




Center for Emerging Infectious Diseases  
Policy & Research



**ANNUAL REPORT 2023**

*Growing Resilience Against Epidemics*



**Emerging infectious diseases show us how intricately connected we are to each other and the planet around us. To build resilience against new threats, we must respond cohesively, continuously, and proactively.**

**- Nahid Bhadelia, MD, MALD**

**Founding Director, CEID**



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# LETTER FROM OUR DIRECTOR

July 1, 2023

Dear CEID Community,

As CEID marks its two-year anniversary, the world is slowly pulling out of the emergency phase of the COVID-19 pandemic. Despite its birth in the middle of the crisis, CEID's work continues because our goal is to not let the world forget what COVID-19 taught



us about our public health system, our medical response, our society, & ourselves. Author John Barry wrote that the 1918 Influenza pandemic was “the first great collision between nature and modern science. It was the first great collision between a natural force and a society that included individuals who refused either to submit to that force or to simply call upon divine intervention to save themselves from it, individuals who instead were determined to confront this force directly, with a developing technology and with their minds.” Since the start of the COVID-19 pandemic, we have become even more proficient in battling these biological foes with technology. Our vaccines were ready within months. We were able to test their safety and efficacy, & mass produce them within a year. The more profound challenges in the last two years of this crisis became about distributing vaccines and treatments, ensuring their uptake, retaining trust in public health response, & keeping ahead of the evolution of the virus through surveillance. We experienced infectious disease emergencies such as MPOX, Sudan (Ebola) virus, & Marburg virus outbreaks, opening up new battlefronts even as we waged the war against the COVID-19 pandemic, highlighting our ongoing vulnerabilities to emerging pathogens.

Over the last two years, these are the issues on which CEID faculty have focused their research, even as they were engaged in the response itself. As I spent last year on the White House COVID-19 Response Team, the work at the center continued under the leadership of Dr. David Hamer, where our faculty published over 90 papers & received \$6.2 million in funding related to infectious diseases. The center hosted 3 events, both on campus and virtually, drawing in global and local audiences. We hosted both BU student researchers & engaged international scholars. In June 2023, CEID joined the WHO's Global Outbreak & Response Network (GOARN), continuing our commitment to global engagement.

This year, we will launch four research cores highlighting areas of high priority which we think are critical to building resilience against emerging infectious diseases, each led by faculty who are

# LETTER FROM OUR DIRECTOR

leading experts in the field: Climate Change & One Health; Medical & Public Health Response; Data Sciences & Surveillance; & Trust & Public Health Communications. These cores will spark faculty collaboration, produce critical science, generate evidence for action and lead to even greater student and community engagement.

Additionally, CEID will continue to serve as a convening force, bringing together diverse perspectives, to help build effective future outbreak responses on lessons learned. I hope you will continue to join us & support our mission.

A handwritten signature in black ink, appearing to read 'Bhadelia', with a long horizontal flourish extending to the right.

**Nahid Bhadelia, MD, MALD**

**Founding Director**

**BU Center for Emerging Infectious Diseases Policy and Research (CEID)**

# OVERVIEW OF CEID

## ***Mission***

Boston University's Center for Emerging Infectious Diseases Policy and Research (CEID) is a university wide center focused on global health security and linking technical knowledge to policy issues related to emerging pathogens and epidemic threats. CEID's core mission is to improve resilience against threat of emerging & epidemic infectious diseases worldwide through transdisciplinary research, global and local capacity strengthening, training, evidence generation for policy support, and community engagement. The center's faculty represent 9 BU Schools and Colleges as well as external and international affiliates, bringing expertise from virology, clinical infectious diseases and infection control, to epidemiology, data sciences, communications and global health policy.

CEID's work includes multidisciplinary research (funded in part by the National Institutes of Health and National Science Foundation as well as private foundations), technical assistance and training (including a Fogarty International Center funded training program in Liberia, and technical partnerships with national and international organizations), policy support to local and national elected representatives, and impactful public communications in media and through public facing events. The center is a member of the World Health Organization's Global Outbreak Alert and Response Network (GOARN) and the National Special Pathogens Training and Education Center (NETEC), a US based network funded by Department of Health and Human Services.

## ***Method***

We approach our work with GRIT. Just as the root causes that give rise to pandemics are multifactored, our efforts to combat them must be multidisciplinary. That's why we've centered our work around four pillars which we refer to as "GRIT": Governance, Resilience, Innovation, & Trust.

## **GOVERNANCE**

We examine the impact of local, national, and international policies, and how these help and hinder global responses to new infectious disease threats. Simultaneously, we work to find novel ways to connect stakeholders with legislators in real time to provide scientific knowledge, policy recommendations and impact assessments for a variety of legislation.

