Request for Proposals: integrated Translational Health Research Institute of Virginia (iTHRIV) 2021 iTHRIV Scholar Mentored Career Development Awards at Virginia Tech Carilion

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The integrated Translational Health Research Institute of Virginia (iTHRIV) is a transformational, cross-Commonwealth collaboration that leverages the latest advances in data science to accelerate innovation in health-related research and facilitate team science. Partners within iTHRIV include Carilion Clinic, Inova Health System, the University of Virginia (UVA), and Virginia Tech, as well as affiliates the Center for Open Science (COS) and the UVA Licensing & Ventures Group. iTHRIV seeks to support highly qualified early career faculty for activities related to the development of a successful clinical or translational research career.

The iTHRIV Scholar Mentored Career Development Program aims to develop the next generation of clinical and translational researchers in principles of data science, the conduct of rigorous and reproducible science, and to promote team science as a means to enhance innovation and discovery in health- related research. iTHRIV announces the annual call for applications for this mentored career development award. **Proposals that demonstrate potential to integrate team science and data science in clinical or translational research are preferred**.

Nominee's home unit (department/college) must commit to the following:

- Allow for 75% release time for research (50% time may be considered under certain circumstances) while funding non-grant funded activities for salary/fringe support during the Scholars program (specific request for protected time must be noted in the Letter of Intent)
- \$50,000/year in research-related expenses including supplies, Scholar travel, Scholar training and/or tuition, etc. for each year of the award

Eligibility:

- Applicants must have a *terminal* research or health-professional doctoral degree, including but not limited to M.D., D.O., D.V.M., Ph.D. or equivalent.
- Applicants must have a full-time faculty appointment at Virginia Tech (including joint appointments with Carilion Clinic) at the time of the award; the position cannot be contingent on obtaining this award. In the University setting, faculty holding at least a 9-month appointment are eligible. Please plan to provide the start date of your full-time faculty appointment according to your offer letter in your Letter of Intent.
- Applicants must be a U.S. citizen or non-citizen national, or have documented permanent resident status.
- Applicants and their home departments must commit 75% of the faculty member's effort (50% under certain circumstances) to mentored research and career development activities. A letter of support from the applicant's department chair must include a statement of commitment to protected time (the agreed upon amount) and a clear description of other activities (including the percent effort allocated to clinical responsibilities, on-call time, teaching, service, and/or administrative activities).
- Applicants who have previously received a career development award or a national, independent research award (as a faculty PI) covering more than 2 full calendar months of support in a year (e.g. NSF, NIH, AHA) are <u>NOT</u> eligible.

Applicants must identify at least one scientific mentor. The primary scientific mentor must provide a letter of support to be included with the application. More than one scientific mentor is permitted and encouraged as appropriate for the proposal.

Program description:

The iTHRIV Scholar Mentored Career Development Program aims to develop the next generation of both clinical and translational researchers in principles of data science, the conduct of rigorous and reproducible science, and to promote team science as a means to enhance innovation and discovery. The iTHRIV Scholars Program is supported in part by the National Center for Advancing Translational Sciences of the National Institutes of Health under Award Number KL2TR003016. Scholars are selected annually to participate in the program, including two Scholars under the NIH KL2 award. Early career faculty candidates pursuing a career in clinical research or translational research from all departments in all Colleges, schools, and institutes at Virginia Tech are eligible and are encouraged to apply. In seeking excellence through diversity of experiences and perspectives, we encourage members of historically underrepresented populations as defined by NIH (https://diversity.nih.gov/about-us/population-underrepresented) to apply.

In anticipation of a diverse cohort of Scholars representing a mix of backgrounds, prior training, and research focus, the iTHRIV Scholars Program is based in a common curriculum of clinical and translational research competencies, interwoven with data science principles, and professional development activities. iTHRIV Scholars will be expected to contribute to a learning community through participation in weekly educational sessions (currently Tuesday afternoons from 1-5 pm) with other Scholars. Attendance at these sessions is mandatory for the duration of the two-year structured program. Each iTHRIV Scholar will furthermore enhance the skills specific to his/her research and career development through an individualized learning plan. Applicants should include the integration of the iTHRIV Scholars Program curriculum in the overall learning plan for their proposal.

Individualized training may be accomplished through various methods including:

- The composition of a personal mentorship team. Mentors identified by the candidate are required to describe their commitment to the mentoring relationship, including a description of mentoring time and regular interactions with the candidate. The program also includes the addition of iTHRIV-appointed career development mentors to enhance the mentoring support for Scholars. iTHRIV-appointed mentors will be assigned to each iTHRIV Scholar during the award period. Applicants are encouraged to list up to three additional areas of expertise (or individual faculty members) that would be welcome contributions to the proposed project or augment the applicant's career development plan.
- 2. Translational experiences, which are individually selected by Scholars to broaden the Scholars' perspective and ability to communicate with stakeholders outside of their immediate scientific field.
- 3. Coaching to achieve professional development goals.
- 4. Opportunities for individualized course work (e.g. Master of Science in Data Science, Masters of Science in Clinical Investigation, Certificate in Implementation Science, etc.).

iTHRIV provides training in research informatics, data analysis and visualization, prediction modeling, open data resources and data sharing, the ethics and governance of big data, principles of commercialization, and scientific rigor and reproducibility. Applicants may consider the use of tools from the Center for Open Science (<u>https://cos.io/</u>) and the University Libraries to enhance the reproducibility of their work.

