

## PEDSnet Scholars Program: A Learning Health System Embedded Scientist Training and Research (LHS E-STaR) Center (P30)

### Application Instructions (July 1, 2024 Start Date)

#### 1. Eligibility

##### 1A. Institutions

The applicant must have a full-time faculty appointment at one of the following founding or onboarding PEDSnet (pedsnet.org) institutions by July 2024:

- Boston Children's Hospital;
- Children's Hospital Colorado;
- Children's Hospital of Philadelphia;
- Children's National Hospital;
- Cincinnati Children's Hospital Medical Center;
- Lurie Children's Hospital of Chicago;
- Nationwide Children's Hospital;
- Nemours Children's Health;
- Riley Children's Health;
- Seattle Children's Hospital;
- Stanford Children's Health; and
- Texas Children's Hospital.

##### 1B. Candidates

Any candidate with the skills, knowledge, and resources necessary to carry out the proposed research is invited to work with their mentors and organization to develop an application for support. ***Individuals from underrepresented racial and ethnic groups as well as individuals with disabilities are encouraged to apply.***

Candidates must have a doctoral degree. Such degrees include, but are not limited to, the MD, PhD, DO, DDS, DMD, and PharmD.

##### 1C. Number of Applications Per Institution

Institutions are restricted to 3 nominations. All applicants may be considered for AHRQ-PCORI P30 support. The PEDSnet Scholars Program Steering Committee has decision making authority for final scholar selection.

Each institution will develop its own process and procedures for selecting applicants for the program. Please contact your institutional PEDSnet Scholars Steering Committee contact (refer to contact list at end of document) for more information.

## 2. Requirements

### 2A. Level of Effort

Applicants must have a “full-time” faculty appointment at their institution by July 2024. Instructor and scientist level positions are eligible. Candidates are required to commit a minimum of **50% protected effort** (i.e., a minimum of 6 person-months) to their program of career development and project, for **2.25 years**.

### 2B. Mentorship Team

Before submitting the application, the candidate must identify **two mentors** at their local institution, a scientific mentor, and a health systems operations leader mentor. The PEDSnet Scholar institutional lead may provide applicants with guidance.

A scientific mentor will supervise the proposed career development and research experience. In a letter of support, the mentor should document their expertise in the proposed area of research and demonstrate their commitment both to the career development of the candidate and to the direct supervision of the candidate's research. Scholars will co-develop these plans with their primary mentor, and iteratively discuss their content with their full mentorship team. Content includes short- and long-term professional and personal goals, professional values and mission, an area of specialization and its training plan, and mentorship plan. The scientific mentor's NIH bio sketch should be submitted with the application. For AHRQ-PCORI funded scholars, support will include a **\$5,000 mentor allowance**.

A health system operations mentor is required. The purpose of the health system mentor is to assist the development of the Scholar's knowledge base regarding how their health system operates, its strategy, its governance, and current learning activities that are designed to promote patient, clinician, and health system outcomes. Activities are likely to include periodic meetings with the mentor, connecting with other health system leaders to better understand their role in the organization, participation in health system committee meetings, such as quality, safety, strategic, and patient experience governance meetings and Board meetings, and review of institutional financial, strategic, and operational reports and documents. Learning health system scientists are “embedded” in the health systems they are studying. Thus, gaining a detailed understanding of the institutional context, its history, and its vision for the future are critical parts of Scholar training. The types of institutional roles that health system mentors may have include but are not limited to: Chief Executive Officer; Chief Operating Officer; Chief Medical Officer; Quality Officer; Safety Officer; Chief Nursing Officer; Population Health Leader; Strategy and Transformation Leader; Medical Affairs and Care Management Leader; and Chief Science Officer.

Upon entry into the program, a PEDSnet Steering Committee Member is assigned as the scholar's PEDSnet mentor and will meet as agreed upon, 3-4 times annually. The PEDSnet mentor will serve to provide career and life course mentorship.

Mentors will be expected to complete mentor training through programs offered at their home institutions, that address topics such as approaches to research mentoring, maintaining effective communications, assessing understanding, establishing expectations, addressing diversity, fostering independence, and promoting professional development. Certificates of completion will be collected and maintained by the PEDSnet Scholars program office.

