amyloid, tau, TDP-43, alpha-synuclein)

#### The Science of VCID Overlays Clinical Syndromes







#### **CWOW Investigator Team**



Investigators should have a broad range of appropriate expertise, for example:

- Clinical and pathological expertise in arteriolosclerosis, CAA, and atherosclerosis
- Vascular Contributions to Cognitive Impairment and Dementia (VCID)
- Reverse and forward translation
- AD/ADRD models and manipulations including loss of function and gain of function
- Rigor in experimental design
- Single-cell analyses
- Neurovascular unit
- Synapses, neural circuits, and network function
- Biostatistical expertise to ensure appropriate statistical design and power analyses
- Data science, including big data, harmonization, interoperability and sharing
- Other expertise needed to effectively and successfully carry out the proposed research



#### **Cross-CWOW Coordinating Team (CCCT) Management Plan**



Each application is to propose a CCCT Management Plan designed to facilitate CWOW-wide interactions that encourage logistic and scientific synergy.

One CCCT will be selected among the funded applications.

#### **CCCT Responsibilities:**

- CWOW-wide confidentiality agreements
- Secure platform for intra-CWOW sharing of protocols and data. Platform is not intended to be a repository of data per se, but rather to offer a secure avenue for sharing data and protocols
- Twice per year meetings: one in person, one virtual
  - CCCT Management Plan is to outline strategies and approaches to perform these CCCT responsibilities.

#### **CCCT Attachment (CCCT Management Plan):**

- Must include a named Lead with appropriate skills and experience who will be the CCCT point of contact
- Must not exceed three pages (applications that exceed this limit will be withdrawn)



#### **CWOW Annual In Person Meetings: Attendees**



#### **Attendee Travel Budgeted and Supported by CCCT:**

- **Trainees**: Up to 10, prioritizing individuals from diverse backgrounds and/or early career individuals
  - Nominated by CCCT on behalf of CWOW contact PIs, concurred upon by the NINDS Program Officer (PO)
- Guests: 6 additional outside guest scientists nominated by CCCT on behalf of CWOW contact PIs
  - Guest scientist must sign confidentiality agreements as a condition of attending

#### Attendees Travel not Budgeted by CCCT:

- **CWOW Investigators:** up to 5 per R01 award, with travel budgeted for these 5 by each separate CWOW application
  - Contact PI attendance is required
- Up to 3 NINDS Staff



#### **Applications Not Responsive to this NOFO**



- Applications not primarily focused on small vessel VCID
- Applications that do not focus on at least one (or more) of: cerebral small vessel disease including arteriolosclerosis, CAA, and atherosclerosis (direct impact or downstream effects on small vessels)
- Applications that do not utilize de-identified human tissues and de-identified clinical data with parallel cross-referencing studies in model-based systems, with at least one in vivo animal model
- Applications that do not use human autopsy tissue for single cell analyses
- Applications that do not include a component designed to increase understanding of interactions between small vessel VCID and  $\geq 1$  other AD/ADRD relevant pathologies (e.g.:  $\beta$ -amyloid, tau, TDP-43,  $\alpha$ -synuclein)