During the award period, iTHRIV Scholars are expected to pursue an extramural mentored career

development award and/or independent research funding with the goal of obtaining significant extramural funding by the end of two years. *If funding is not achieved within the 2-year award period, the applicant's home department or school must fund a 3rd year of protected time to achieve extramural funding (exceptions must have prior approval). A letter of support from the applicant's department chair confirming this commitment is required at the time of application.* If a national career development award or major independent research grant is funded before the end of the iTHRIV award, the iTHRIV Scholar is encouraged to continue to participate in iTHRIV Scholar programming, and financial support will transition to the extramural award (as allowed by the external award). An annual progress report is required of all iTHRIV Scholars.

This program will not support any application with a focus on global health and/or research located outside of the United States. This program will not fund any research work or travel outside of the United States and Canada. Conducting research in the United States with foreign samples and data is allowed.

The iTHRIV Scholar Mentored Career Development Program encourages applications with an emphasis on interdisciplinary team science. Proposals that incorporate, or have the potential to integrate, data science methods are preferred, and demonstration of the potential for *using data to improve health* is encouraged.

Instructions for Proposal:

Letters of Intent (LOI) are required and should be electronically submitted by Tuesday, December 1, 2020 to Dr. Leanna Blevins (leannab@vtc.vt.edu).

Please include the title of the proposal, name(s) of scientific mentor(s), and a paragraph describing the intended proposed research including topic and probable methods (100-word limit) in the Letter of Intent. Any request for deviation from the 75% protected time and salary/fringe support must be noted in this LOI (and must include a minimum of 50% release time for research and 50% salary/fringe support). A letter of commitment from the applicant's department chair, institute director or dean stating that the department commits to funding the applicant's salary and protected time for up to 3 years is also required.

Applications are due on Monday, February 1, 2021. A complete application must include:

- iTHRIV Scholars Career Development Application Coversheet (template provided)
- NIH Biosketch and other support for the applicant
- NIH Biosketch and other support for the applicant's scientific mentor(s)
- NIH Biosketches for key contributors to the applicant's proposed research and career development
- Proposal
 - Career Development Plan (6-page limit)
 - Describe applicant background
 - Career goals and objectives
 - Mentoring plan and proposed career development activities, including how the iTHRIV Scholars Program fits into the applicant's/candidate's career development goals and objectives
 - Specific Aims (research question(s)) (1 page)
 - Research strategy (6-page limit)
 - Include plan to assure scientific rigor and reproducibility (applicants may wish to consider resources offered by the Center for Open Science (<u>https://cos.io/</u>))

- References cited (not included in the page limitations)
- List up to three additional areas of expertise (or individual faculty members) that would be welcome contributions to the proposed project or augment the applicant's career development plan.
- Budget and Budget Justification
- Letters of support (6-page limit total for all letters)
 - Department chair (required; must include statement confirming protected time; participation in 4-hour weekly events, and guaranteed 3rd year of funding as described above)
 - Primary scientific mentor (required; must include commitment to attend monthly Mentoring Hour discussions and other mentoring activities)
 - Co-mentors, consultants and contributors to the project (required from comentors, consultants and contributors named in application)
- Description of Institutional environment and commitment (1 page)
- Human Subjects (state N/A if not appropriate)
 - Data and safety monitoring plan (state N/A if not appropriate)
 - Inclusion of women, minorities and children (state N/A if not appropriate)
- Vertebrate animals (state N/A if not appropriate)
- Training in the responsible conduct of research (1 page)
- Biohazards (state N/A if not appropriate)
- Conflict of Interest Disclosure
 - Indicate whether or not the research involves the evaluation or further development of intellectual property associated with the financial interests of the applicant, mentor(s), or other participants. Describe the plan for management of any potential conflict if applicable.

Applications should be sent electronically to Dr. Leanna Blevins at leannab@vt.edu on or before February 1, 2021 at 11:59 pm. No applications will be accepted after this time/date with the exception of candidates who are in the process of being recruited to Virginia Tech or Carilion Clinic who are strongly recommended by their department head or institute director and, upon confirmation of commitment to the institution, must submit an application and be granted a waiver by the selection committee.

Key Dates:

- Call for applications: Tuesday, September 29, 2020
- Letter of Intent Due: Tuesday, December 1, 2020 at 11:59 pm (required)
- Applications Due: February 1, 2021 at 11:59 pm
- Interviews by Invitation: Between March 1 and April 1, 2021
- Notification of Awards: By April 30, 2021
- o Award Begins: July 1, 2021

Information sessions to occur via Zoom in October and January (to be announced). Recommended templates will be available to all applicants upon LOI acceptance.

Selection Criteria:

NIH Scoring criteria will be used to evaluate submitted proposals. Each of the following areas will be scored using the NIH nine-point scale:

- Overall impact
- Candidate
- Career development plan/career goals & objectives/plan to provide mentoring

- Research plan
- Mentors/consultants/collaborators
- Environment and institutional commitment to the applicant
- Additional Review Criteria:
 - Human Subjects
 - Vertebrate Animals
 - o Biohazards
 - o Training in the Responsible Conduct of Research
- Potential for Integration of Data Science and Team Science Principles
- Approach to Scientific Rigor and Reproducibility

Reviews will be returned to applicants with the intent of providing feedback that will be helpful for all applicants (whether or not the proposal is funded) for future competitive proposals.

Support for Applicants:

For questions, please contact Dr. Leanna Blevins at 540-526-2191 or email leannab@vtc.vt.edu.

References for proposal content and selection criteria:

- 1. NIH Biosketch format, template: https://grants.nih.gov/grants/forms/biosketch.htm
- 2. NIH Research Career Development Program:<u>https://researchtraining.nih.gov/programs/career-</u> <u>development</u>
- 3. NIH Scoring Guidance for Career Awards:_ https://grants.nih.gov/grants/peer/guidelines_general/scoring_guidance_training.pdf

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