## **RESILIENCE**

Our researchers center their work around keeping our communities safer and better preparing our healthcare systems. We believe resilience against novel infectious diseases requires engagement of a wide range of partners from both of these settings. Outbreaks fracture us along known fault lines. Hence, we believe achieving health equity is an essential requirement for global health security.

## **INNOVATION**

We believe investment in new biomedical, technical and social innovations can significantly impact the discovery of emerging pathogens and enhance our response. We examine the societal and policy impact of new research; study challenges of deploying new diagnostics, vaccines, and treatments; and identify best practices for evaluating efficacy of new interventions during public health emergencies. Our researchers also evaluate social innovation strategies in response to emerging and reemerging infectious diseases, and work to identify novel surveillance strategies.

## **TRUST**

Building trust between scientists, governments, public health organizations and affected communities is a cornerstone of responsible pandemic preparedness and response. Misinformation and disinformation sow confusion, lead to detrimental effects on individual health, and delay the end of public health emergencies. We examine the evolution of the role of misinformation and disinformation during infectious diseases emergencies, and their public health impact. Our research focuses on identifying evidenced- based strategies for dispelling misinformation and combatting disinformation. We're examining the role of social media platforms and misinformation, addressing vaccine hesitancy and cyber information exchange networks, exploring the role of geopolitics in the use of disinformation, identifying best practices for communication of scientific uncertainty, and reimagining media and public health interactions during outbreaks.

## AY 2022-2023 by the Numbers

**33**

Faculty

**\$6.2 million**

In new & continuing  
research funding

**150**

Faculty Media  
Appearances

**1,655**

Twitter  
Followers

**790**

Event  
Attendees

\*based on in person &  
virtual attendance

**97**

Faculty  
Publications

\*related to emerging  
infectious diseases

**4**

Core  
Research  
Areas



## **Leadership & Staff**

As a University-wide research center, CEID reports to BU's Office of Research. Under the leadership of Founding Director Dr. Nahid Bhadelia and Dr. Gloria Waters, Vice President and Associate Provost for Research at BU, the Center is supported by two new full-time staff members, Anna Bakanova and Cassandra Kocek. Together, our core team has worked tirelessly to develop CEID's overall research, finance, and communications strategies.



**NAHID BHADELIA, MD,  
MALD**  
FOUNDING DIRECTOR



**GLORIA WATERS, PHD**  
VICE PRESIDENT & ASSOCIATE  
PROVOST FOR RESEARCH, BU



**ANNA BAKANOVA, M.ED.**  
ASSOCIATE DIRECTOR, FINANCE  
& ADMINISTRATION



**CASSANDRA KOCEK, MPH**  
COMMUNICATIONS &  
OUTREACH ASSOCIATE

We would also like to acknowledge the work of our former staff members Erika Augustine (Manager of Marketing & Communications), Caitryn McCallum (Director of Research & Partnerships), and Marie Vearling (Associate Director of Finance & Administration).

# BUILDING OUR COMMUNITY

## *Faculty Overview*

We are proud of our faculty team that embodies the multidisciplinary nature of our work. Our outstanding Core Faculty stem from a wide range of schools and colleges at Boston University, including the Schools of Medicine, Public Health, Global Studies, Law, Business, Social Work, and the Colleges of Arts and Sciences, Communication and Engineering. Additionally, our dedicated Affiliate Faculty represent a range of national and international institutions.

**22**  
Core  
Faculty

**across**

**9**  
BU Schools &  
Colleges

**partnering  
with**

**12**  
Institutions  
globally



*The multi-disciplinary nature of CEID offers exciting opportunities for research, analysis, advocacy, and policy development to address current and future threats including climate change, emerging disease spillover events, and pandemic preparedness using the array of expertise available on the BU campus and nationwide given the unique blend of faculty from a broad range of disciplines.*



