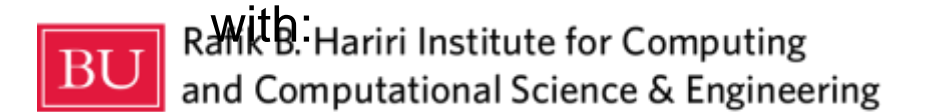


BU Center on Emerging Infectious Diseases



In collaboration



BEACON

Biothreats Emergence, Analysis, and Communications Network

Britta Lassmann, MD

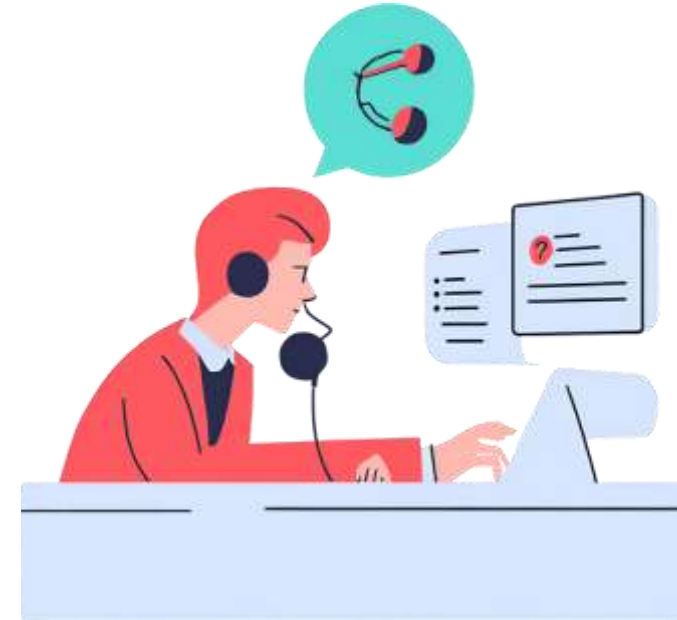
Co-founder and Co-director, BEACON
BU Center on Emerging Infectious Diseases (CEID)



We live in an
age of
epidemics



Detectio
n



Reportin
g

Challenges:

- Political transparency
- Only focused on human health
- Disparate sources
- Data sharing and interoperability
- Language barriers
- Lack of context and prioritization/prognostication
- Lack of scalability during epidemics/pandemics
- Data granularity
- Lack of demographic information
- Behind paywall



Respons
e

- Online news aggregators
- Eyewitness reports
- Online expert-curated discussions
- Validated official reports
- 12 languages, 24/7

Signal

Detection



HealthMap
(web scrapping)



Public Health Partners



Individual Communication

Signal Verification & Context



- Globally based SMEs
- Network of trust
- Multidisciplinary expertise
- Many ex-ProMED
- Authoring online reports



Pandemic

LLM

- Signal Prioritization
- Translation
- Copy editing and drafting
- Inclusion of reference data



Open-source Reports

(& LLM Models)

- Near real time
- Context + data
- All UN languages
- Practitioner discussion
- Visual & data layers

Predictive

Intelligence



- Predicting scope, spread & severity
- Linked to SME verification
- Generated for different use cases

BEACON

Biothreats Emergence, Analysis, and Communications Network

PROGRAM COMPONENTS



Web platform & predictive intelligence



International Governance Board



Global Training Program



Community of Practitioners

BEACON values

- Transparent, fast, One Health focused
- Near real time, open source
- Free of political and commercial constraints
- Operating as a global public good – freely available to all

BEACON goals

- Context regarding why a new “signal” matters
- Serve as platform for collaboration in outbreak response
- Linkage to data, reference materials, clinical guidelines and situation reports
- Predictive intelligence can guide response scale and scope
- Enables research in public health, AI, policy and natural sciences

Who can BEACON help?



FUNDERS



BILL & MELINDA GATES foundation



LEADERSHIP



Nahid Bhadelia, MD, MALD
Director



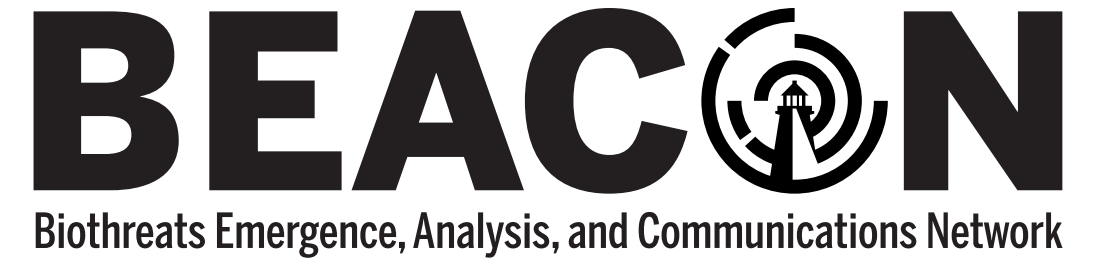
Britta Lassman, MD
Co-Director, Editor, Human moderation



John Brownstein, PhD
Co-Director, Digital Surveillance and Platform Development



Ioannis Paschalidis, PhD
Co-Director, Predictive Intelligence and Large Language Models



ADVISORS

Robert Brown, President Emeritus, Boston University

Gloria Waters, Provost, Boston University

Jeremy Farrar, Chief Scientist, WHO

Larry Madoff, Massachusetts Department of Public Health, Editor Emeritus of ProMED

Marjorie Pollack, former ProMED Deputy Editor

Leo Liu, former Associate Editor for ProMED

Maria Jacobs/ former ProMED Senior Technical Editor

Matt Levinson, former Associate Editor for ProMED

TECHNICAL PARTNERS & COLLABORATORS



Boston University Office of Research