The PEDSnet Scholars mentors are expected to support the inter-institutional PEDSnet learning community of mentors, sponsors, and scientists to accelerate shared learning and broad implementation of research findings. Mentors must participate in evaluation activities conducted by the program evaluator sponsored by AHRQ.

### 3. Program Support and Requirements

#### 3A. Financial Support- 2.25 years

- Funding options:
  1. **AHRQ PCORI P30 funding** (depending on needs of scholars appointed, up to 6 positions available; up to 4 of 6 scholars may receive data scientist effort)
    - Up to \$73,500 in salary support (total costs based on up to 120k base salary) per scholar per year (a minimum of .25 effort must be covered with grant funds; up to 50% of available funds may be used for research costs instead of effort);
    - \$10,000 for research costs (including funds to cover costs for patient and family partners);
    - \$10,000 for conference/travel expenses and a mentor allowance; and
    - .25 effort for a PEDSnet Data Coordinating Center data scientist (for approved projects leveraging multi-institutional PEDSnet data).
  2. **Commitment from Institutional or other extramural funding** to cover required salary effort and research and travel expenses (as described above) (up to 8 positions available)

#### 3B. Program Requirements

Scholars will participate in training experiences that are designed to develop competency in learning health systems science and research. The program's core curriculum will include material from AHRQ LHS research competencies, PCORI Methodology Standards, and exposure to other LHS related topics such as child/family-centered outcomes in observational and interventional research, stakeholder engagement, dissemination and implementation science, applied informatics, leadership, and quality improvement science. A fundamental premise of the required improvement or research project is that it is stakeholder driven and uses a learning health system framework.

Scholars will participate in mandatory PEDSnet Scholar videoconferences (1.5 hours twice a month) which will be focused on delivery of core curriculum content. In addition, PEDSnet Scholars will participate in annual in-person training workshops (required) and complete self-guided on-line modules for related core content. Scholars will conduct

mentored research by a personal mentorship team that includes a research scientist, a health systems leader, and a scientist from another institution within PEDSnet.

## 4. Application

### 4A. Application Components

The following must be submitted as part of the application:

- Cover page (template)
- Scholar project and training plan (details described below)
- NIH/AHRQ bio sketch for applicant
- NIH/AHRQ bio sketch for research mentor
- Letter of support from research mentor
- Letter of support from health systems mentor
- Letter of support from candidate's department chair confirming commitment of effort

*A budget is not required at the time of submission, it will be requested after admission to the program.*

### 4B. Scholar Project and Training Plan Components

This will be a 7-page document, using no smaller than Arial 12-point font, 1-inch margins, and single spacing. References will not be included in the page count. The following lists the required sections for the application and suggested page limits.

- Overview (0.5 pages)
  - An executive summary of the proposed scholar project and mentorship plan.
- Candidate Statement (1 page)
  - Describe the candidate's career goals, commitment to learning health systems science and research and past educational, training, and research experiences related to those interests.
  - Provide evidence of the candidate's potential to develop into an independent investigator or health systems leader.
- Scholar Project (5 pages)
  - Scholars have the option to propose either a research project or an improvement/implementation science project. Projects with clear outcome and impact metrics linked to improvements in health system performance will be viewed as highly desirable. In either case, the project should lead to manuscripts published in the peer reviewed press. All projects should be realistic and achievable within the timeframe of the training program.
  - Statement of the problem (0.5 pages)