**David Hamer, MD**  
Interim director of CEID

## Core Faculty



**JOHN CONNOR, PHD**  
ASSOCIATE PROFESSOR,  
MICROBIOLOGY, MED



**MICHAEL DIETZE, PHD**  
PROFESSOR,  
EARTH & ENVIRONMENT,  
CAS



**KEVIN GALLAGHER, PHD**  
DIRECTOR &  
PROFESSOR,  
GDP CENTER, PARDEE



**DAVID HAMER, MD**  
PROFESSOR,  
GLOBAL HEALTH, SPH &  
MEDICINE, MED



**ANDREW J. HENDERSON,  
PHD**  
PROFESSOR,  
MEDICINE &  
MICROBIOLOGY,  
MED



**PATRICIA HIBBERD MD,  
PHD**  
CHAIR & PROFESSOR,  
GLOBAL HEALTH, SPH  
PROFESSOR, MEDICINE &  
PEDIATRICS, MED



**TRACI HONG MA, PHD**  
ASSOCIATE PROFESSOR,  
MEDIA & SCIENCE, COM



**ADAM HUME, PHD**  
RESEARCH ASSISTANT  
PROFESSOR,  
MICROBIOLOGY, MED



**JAI MARATHE, MD, MS**  
ASSISTANT PROFESSOR,  
MEDICINE, MED

## Core Faculty (continued)



**NINA MAZAR, PHD**  
PROFESSOR,  
MARKETING, QUESTROM



**ELLIE MURRAY, SCD**  
ASSISTANT PROFESSOR,  
EPIDEMIOLOGY, SPH



**CASSANDRA PIERRE,  
MD, MPH, MSC**  
ASSISTANT PROFESSOR,  
MEDICINE, MED



**LINDA SPRAGUE  
MARTINEZ, PHD**  
ASSOCIATE PROFESSOR,  
COMMUNITY PRACTICE,  
SSW



**ANDREW STOKES, PHD**  
ASSISTANT PROFESSOR,  
GLOBAL HEALTH, SPH



**GIANLUCA STRINGHINI,  
PHD**  
ASSISTANT PROFESSOR,  
ELECTRICAL & COMPUTER  
ENGINEERING, ENG



**MICHAEL ULRICH,  
JD, MPH**  
ASSISTANT PROFESSOR,  
HEALTH LAW, ETHICS &  
HUMAN RIGHTS, SPH &  
LAW



**JENNIFER WEUVE, MPH,  
SCD**  
ASSOCIATE PROFESSOR,  
EPIDEMIOLOGY, SPH



**LAURA WHITE, PHD**  
ASSOCIATE PROFESSOR,  
BIostatISTICS, SPH

## Core Faculty (continued)



**VERONIKA WIRTZ, PHD**  
PROFESSOR,  
GLOBAL HEALTH, SPH



**MUHAMMAD ZAMAN, PHD**  
PROFESSOR,  
BIOMEDICAL  
ENGINEERING, ENG

## Affiliate Faculty



**RODGERS AYEBARE, MB  
CHB, DTM&H, CIC, MSC**  
INFECTIOUS DISEASES  
SCIENTIST, INFECTIOUS  
DISEASES INSTITUTE,  
MAKERERE UNIVERSITY,  
KAMPALA, UGANDA



**ANGEL DESAI, MD, MPH**  
ASSISTANT PROFESSOR,  
INFECTIOUS DISEASES,  
UC DAVIS



**MOSOKA FALLAH, PHD, MA,  
MPH**  
PRESIDENT & CEO,  
REFUGE PLACE  
INTERNATIONAL,  
HEALTH SECURITY TECHNICAL  
CONSULTANT, WORLD BANK



**KOKULO FRANKLIN, M.PHIL,  
M.SOC.SC.**  
MANAGER/CO-LEAD,  
REGULATORY COMPLIANCE  
& ETHICS  
FHI CLINICAL (FHIC) |  
PREVAIL-LIBERIA



**IAN JOHNSTONE, JD, LL.M**  
PROFESSOR,  
INTERNATIONAL LAW  
THE FLETCHER SCHOOL,  
TUFTS UNIVERSITY



**DEBORAH KOHEVAR,  
MGBA, DVM, PHD**  
DEAN EMERITA, CUMMINGS  
SCHOOL OF VETERINARY  
MEDICINE,  
SENIOR FELLOW, FLETCHER  
SCHOOL, TUFTS UNIVERSITY

## Affiliate Faculty (continued)



**ABIGAIL LOWE, MA**  
ASSISTANT PROFESSOR,  
COLLEGE OF ALLIED HEALTH  
PROFESSIONS, DEPARTMENT  
OF ALLIED HEALTH  
PROFESSIONS EDUCATION,  
RESEARCH, & PRACTICE,  
UNMC



**SYRA MADAD, DHSC, MSC,  
MCP**  
SENIOR DIRECTOR,  
SYSTEM-WIDE SPECIAL  
PATHOGENS PROGRAM  
NYC HEALTH & HOSPITALS



**PREETI MEHROTRA, MD, MPH**  
SENIOR MEDICAL DIRECTOR,  
DIVISION OF INFECTION  
CONTROL/HOSPITAL  
EPIDEMIOLOGY  
SILVERMAN INSTITUTE &  
DIVISION OF INFECTIOUS  
DISEASES, BETH ISRAEL  
DEACONESS MEDICAL CENTER,  
HARVARD MEDICAL SCHOOL



