Alliance Discussion

featuring
Dylan George, PhD

October 27, 2022
Today’s Guest

Dylan George, PhD
Director of Operations for the Center for Forecasting and Outbreak Analytics (CFA), U.S. Centers for Disease Control and Prevention
Early Warning Saves Lives

Galveston Hurricane

Image courtesy of Encyclopedia Britannica
Analytics Inform Response Efforts Across an Epidemic

Examples of Outbreak Analytics

- Prospective Scenario Analyses
- Risk Assessment Tools
- Parameter Estimations
- Vaccine Effectiveness
- Pathogen Characterization
- Disease Risk Mapping
- Burden, Impact Assessments
- Therapeutic Effectiveness
- Phylogenetics
- Disease Forecasting
- Outbreak Management Scenario Analyses

Graphic courtesy of bnex/iqt
CFA has awarded more than $52 million to academic, federal, and private partners to advance:

- Advancing science of forecasting, outbreak analytics
- Developing technology architecture, compute power
- Data science workforce & skill development
- Supporting federal, state, local decision-maker modeling needs
- Data collection & sharing mechanisms

**Real-time, USG disease forecasting capability to support decision-making needs at the federal, state, and local levels**
Guiding Principles for CFA Design

1. **Mission Impact**
   CFA will focus on saving lives and protecting people through outbreak data, forecasts and analytics.

2. **Open and transparent**
   CFA will make data, analyses, and scientific methods open to the public in human and machine-readable formats as much as possible.

3. **Collaborative**
   CFA will work with partners, including in the public sector, private sector, academia, and civil society to coordinate efforts and maximize impact.

4. **Equity focused**
   CFA will support efforts to achieve health equity by using data to identify and track health disparities in outbreaks and inform policies to address those disparities.
Advancing weather forecasting capabilities took decades

Needed ingredients:
- Data
- Models
- People
- Computational Power
- Specific Use Cases
- Sustained Funding

Diseases forecasting, analytics still in early stages
Questions?

Learn more: cdc.gov/cfa
Get in touch: cfa@cdc.gov
Join us next time!

Wednesday, November 2, at 1:30 p.m. ET

Adam Felsenfeld, PhD
Program Director for the Division of Genome Sciences,
NHGRI