

# Strategies for Training and Advancing under-represented Researchers (STARs) Program

# **Request for Applications**

#### **Background**

Research shows that diverse teams working together and capitalizing on innovative ideas and distinct perspectives outperform homogenous teams.<sup>1</sup> Scientists and trainees from diverse backgrounds and life experiences bring different perspectives, creativity, and individual enterprise to address complex scientific problems. Benefits that flow from a diverse scientific workforce include fostering scientific innovation, enhancing global and national competitiveness, contributing to robust learning environments for our students, improving research quality, and advancing the likelihood that underserved populations participate in, and benefit from health research.<sup>2;3</sup> However, underrepresented faculty still have inequitable access to information, professional development, and research resources.<sup>4;5</sup> A structured research-mentoring program that provides grant writing skills and connects faculty to institutional research resources and support could help strengthen the research acumen of underrepresented faculty, and provide a community of belonging and real support to ensure their success in becoming independent investigators.<sup>6</sup>

# The TRI STARs Program

The TRI STARs program aims to build a peer support community of underrepresented faculty in Biomedical, Clinical, Behavioral, and Social Sciences Research to support career development and research success. This will be done by:

- Establishing a structured peer support group that engages in a 5-month grant training and development program. This model addresses issues of isolation often felt by underrepresented faculty in academic settings. It also provides and encourages the development of innovative research ideas in a safe environment. This peer support group can also help improve confidence and self-efficacy in clinical and translational research development and execution by junior faculty.
- Providing practical research skill development and grantsmanship.
- Offering access to research mentors and research support services, i.e. IRB protocol development and submission, recruitment, etc.
- Supplying \$10,000 in seed funding upon course completion to help jumpstart future grant applications and generate preliminary data.

In addition, the STARs Program aims to promote applications to the TRI Pilot Studies and other funding opportunities, allowing scholars to build their research idea and proposal with TRI mentors and apply for follow-on funding to build upon their seed funding. STARs scholars will be expected to apply for follow-on funding (intramural or extramural) within 18 months of completing the STARs didactics.

Join us May 29, 2024, at 11:00 AM, or June 7, 2024 at 2:00 PM for an information session to answer your questions. Please register for the <u>STARs Informational Session</u>.

Program Leadership

The TRI STARs program is led by a multi-disciplinary team that will provide the didactics, grant training and review, and ongoing mentorship of the scholars. The leaders are:

- Antiño R. Allen, PhD, Professor, Associate Director of Pathway Initiatives at TRI
- Mario Schootman, PhD, Professor, Co-Director of TRI's Workforce Development Program, Vice-Chair for Mentoring & Innovation, Department of Medicine
- Jessica Snowden, MD, Professor and Vice Dean for Research, Co-Director of TRI's Workforce Development Program
- Laura James, MD, Professor and Associate Vice Chancellor for Clinical and Translational Research, Director, Translational Research Institute,

#### **Eligibility**

- 1. Eligible participants should have a terminal degree; must be full-time faculty at UAMS, UAMS-NW, ACH/ACRI, or CAVHS who hold non-temporary positions at the rank of Instructor, Assistant Professor, or Associate Professor; and must be a US citizen or permanent resident.
- 2. Faculty must meet the NIH definition of underrepresentation in Biomedical, Clinical, Behavioral, and Social Sciences Research, as follows:
  - Individuals with disabilities, who are defined as those with a physical or mental impairment that substantially limits one or more major life activities, as described in the <u>Americans with</u> Disabilities Act of 1990, as amended.
  - Individuals from the following racial and ethnic groups: Blacks or African Americans, Hispanics or Latinos, American Indians or Alaska Natives, Native Hawaiians, and other Pacific Islanders.
  - Individuals from disadvantaged backgrounds are defined as those who meet two or more of the following criteria:
    - Were homeless, as defined by the McKinney-Vento Homeless Assistance Act;
    - Were in the foster care system, as defined by the Administration for Children and Families:
    - Were eligible for the Federal Free and Reduced Lunch Program for two or more years;
    - Have/had no parents or legal guardians who completed a bachelor's degree (firstgeneration college graduate);
    - Were eligible for Federal Pell Grants;
    - Received support from the Special Supplemental Nutrition Program (SNAP) for Women, Infants, and Children (WIC) as a child;
    - Grew up in one of the following areas:
      - a U.S. rural area, as designated by the Health Resources and Services Administration (HRSA) Rural Health Grants Eligibility Analyzer, or
      - a Centers for Medicare and Medicaid Services-designated Low-Income and Health Professional Shortage Areas
  - Women in the biomedical workforce: Over the past 30 years, the number and proportion
    of women obtaining science and engineering bachelor's and doctoral degrees has
    increased dramatically, although their participation in tenure-track and leadership positions
    remains limited.