- Describe the health, health services, or health system problem that is being investigated and why it matters to health system stakeholders.
- Specific aims (0.5 pages)
  - Describe the project's goal, its specific aims, and the anticipated impact of the findings from the work.
- Methods (4 pages)
  - Describe the data sources and data collection methods, study sample, variables and their construction, and analysis plan. Up to four Scholars will be supported by a PEDSnet Data Coordinating Center data scientist who will conduct analyses using the PEDSnet EHR database. Other Scholars will collect primary data in their local institutions or use PEDSnet data with support offered by their institutional informatics teams. Applicants **nominated by institutions** who are proposing to leverage PEDSnet data via the data scientist support option must submit a brief description of the data use to the PEDSnet Data Coordinating Center *before submitting their application to the Program Office* (a redcap link will be provided on the website), to ensure project scope feasibility.
  - Describe the plan for engaging health system stakeholders (i.e., patients, parents, clinicians, and/or health system leaders). Engagement of patient/parent stakeholders is required. Scholars will learn to take a structured approach for integrating the perspective of partners throughout the conduct of the study and using this information to drive the design and implementation of the project. **As part of the program curriculum participating scholars will be required to complete the PCORI engagement template, a resource to help research teams move from the planning stage to developing a roadmap for executing engagement activities.**
  - Applicants who choose to conduct an Improvement /Implementation project may wish to consult the Standards for QQuality Improvement Reporting Excellence (SQUIRE) 2.0 Guidelines, or the Standards for Reporting Implementation Studies (StaRI) for direction.
  - If you are proposing a project that involves intervention development please describe your implementation approach. **As part of the program curriculum, where applicable, participating scholars will be required to develop an implementation plan that identifies and assesses the strategies and outcomes to be used.**
  - If you are proposing a project that involves Dissemination (Spread and Scale) and Implementation (D&I) research, please describe the approach/ framework you will be using. **As part of the program curriculum, where applicable, participating scholars will be**

**required to develop a D&I plan that identifies and assesses the strategies and outcomes to be used.**

- Describe the relationship between the mentor's research and the candidate's proposed research plan.
  - Highlight the strengths and weaknesses of the proposed methods and alternatives that you may consider.
  - Describe the timeline and key milestones for the project.
  - List peer-reviewed manuscripts and other products that are anticipated to result from either the improvement/implementation project or research.
- Mentorship Plan (0.5 pages)
    - Describe the rationale for selecting the research and health systems mentor and describe their qualifications.
    - Describe a plan that explains the nature of the supervision and mentoring that will occur during the proposed award period. Please describe the proposed health system activities that the candidate may observe/participate in.

## **5. Application Process and Timeline**

The governance for the application process begins with the PEDSnet Scholars Program Steering Committee member at each PEDSnet institution, who may nominate up to 3 individuals. All nominations may be considered for AHRQ-PCORI funded slots. The Scholars Program Steering Committee member from each PEDSnet institution will manage the potential local candidates, and the timeline for internal selection. It is estimated that the internal selection process would occur sometime between February-March 2024 to allow preparation of the final application due to the coordinating center by Thursday May 2, 2024 5pm applicant time zone.

The PEDSnet Scholars Steering Committee will review all applications, and two committee members will interview each candidate via videoconference. Final selection will be based on the review process and other programmatic factors as determined by the PEDSnet Scholars Steering Committee.

## Timeline

Feb	• Program/application announcement
Feb- Mar	• Identification of potential candidates
Mar 1, 4pm ET	• Informational webinar, recording will be available
Mar	• Institution internal nomination process
April	• Pre-Application LHS Design Studios/Office Hours
May 2, 5pm applicant time zone	• Application due to Program Office
Mid May	• Videoconference interviews w/ Steering Committee
Late May	• Review of candidates and scholar ranking/ selection
Jun	• Notification to applicants and AHRQ review
Jul 1	• Scholar appointment

Applications are due **May 2, 2024, 5 pm applicant time zone.**

Please email applications as a single PDF file, in the order of required sections described to: [pedsnet@chop.edu](mailto:pedsnet@chop.edu). **Please do not lock pdf files, as files will be concatenated for the review committee.**

Funding and project start dates are July 1, 2024 for a 2.25 year period.



## 6. PEDSnet Scholar Institutional Leads

**For questions about application requirements and site nominations, please reach out to your Program Executive Committee member. PEDSnet principal investigators are also listed.**