**LARA SALAHI, ED.D.**  
ASSISTANT PROFESSOR,  
JOURNALISM  
ENDICOTT COLLEGE



**LAUREN SAUER, MSC**  
ASSOCIATE PROFESSOR,  
EMERGENCY MEDICINE,  
JOHNS HOPKINS MEDICINE



**CHRISTINA YEN, MD**  
ASSISTANT PROFESSOR,  
DEPARTMENT OF INTERNAL  
MEDICINE, UNIVERSITY OF  
TEXAS SOUTHWESTERN  
MEDICAL CENTER (UTSW)

# RESEARCH

## Core Focus Areas

In Summer 2023, BU Center for Emerging Infectious Diseases Policy and Research (CEID) launched Core Research Initiatives which will underpin the main research areas the center will focus on over the next two academic years. Core Research Initiatives are meant to accelerate the scholarly activities activity, grant applications, faculty collaboration and stakeholder engagement in a particular area of high priority in the field as it relates to emerging infectious diseases.

### Data Science and Surveillance

*Led by Drs. Kayoko Shioda and Laura White*

The CEID data science and surveillance core will focus on bringing together researchers working to develop new data sources, methods, and tools to identify, monitor, and characterize emerging infectious disease threats. This involves hosting events to bring together researchers to synergize their efforts and encourage new collaborations, particularly between data owners, methodologists, and practitioners to generate novel approaches to surveillance. The core envisions this being a group that can generate ambitious ideas and plans for the role of data science in preparing for and combatting emerging infectious disease threats.

### EIDs, Climate Change, and One Health

*Led by Drs. David Hamer and Kayoko Shioda*

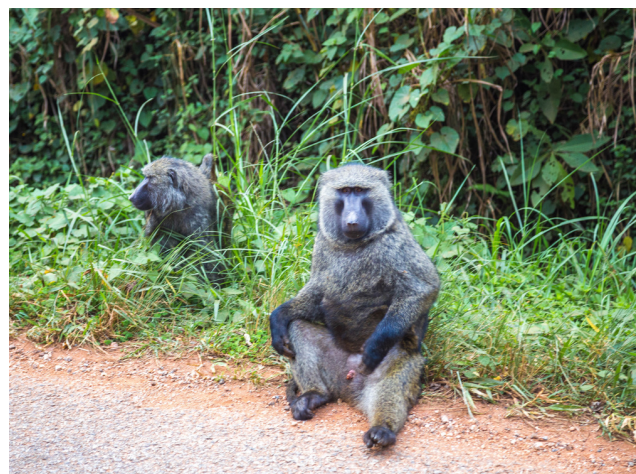
The focus of the CEID One Health and

Climate Change core is to bring together experts from ecology, climate change, One Health, planetary health, emerging infectious diseases, and systems science, along with practitioners and policy experts in public health surveillance and pandemic preparedness, to identify, review, and prioritize research gaps that must be addressed to prevent future global pandemics. The core aims to develop new data sources, methods, and tools to identify, monitor, and characterize emerging infectious disease threats in the era of climate change.

### Public Health, Medical Preparedness, and Response to EIDs

*Led by Dr. Nahid Bhadelia*

The focus of the CEID Public Health and Medical Response Core is to link researchers and practitioners from clinical fields, basic and translational sciences, public health and policy sectors to evaluate and understand how diagnostics, vaccines,



# RESEARCH

## Core Focus Areas

and therapeutics for priority pathogens can be developed and distributed faster and more equitably within the US and globally. This core will study the architecture and efficacy of the national and international public health responses against emerging infections between and during outbreaks. Additionally, it will conduct healthcare and health services utilization research in the setting of emerging infectious diseases. Lastly, the core will examine how infection control and clinical standards of care, research capacity as well as medical practice can be improved in the setting of evolving data surrounding novel diseases.

We will examine historic case studies through existing data sources, conduct evaluation of public health and medical polices set during outbreaks, develop new methodology to predict success of outbreak responses and identify best practices for public health and policy leaders as well as clinicians.

### **Trust and Public Health Communications during Infectious Diseases Outbreaks**

*Led by Drs. Traci Hong and Veronika Wirtz*

Trust in science and in public health institutions and organizations is essential to effectively mobilize citizens to respond to threats to public health and safety. However, over the last few decades, especially during the COVID-19 pandemic, public opinion of science has gradually diminished the ability

of organizations and institutions to translate science into practical guidance to promote public health.

The CEID Core on Trust and Public Health Communication during Infectious Diseases Outbreaks, through transdisciplinary research, aims to identify the best policies and practices a) to share information with the general public as well as specific stakeholders before and during a fast moving infectious diseases crisis, and b) to build trust in science and public health institutions and organizations, especially as they related to infectious diseases control.