#### Use of funds

A broad range of research activities, including but not limited to, consultant fees, supplies, software, transcribing and analyzing existing data, data collection, publication fees, participant incentives, and other activities to prepare for applying for extramural funding. **Funds must be expended within one year of the award date.** 

Award amount: \$10,000

### **Application Process**

All applicants are required to use our online application system to enter their basic information and application information. The application must be completed by **5:00 pm, July 15, 2024**, through the TRI's <a href="Apply Grant Application">Application</a> system. Applicants are required to establish an account with Apply to submit for this funding opportunity. <a href="Click here for instructions">Click here for instructions</a> on how to make an account in Apply. Contact <a href="Hailey Rogers">Hailey Rogers</a> at 501-526-0363 with any questions.

The application will	ıncıude:
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Facult	y demographics			
Self-reported eligibility that the applicant is from a group meeting the NIH definition.				
Application research summary letter (no more than 2 pages) that must contain the following:				
0	Research questions to be addressed and/or specific aims.			
0	Project summary			
0	How your project aligns with TRI's mission to develop new knowledge and approaches that will			

measurably address the complex health challenges of rural and underrepresented populations

☐ Survey of self-reported confidence on grant and project management skills. Specifically:

- Grant writing confidence
- Project leadership experience
- Current research training (CITI/RCR)
- o Research release time/support
- Main area of need/expectation from the program
- ☐ List of Current Publications (most recent 2 years)

#### Timeline:

RFA Released: May 8, 2024
Informational Session: May 29, 2024
Informational Session: June 7, 2024
Deadline to Apply: July 15, 2024
Scholars Notified of Acceptance: July 22, 2024

Orientation: August 2, 2024, 3:00 – 4:00 PM

Didactics Begin: August 29, 2024 Seed Funding Starts: March 2025

#### **Outcomes/End of Program Report**

Each STARs Scholar is expected to:

- Submit a final research proposal developed over the course of the didactic training for seed funding
- Submit for follow-on funding to any intra- or extramural funding opportunity within 18 months of completing STARs didactics
- Submit a manuscript for publication within 18 months of completing STARs didactics. **TRI will pay** publication fees for one manuscript accepted for publication.
- Participate in pre- and post-surveys on grant writing self-assessments.
- Provide feedback to the program.

# **Program Structure and Schedule**

Phase 1 – Didactics, proposal development		Phase 2 – Project implementation and dissemination
<ul> <li>□ The basics of grantsmanship         <ul> <li>Identification of the knowledge gap and strategy to fill it</li> <li>Formulating a central hypothesis</li> </ul> </li> <li>□ Developing the specific aims and impact sections</li> <li>□ Writing the significance and innovation sections</li> <li>□ Writing the research plan</li> <li>□ Future studies and creating a powerful title for your proposal</li> </ul>		<ul> <li>□ Project implementation</li> <li>□ Monthly WIPs/check-ins</li> <li>□ Deliverables         <ul> <li>○ Abstract submission</li> <li>○ Final paper</li> <li>○ Submit for TRI pilot award or another mechanism</li> </ul> </li> </ul>
Date (maybe subject to change)	Program Activity	Deliverable/assignment
July 1	Application Deadline	Project summary and application due July 1
July 11	Awardees announced	Notice of selection sent to awardees and kickoff of didactics announced
Aug 2, 2024 3:00 – 4:00 PM	Orientation/Overview of Program Scope project to \$\$/feasibility	No Homework
Aug 6, 2024 4:00-5:00 PM	Formulating a Research Question  Jessica Snowden, MD  Overview of abstract	Homework: 250-word abstract of future proposal (Due: 8/22/2024)