\* Program Director/Co-Director

^ Program Executive Committee Member

+ PEDSnet Site Principal Investigator

<i>Boston Children's Hospital</i>
Donald Goldmann, MD* <sup>^</sup> Professor of Pediatrics Harvard Medical School Professor of Epidemiology, Harvard School of Public Health and Chief Scientific Officer Emeritus and Senior Fellow, Institute for Healthcare Improvement
Kathleen Walsh, MD MSc <sup>^</sup> Director of Patient Safety Research Core, General Pediatrics and Director of Harvard-Wide Pediatric Health Systems Research Fellowship, Harvard Medical School Professor of Epidemiology Harvard School of Public Health
<i>Children's Hospital Colorado</i>
Suchitra Rao, MBBS, MSCS <sup>^+^</sup> Associate Professor of Pediatrics and Associate Medical Director of Infection Control, University of Colorado School of Medicine
<i>Children's Hospital of Philadelphia</i>
Christopher Forrest, MD PhD* <sup>^+</sup> Professor of Pediatrics and PEDSnet Director, Perelman School of Medicine University of Pennsylvania
Gregory Tasian, MD, MSc, MSCE <sup>^</sup> Associate Professor of Surgery and Epidemiology, Perelman School of Medicine University of Pennsylvania
<i>Children's National Hospital</i>
Hiroki Morizono, PhD <sup>^</sup> Associate Research Professor of Pediatrics and Genomics and Precision Medicine and Director of Biomedical Informatics, George Washington University School of Medicine and Health Sciences
James Bost, PhD <sup>+</sup> Research Division Chief of Biostatistics and Study Methodology and Co-Director of the BERD CTSI-CN
<i>Cincinnati Children's Hospital Medical Center</i>
Peter Margolis, MD PhD* Professor of Pediatrics and Co-Director James M. Anderson Center for Health Systems Excellence, University of Cincinnati College of Medicine
Eneida Mendonca, MD, PhD, FAAP, FACMI, FIAHSI <sup>^</sup> Professor of Pediatrics and Chair of Biomedical Informatics, University of Cincinnati College of Medicine
<i>Lurie Children's Hospital of Chicago</i>
Marc Rosenman, MD <sup>^+</sup> Associate Professor of Pediatrics and Director of Chicago Area Patient Outcomes Research Network (CAPriCORN), Feinberg School of Medicine at Northwestern University



<i>Nationwide Children’s Hospital</i>
Christopher W. Bartlett, PhD <sup>^</sup> Principal Investigator, Battelle Center for Mathematical Medicine at the Research Institute at Nationwide Children’s Hospital, Associate Professor of Pediatrics at the Ohio State University
Kelly Kelleher, MD MPH <sup>+</sup> Professor of Pediatrics, Psychiatry and Public Health, Colleges of Medicine and Public Health at The Ohio State University and Vice President of Community Health and Services Research, Nationwide Children’s Hospital
<i>Nemours Children’s Health</i>
Timothy Bunnell, PhD <sup>^+^</sup> Director of Center for Pediatric Auditory and Speech Sciences and Director of Nemours Bioinformatics Core Lab, Head of Speech Research Lab, and Principal Research Scientist
Anne Kazak, PhD ABPP <sup>^+^</sup> Professor of Pediatrics, Sidney Kimmel Medical College at Thomas Jefferson University, Director, Nemours Center for Healthcare Delivery Science
<i>Riley Children’s Health</i>
Colin Rogerson MD MPH <sup>^+^</sup> Assistant Professor of Pediatrics, Division of Pediatric Critical Care at Riley Hospital for Children, Investigator at the Regenstrief Institute Center for Biomedical Informatics
<i>Seattle Children’s Hospital</i>
Dimitri Christakis MD MPH <sup>^+^</sup> Professor of Pediatrics, School of Medicine at University of Washington, Director, Center for Child Health, Behavior and Development
<i>Stanford Children’s Health</i>
Alan Schroeder, MD <sup>^+^</sup> Clinical Professor of Pediatrics, Clinical Professor of Pediatrics - Critical Care, Clinical Professor of Emergency Medicine, and Member of Maternal & Child Health Research Institute (MCHRI), Stanford Children’s Health
<i>Texas Children’s Hospital</i>
Beth Van Horne, MPH, DrPH <sup>^+^</sup> Director of Research, Section of Public Health & Child Abuse Pediatrics, Assistant Professor, Pediatrics, Baylor College of Medicine, Texas Children’s Hospital

**For general questions about PEDSnet Scholar program, please contact:**

JeanHee Moon

[moonj1@chop.edu](mailto:moonj1@chop.edu)

Elana DiCocco

[dicoccoe@chop.edu](mailto:dicoccoe@chop.edu)