Applications not responsive to this NOFO will not be reviewed



#### **Applications Not Responsive to this NOFO**

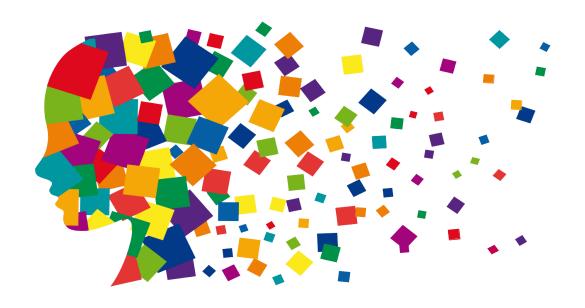


- Applications that do not indicate, beyond standard NIH requirements for sharing, a commitment to NOFO-specific sharing requirements, namely:
  - Pre-publication sharing of data, methods, and results at CWOW meetings
  - Sharing with an NIH-funded resource of any human omics sequencing libraries used under this funding
- Applications with an NIH-defined clinical trial: <a href="https://grants.nih.gov/policy/clinical-trials/definition.htm">https://grants.nih.gov/policy/clinical-trials/definition.htm</a>
- Human subjects research unless E4 exemption (de-identified human samples, cells & clinical data)
  - For help determining if human subjects research meets the E4 exemption, see here:
     <a href="https://grants.nih.gov/sites/default/files/exemption">https://grants.nih.gov/sites/default/files/exemption</a> infographic v8 508c 1-15-2020.pdf
  - For help determining if research is considered human subjects research, please see: here: <a href="https://grants.nih.gov/grants/policy/hs/private-information-biospecimens-flowchart.pdf">https://grants.nih.gov/grants/policy/hs/private-information-biospecimens-flowchart.pdf</a>.

Applications not responsive to this NOFO will not be reviewed



#### **Thank You For Attending**



No RFA is needed to apply!! NINDS special AD/ADRD payline applies to investigator-Initiated research applications to the NIH Parent R01 and the NINDS R21 (PA-21-219)

Published funding announcements will also be shared via the NINDS ADRD Listserv

Email kiara.bates@nih.gov to sign up!

Please visit the NINDS ADRD website for more info, including Program contact information:

<a href="https://www.ninds.nih.gov/Current-Research/Focus-Disorders/Alzheimers-Related-Dementias">https://www.ninds.nih.gov/Current-Research/Focus-Disorders/Alzheimers-Related-Dementias</a>



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#### **Letter of Intent**



Letter of Intent Due Date(s): December 15, 2023

A letter of intent is not required, is not binding, and does not enter into the review of a subsequent application, but prospective applicants are asked to submit a letter of intent that includes the following information:

- Descriptive title of proposed activity
- •Name(s), address(es), and telephone number(s) of the PD(s)/PI(s)
- Names of other key personnel
- Participating institution(s)
- Number and title of this funding opportunity

The letter of intent should be sent to:

Roderick A. Corriveau

Email: <u>roderick.corriveau@nih.gov</u>

#### Other Requirement: Intellectual Property Strategy



- Applications must include an Intellectual property (IP) strategy that is no more than two pages in length.
- Applications that exceed this limit will be withdrawn.
- Applicants are encouraged to prepare this section of the application in consultation with their institution's technology transfer officials, as applicable.
- If copyright or patents pertinent to the paradigms developed under the application have been filed, the applicants should indicate the details such as filing dates, what types of patents are filed, application status, and associated United States Patent Office (USPTO) links, if applicable.
- Applicants should also discuss future copyright or IP filing plans.
- For a multiple-PD/PI, multiple-institution application, applicants should describe the infrastructure of each institution for bringing the technologies to practical application both within and outside the CWOW.
- Applicants must clarify how IP will be shared or otherwise be managed with other CWOW members.
- All existing and planned IP and/or copyright that impacts or may impact sharing of information and reagents in the CWOW must be disclosed and discussed in the application.



#### **Foundational Principles of NINDS ADRD Funding**



#### How do I know if my NINDS (NS primary) application qualifies for AD/ADRD funds?

- 1. Yes if responsive to NINDS ADRD-specific funding opportunities
- 2. Yes if (A) it is a "Parent" R01, R21, R03, or R15 funding opportunity, <u>and</u> (B) the science proposed directly addresses AD/ADRD\*:
  - Framing of the science
  - Actual experiments proposed

### Am I required to apply to an ADRD funding announcement to qualify for the special pay line?

No RFA is needed to apply!! The special ADRD payline applies to investigator-initiated research applications, e.g. the NIH Parent R01 & the NINDS R21 (PA-21-219)

#### What are the AD/ADRD Paylines?

- 1. For AD/ADRD applications responding NINDS ADRD-specific funding opportunities, NINDS sets a payline for each based on impact score, reviewer comments and funds available.
- 2. For percentiled AD/ADRD applications submitted to "Parent" R01, R21, R03, & R15 funding opportunities NINDS follows NIA AD/ADRD paylines: for FY 2023, up to 25% (NI: 28%; ESI, 30%).

<sup>\*</sup>AD/ADRD awards are publicly reported in NIH RePORTER under the Spending Category "Alzheimer's Disease and Alzheimer's Disease-Related Dementias (AD/ADRD)" (https://report.nih.gov/funding/categorical-spending)