August 29, 2024 1:00 – 2:30 PM	Basics of grantsmanship, specifics of the TRI pilot grant, identification of the knowledge gap and strategy to fill it, formulation of <b>central hypothesis</b>	Homework: ~1-page justification for your hypothesis, single-sentence hypothesis, Specific Aims (rough draft) and impact drafts (Due: 9/11/24)
Sept 19, 2024 1:00 – 2:30 PM	Review of the Hypotheses, Discuss Specific Aims, Impact sections, Significance, and Innovation sections	Homework: Finalizing Specific Aims and Impact; writing Significance and Innovation sections (0.5 page) (Due: 10/10/24)
Oct 17, 2024 1:00 – 2:30 PM	Review of Specific Aims and Impact page, Significance, and Innovation sections. How to write <b>Approach</b> section: basics.	Homework: Writing first half of Approach section (~1 page); Internal group peer-review of the Specific Aims page. (Due: 10/24/24)
Nov 1, 2024 3:00 – 4:30 PM	Review of the 1 <sup>st</sup> Aim/half of Approach sections. How to write <b>Pitfalls</b> and <b>Alternative Approaches</b> in the Approach section	Homework: Finalizing the Approach section (~1.25 pages). <b>(Due: 11/8/24)</b>
Nov 15, 2024 2:00 – 3:30 PM	Review of the Approach sections. How to write Future Studies, Plan for Extramural funding and create a powerful title for your proposal	Homework: Future studies, Plan for extramural funding (~.25 page), and Title. (Due: 12/5/24)
Dec 13, 2025 3:00 – 4:30 PM	Review of Future Studies, Extramural Plan and Title. How to peer-review Introduction to TRI Services	Internal group peer-review of the entire proposal (Due: 1/13/25)
Jan 6, 2025 3:00 – 4:30 PM	Nuts and Bolts of an IRB Protocol Michael Bailey, CCRP Budget development overview	No homework. Internal group peer review of the entire proposal (Due: 1/13/25)
Jan 16, 2025 1:00 – 2:30 PM	Peer reviews presented and discussion/review of final proposal and presentation of TRI pilot RFA	Final proposal after editing for comments for seed funding. (Due: 2/13/25 COB)
Feb 13, 2025	The finalized proposal is due to Program directors no later than 5:00 P.M.	The finalized proposal is due no later than 5:00 P.M.

#### References

- (1) Gomez LE, Bernet P. Diversity improves performance and outcomes. *J Natl Med Assoc* 2019; 111(4):383-392.
- (2) Kandler A, Laland KN. An investigation of the relationship between innovation and cultural diversity. *Theor Popul Biol* 2009; 76(1):59-67.
- (3) Hofstra B, Kulkarni VV, Munoz-Najar GS, He B, Jurafsky D, McFarland DA. The Diversity-Innovation Paradox in Science. *Proc Natl Acad Sci U S A* 2020; 117(17):9284-9291.
- (4) Fang D, Moy E, Colburn L, Hurley J. Racial and ethnic disparities in faculty promotion in academic medicine. *JAMA* 2000; 284(9):1085-1092.
- (5) Pololi L, Cooper LA, Carr P. Race, disadvantage and faculty experiences in academic medicine. *J Gen Intern Med* 2010; 25(12):1363-1369.
- (6) Chue S. Professional learning communities for enhancing faculty development initiatives. *Med Teach* 2016; 38(12):1288.