## Research We're Doing

### Defining Long COVID

When School of Social Work (SSW) associate professor Linda Sprague Martinez, Ph.D. set out to explore vaccine equity and hesitancy among marginalized communities, she didn't anticipate the project would lead her to becoming part of the group that would work to define long COVID. As she interviewed individuals about why their communities were wary of vaccination, a topic that kept coming up was the lasting symptoms they experienced long after contracting COVID. Yet, long COVID was rarely discussed. "People weren't talking about long COVID with each other, or just weren't aware of it," says Sprague Martinez. Her work has helped highlight the barriers to accessing care for long COVID for these patients.

Because long COVID varies so much both in severity and the types of symptoms experienced, it has been hard for medical establishments to formally diagnose it. Without a clear condition to diagnose, it has been a challenge to assess the true impact of how many people suffer from long COVID. Additionally, it is hard for patients who cannot take time off work to make appointments to many different medical specialists that have been involved in the care of long COVID. In 2022, Dr. Bhadelia and Dr. Sprague Martinez received a grant from the Massachusetts Coalition for Pathogen Readiness to address long COVID from clinical and social sciences perspectives, Post-Acute Sequelae of SARS-CoV-2 Health Equity Core. The goal of Sprague Martinez's research includes: "1) Identifying the impact of long COVID on diverse Black and



Latinx communities in Massachusetts and identifying barriers to long COVID treatment; 2) Increasing awareness and access to long COVID treatment and resources in Black and Latinx communities in Massachusetts, including the primary care providers serving them; & 3) Influencing relevant policies at the organizational, municipal, state and national levels."

Working with other multidisciplinary faculty at CEID has enabled Dr. Sprague Martinez to expand her partnerships with Boston Covid Recovery Center (BCRC) at Boston Medical Center. With BCRC, she is working to define this condition and determine how many people continue to experience long COVID. "Through CEID, I've been able to work with other experts from across BU- in the [Chobanian & Avedisian] School of Medicine, [College of] Communications, School of Public Health- who I normally wouldn't cross paths with," she says. This project has also created leadership opportunities for the SSW students working on the project with her. "One has taken the lead on our data analysis, and another has been the project manager."

Her research paper “[How is COVID-19 Impacting You? A Community-Based Photovoice Workshop](#)” captured the often-contradicting emotions felt by so many during the pandemic, participants citing both a feeling of isolation and a sense of urgency. Photovoice projects like this allow participants to use photography to capture their experiences and can make the research they are participating in more accessible. [Using accessible, plain language to disseminate research](#) is something Sprague Martinez is passionate about promoting for its ability to restore trust in science among people who feel disconnected from or distrustful of it.

As a social worker, Sprague Martinez works on a macro level to create systemic change that shapes people’s lives. When she, along with MA state representative Mindy Domb, first met with the MA Department of Public Health (DPH) to discuss policies to support those with long COVID, the DPH was unsure they could enact such policies without a clear definition of the condition. So, one of her next projects, building on the findings of her research, is serving on the [academy National Academies of Sciences, Engineering, and Medicine](#) committee that is creating the definition of long-COVID. Additionally, she hopes to increase awareness of long COVID and providing multilingual support for people with long COVID.

**Boston University and University of Liberia Emerging and Epidemic Virus Research (BULEEVR)**

Supporting research capacity in low- and middle-income countries (LMICs) is an essential component of building resilience

against new emerging threats. Scientists in LMICs help develop research agendas that reflect the needs of their communities, build trust in those communities for critical science, are advisors to policy makers during outbreaks and serve as mentors for the next generation of trainees. The idea for BULEEVR was developed in 2017 by Drs. Nahid Bhadelia and Mosoka Fallah. In response to the 2014-2016 Western Africa Ebola outbreak, the need to promote infectious disease research at the doctoral level in Liberia, led by Liberian researchers was obvious. Liberia’s history has been marred by a devastating 14-year civil war that ended in 2003, leading to the emigration of a significant number of scientists, researchers, and public health practitioners. Additionally, the 2013-2016 Ebola Virus Disease (EVD) epidemic further crippled the struggling healthcare and public health infrastructure with the loss of 8% of its physicians, nurses, and midwives. Since 2017, BULEEVR program has received a planning grant and then a training grant to meet its mission.

The overarching goal of BULEEVR is to develop a culture of research in Liberia and to increase the number of PhD trained researchers who can engage in existing and new critical research in public health and infectious diseases of interest to their home country. To achieve this, the two universities have partnered to increase interest in graduate level studies among University of Liberia students and prepare them to be competitive applicants to PhD programs in basic, translational, & public health sciences. Five out of seven BULEEVR trainees in the first cycle of the grant have been admitted to or have started PhD

programs, and one has completed a Masters in Clinical Research. This is despite the challenges posed by the COVID-19 pandemic.

