PREPARED (Pandemic Preparedness Engaging Primary Care and Emergency Departments) Study: Call for Early Career Researchers and Post-Doctoral Fellows

We are pleased to announce a call for applications for Early Career Researchers and Post-Doctoral Fellows to conduct research in critical areas such as surveillance, screening, rapid testing technologies, data sharing and collaboration, clinical trials, and health system efficiency.

This initiative addresses the objectives of the PREPARED study (https://upstreamlab.org/project/prepared/) and seeks to engage researchers in advancing knowledge and solutions to enhance pandemic readiness and tackle health inequities.

Subject to funding, we aim to recruit one or two Early Career Researchers and one or two Post-Doctoral Fellows. Successful candidates will be expected to commence their roles in September 2025.

Interested applicants should be emerging leaders with expertise and goals that align with the mission, vision and goals of the Upstream Lab. Successful candidates will have demonstrated research experience in relevant fields, including designing and implementing studies that address social determinants of health, utilizing data science to enable proactive care, and conducting clinical trials. Experience in developing innovative interventions, collaborating with community advisory members, and managing population health initiatives is highly valued. This background will equip candidates with the skills necessary to contribute effectively to multidisciplinary research teams and advance knowledge in critical areas of public health. Candidates who have demonstrated success in securing and managing research grants are highly preferred.

We are seeking researchers with expertise and interest in the following areas:

Surveillance and Detection

- Biospecimen collection to help in identifying new pathogens and in detecting and tracking potential pandemics.
- Early Indicators: Identify early indicators of emerging infectious diseases through enhanced surveillance systems.
- Technological Innovations: Explore the role of AI and machine learning in improving surveillance and detection capabilities, using EMR data
- Global Networks: Assess the effectiveness of international collaborations in monitoring and responding to emerging infectious diseases.

Patient Care and Rapid Testing

- Impact of Rapid Testing: Examine the impact on patient care and health outcomes in primary care and emergency settings.
- Benefits and Challenges: Explore the benefits and challenges of using rapid testing to reduce unnecessary antibiotic use in patients with respiratory symptoms.
- Integration in Workflows: Investigate how rapid testing can be seamlessly integrated into existing healthcare workflows.
- Perceptions: Study the perceptions and acceptance of rapid testing among patients and healthcare providers.

Development of Treatments, Vaccines, and Diagnostics

- Data Sharing: Investigate how data sharing between healthcare providers and industry partners can accelerate the development of new treatments, vaccines, and diagnostic tests.
- Engaging Industry Partners: Identify effective strategies for engaging industry partners in developing and distributing pandemic-related healthcare solutions.
- Vaccine Development: Explore novel approaches to vaccine development, including mRNA technology.
- Diagnostic Innovations: Assess the potential of new diagnostic technologies, such as point-of-care testing and home-based testing kits.

Clinical Trials and Patient Linkage

- Linking Patients: Explore how linking patients with acute infections to ongoing clinical trials can improve the speed and efficiency of developing new treatments and vaccines.
- Participation Barriers: Identify barriers and facilitators to patient participation in clinical trials during a pandemic.
- Ethical Considerations: Examine ethical challenges in conducting clinical trials during a pandemic.
- Innovative Trial Designs: Investigate adaptive and decentralized trial designs to enhance research efficiency.

Health System Efficiency

- Point-of-Care Testing and Real-Time Data: Examine how integration can enhance health system efficiency during a pandemic.
- Cost-Benefit Analysis: Analyze the cost-benefit implications of implementing rapid testing and enhanced surveillance systems.
- System Resilience: Study strategies to enhance health system resilience, including resource allocation and crisis management.
- Telehealth and Remote Monitoring: Explore the role of telehealth and remote monitoring in maintaining healthcare delivery during a pandemic.

Eligibility Criteria:

Early Career Researchers (ECRs) must have held their first independent academic position within the last five years. Post-Doctoral Fellows must be within 1-2 years of completing their PhD, and not hold or have taken up an independent academic position as yet.

Application Process:

Interested candidates are invited to submit a curriculum vitae, a one page cover letter detailing their research interests and experience and why the Upstream Lab is a good fit, and a brief proposal (no longer than two pages) outlining their intended research plan during 12-months. Applications will be reviewed after the closing date, and only selected candidates will be contacted.

Contract Length:

The positions offered under this call will be for a fixed term of one year, from September 1 2025 to August 31st 2026, with the possibility of a 1-year renewal based on performance and funding

availability. ECRs will be partially funded and would be expected to carry out 50% of their research activities at the Upstream Lab.

Equity, Diversity, and Inclusion (EDI):
We are committed to fostering an equitable, diverse, and inclusive research environment. Applicants are encouraged to integrate EDI considerations into their research proposals, ensuring that their projects promote diversity in team composition and trainee recruitment, foster an inclusive and accessible work environment, and highlight equity in mentoring and training opportunities. By addressing systemic barriers and creating a culture of inclusivity, we aim to enhance the quality and impact of our research efforts.

We strongly encourage applications from underrepresented groups, including women, Indigenous peoples, persons with disabilities, members of visible minorities, and LGBTQ+ individuals. By welcoming diverse perspectives and experiences, we strive to enrich our research community and drive innovative solutions to global health challenges.

Deadline:
Applications must be submitted by **5 pm EST on June 23rd 2025**.
Contact Information:
For further information or to submit your application, please contact Dr. Isobel Okoye, Senior Research Associate and Talent Development Coordinator, Upstream Lab (Isobel.Okoye@unityhealth.to).