Two of the BULEEVR students, Sam Gebeh and Sam Toszay spent the last year on the BU medical campus, learning from our academic community while sharing their unique experiences and insights.

Other BULEEVR Scholars worked with CEID faculty on research projects. Kokulo Franklin worked with CEID researchers on a project examining the ethical dilemmas related to care of patients with highly communicable diseases, and Dr. Keith Gray completed critical project examining the impact of Ebola epidemic on tuberculosis diagnosis and treatment in Liberia, mentored by Dr. Nahid Bhadelia.

BULEEVR leadership from Boston University includes Dr. Andrew Henderson (PI), Dr. Patricia Hibberd (PI), Dr. Nahid Bhadelia, and from University of Liberia, Dr. Mosoka Fallah, who was recently succeeded by Dr. Bernice Dahn.

A major focus for 2021 was to help BULEEVR scholars develop competitive graduate

applications. Each of these students worked with a personalized mentorship team that include mentors in Liberia and at BU, which guided students through a range of professional development activities that extended from writing manuscripts, critical thinking, PhD applications, and foundational knowledge. In addition, BULEEVR organized workshops and seminars that focused on emerging infectious diseases and public health concerns for Liberia, as well as journal clubs to foster a community and a culture of science over the last four years during and post COVID. In 2023-2024, CEID will cosponsor pilot research grants which allow BULEEVR scholars to work with BU faculty in critical science in Liberia.



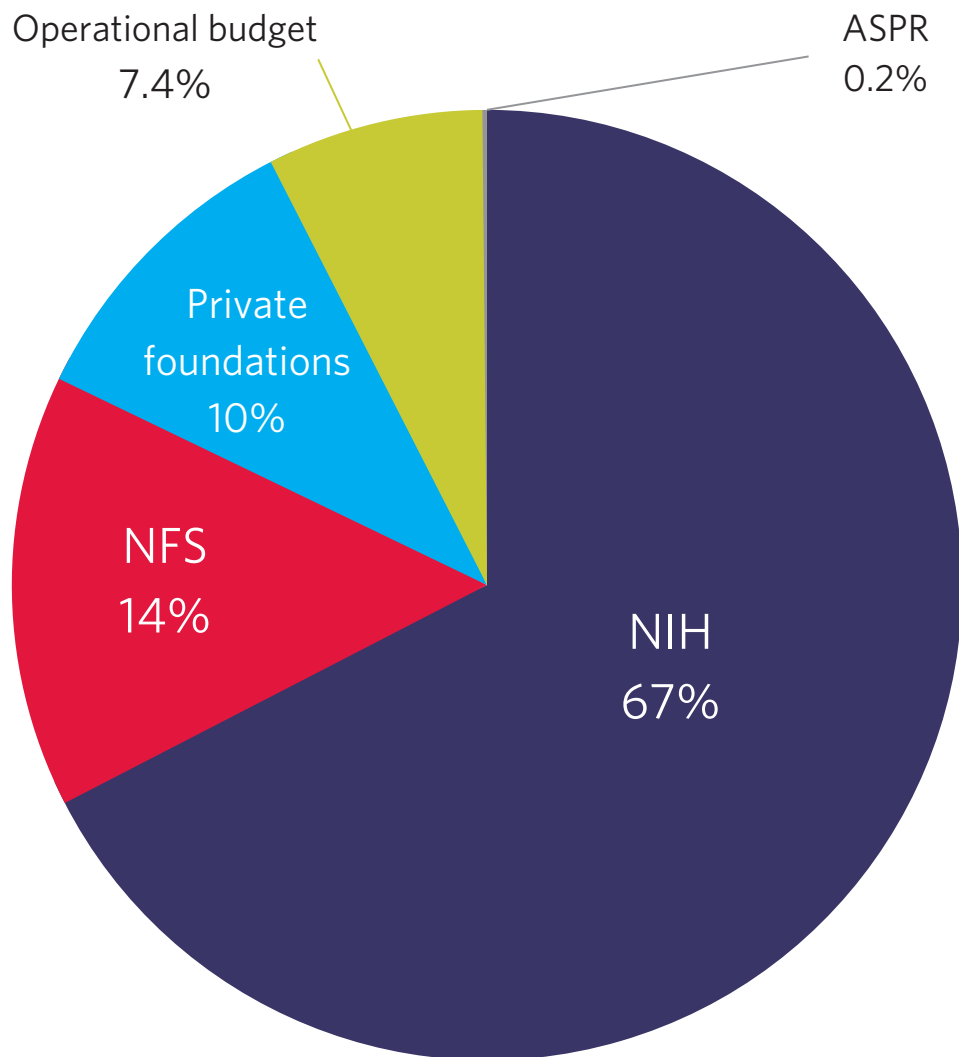
**Sam Toszay, M.Sc.**  
BULEEVR Scholar

*"This invaluable opportunity has not only propelled my academic growth but has also profoundly impacted my personal progress, allowing me to realize my career aspirations in the field of clinical research. The BULEEVR program's support has not only shaped my scientific development but has also instilled in me a sense of purpose and determination to make significant contributions to the field of clinical research."*



## Funding Sources

This year CEID has received over \$6.2 million in new and continuing research funding, on top of our operational budget. This funding represents grants both catalyzed or led by CEID. Our primary sources of research funding have been the National Institutes of Health (NIH), National Science Foundation (NSF), Administration for Strategic Preparedness and Response (ASPR), and other private foundations.



## Events

Over the past year, CEID has convened several public events related to emerging infectious diseases. Our events fostered engaging discussions and collaboration across the university.

**Monkeypox: old disease, new fears.**  
 Monday, August 29 12:00pm - 1:30pm ET Online

**Panelists:**

- Sean Cahill**  
 Director of Health Policy Research at the Fenway Institute  
 Adjunct Associate Professor at Boston University School of Public Health
- Angela Rasmussen**  
 Research Scientist Vaccine and Infectious Disease Organization University of Saskatchewan
- Elle Lett**  
 Statistician-epidemiologist Perelman School of Medicine
- David Hamer**  
 Professor of Global Health and Medicine Boston University School of Public Health and Boston University School of Medicine

**Moderator:**

- Craig Andrade**  
 Associate Dean for Practice Boston University School of Public Health

BU School of Public Health | BU Center for Emerging Infectious Diseases Policy & Research | BU LGBTQIA+ Center for Faculty & Staff

**Monkeypox: Old Disease, New Fears** (virtual) in partnership with SPH and The LGBTQIA+ Center for Faculty & Staff

**Public Health Communication In An Era of Mis- and Disinformation: A Discussion with UN Under-Secretary-General for Global Communications Melissa Fleming (COM '89)** (hybrid) in partnership with BU Alumni Association, College of Communication, Global Development Policy Center, Hariri Institute for Computing and Computational Science & Engineering, Pardee School for Global Studies



**Promoting Policies and Research to Prevent and Prepare for Pandemics** (virtual) featuring two panel discussions, the first with Dr. Matthew Hepburn, Dr. David Hamer, Lauren Sauer, MS, & Dr. Diafuka Saila-Ngita, the second with Dr. Gerald Keusch, Dr. Linda Saif, & Dr. Stanley Perlman

## Partnerships

CEID continued to strengthen existing relationships and forged new partnerships with organizations, stakeholders, academic institutions, and community based organizations over the course of this year. Some of the organizations and initiatives we are proud to work with include:

### **National Emerging Special Pathogens Training and Education Center (NETEC)**

NETEC is a collaboration between several universities and hospitals throughout the United States, focusing on special pathogen preparedness and response with the goals of driving best practices, closing knowledge gaps, and developing innovative resources. NETEC's vision is a sustainable infrastructure and culture of readiness for managing suspected and confirmed special pathogen incidents across the United States public health and health care delivery systems.

### **National Emerging Infectious Diseases Laboratories (NEIDL)**

The NEIDL ("needle"), Boston University's maximum containment research program, is a sister institute of CEID and where CEID staff are based. The collaboration between CEID and the NEIDL - including a number of NEIDL faculty acting as core CEID faculty - has led to dynamic events featuring worldwide partners and engaging in dialogue and stakeholder engagement to improve global response to infectious diseases threats.



### **WHO's Global Outbreak Alert & Response Network (GOARN)**

GOARN is a World Health Organization network of over 250 technical institutions and networks globally that respond to acute public health events with the deployment of staff and resources to affected countries. Coordinated by an Operational Support Team based at the WHO headquarters in Geneva and governed by a Steering committee, GOARN aims to deliver rapid and effective support to prevent and control infectious diseases outbreaks and public health emergencies when requested. CEID joined as a member of GOARN in 2023.

# COMMUNICATIONS & MEDIA

## Communications Strategy

One of our core areas of focus is effective public health communications during emerging infectious diseases outbreaks, including combatting mis- and disinformation. Therefore, our communications strategy is centered around sharing accessible and evidenced-based information on emerging infectious diseases in real time via traditional and new media. We believe that this system of values and approach are why CEID has a strong core audience, which we are continuing to grow and engage.

This year we have maintained our digital presence on Twitter, LinkedIn, and YouTube, as well as our own website. Looking ahead, we plan to increase our volume of content and expand to other platforms, such as Instagram and Threads, in order to increase our reach and engage new audiences.



## Media Appearances

We promote the expertise of CEID faculty on all of our communications channels. Our faculty have been a trusted source of information throughout the course on topics including COVID-19, mpox, & malaria. They have been featured on and quoted in countless news and media outlets, including:

nature STAT TIME Science The Boston Globe



The New York Times



JAMA Network™

The Washington Post



KFF Health News



The Atlantic



CBC



AXIOS SLATE



SELF InStyle INSIDER

# PUBLICATIONS

CEID faculty released over 90 publications related to emerging infectious diseases in the past year. Below is a selection of highlighted work.

- **JAMA Network Open:** Examination of SARS-CoV-2 In-Class Transmission at a Large Urban University With Public Health Mandates Using Epidemiological and Genomic Methodology (Drs. David Hamer & John Connor)
- **American Journal of Public Health:** How Is COVID-19 Impacting You? A Community-Based Photovoice Workshop (Dr. Linda Sprague Martinez)
- **Health Promotion International:** Misinformation messages shared via WhatsApp in Mexico during the COVID-19 pandemic: an exploratory study (Dr. Veronika Wirtz)
- **JAMA Network Open:** Duration of Symptoms and Association With Positive Home Rapid Antigen Test Results After Infection With SARS-CoV-2 (Dr. John Connor)
- **The Lancet:** COVID-19 mortality and excess mortality among working-age residents in California, USA, by occupational sector: a longitudinal cohort analysis of mortality surveillance data (Dr. Andrew Stokes)
- **BJOG:** COVID-19 Antibody Positivity Over Time and Pregnancy Outcomes in Seven Low-and-Middle-Income Countries: A Prospective, Observational Study of the Global Network for Women's and Children's Health Research (Dr. Patricia Hibberd)
- **Nature:** Spike and nsp6 are key determinants of SARS-CoV-2 Omicron BA.1 attenuation (Dr. John Connor)
- **PLoS One:** Researching COVID to Enhance Recovery (RECOVER) adult study protocol: Rationale, objectives, and design (Drs. Nahid Bhadelia & Jai Marathe)
- **BMJ Global Health:** Quality of clinical evidence and political justifications of ivermectin mass distribution of COVID-19 kits in eight Latin American countries (Dr. Veronika Wirtz)
- **The Lancet Infectious Diseases:** Epidemiological and clinical characteristics of patients with monkeypox in the GeoSentinel Network: a cross-sectional study (Dr. David Hamer)
- **BMC Health Services Research:** The Black women first initiative: using implementation science to examine bundled interventions to improve care and treatment coordination for Black women with HIV (Dr. Linda Sprague Martinez)
- **The Journal of Infectious Diseases:** Pathogenicity of Lloviu and Bombali viruses in IFNAR<sup>-/-</sup> mice (Dr. Adam Hume)
- **Open Forum Infectious Diseases:** Monkeypox Vaccination Strategy and Missed Opportunities in STI and HIV Prevention: An Urban Sexual Health Clinic's Experience During a Public Health Emergency (Dr. Cassandra Pierre)
- **PLoS One:** Comparison of anterior nares CT values in asymptomatic and symptomatic individuals diagnosed with SARS-CoV-2 in a university screening program (Drs. Laura White & David Hamer)
- **Pathogens:** Establishment of an Inactivation Method for Ebola Virus and SARS-CoV-2 Suitable for Downstream Sequencing of Low Cell Numbers (Dr. Adam Hume)



# LOOKING FORWARD

July 1, 2023

On the horizon, the global community is contending with how we will make the world safer through efforts such as the Pandemic Accord negotiations, the launch of the Pandemic Fund, and the commitments to the “100 Day Mission” which aims to make investments enabling the world to make safe, effective vaccines, therapeutics, and diagnostics within 100 days of identification of a new pandemic threat. Closer to home, the critical work will be to help resolve the gaps in our public health and medical responses which were exposed by the pandemic, even as we identify what worked and can be built on.

Centers like CEID have the ability coming out of the COVID-19 pandemic to serve as a memory reservoir, a place where intellectual capital can be sourced, so we don't lose the experiences of the last three years. Our goal is to continue to serve that role, while providing technical expertise to help answer policy questions about emerging pathogens during this complex time.

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Photo credits throughout: Nahid Bhadelia (pages 2, 7, 15, 16, & 22), BU School of Social Work (page 17), open source (pages 1 & 2)

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