

National Institute of Allergy and Infectious Diseases

NIAID Overview and International Portfolio

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Director, Office of Global Research

NIAID

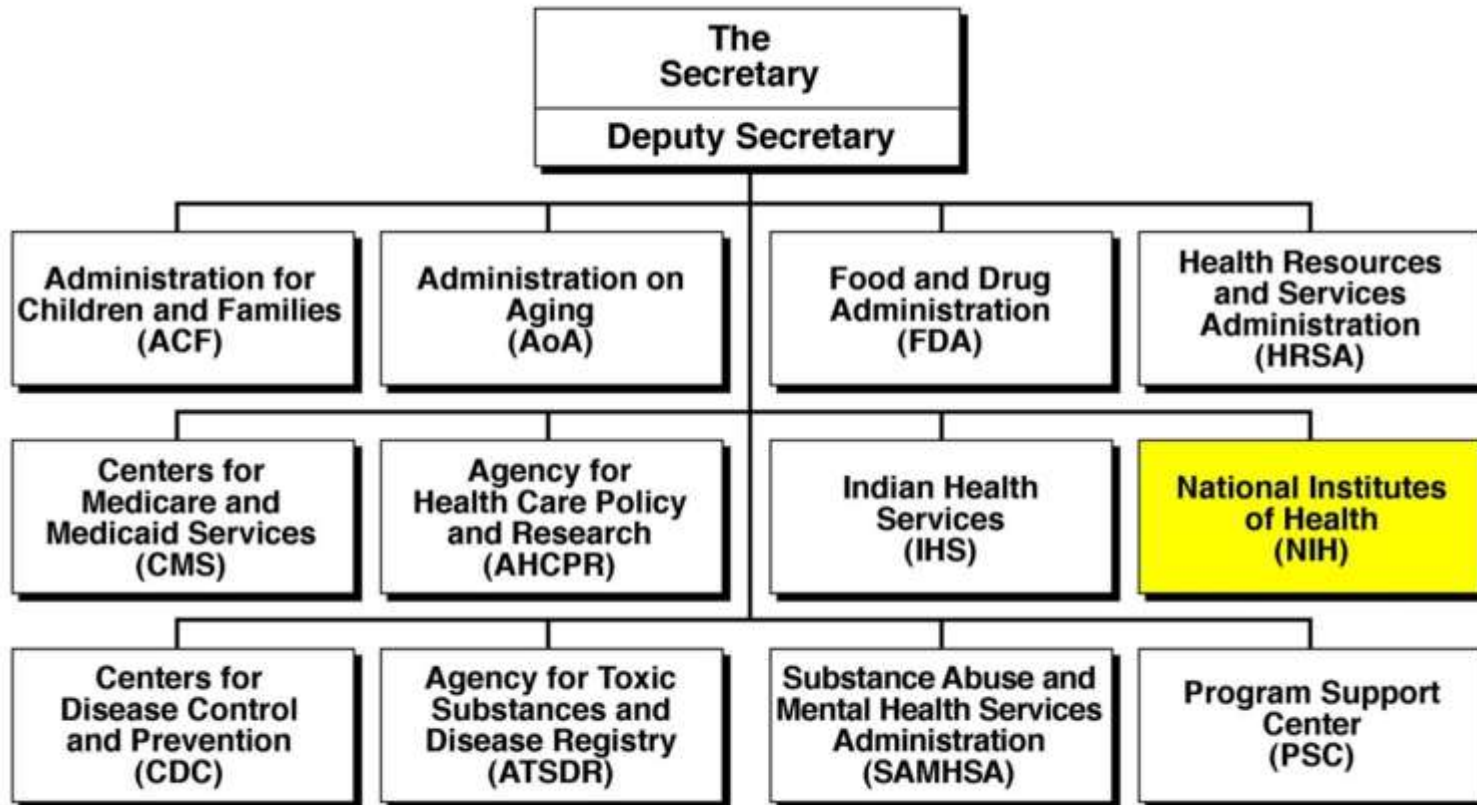


National Institute of
Allergy and
Infectious Diseases

National Institutes of Health

March 20, 2023

U.S. Department of Health and Human Services



U.S. National Institutes of Health Mission



NIH's Mission:
**Science in Pursuit of Knowledge
to Improve Health**

NIH: A Two-Component System



~80%
of funds for
grants/contracts to
support research in US
and internationally



~20%
of funds for
research at NIH

**National Institutes of Health
Main Campus – Bethesda, Maryland**



>300,000 Scientists
>2,500 Institutions

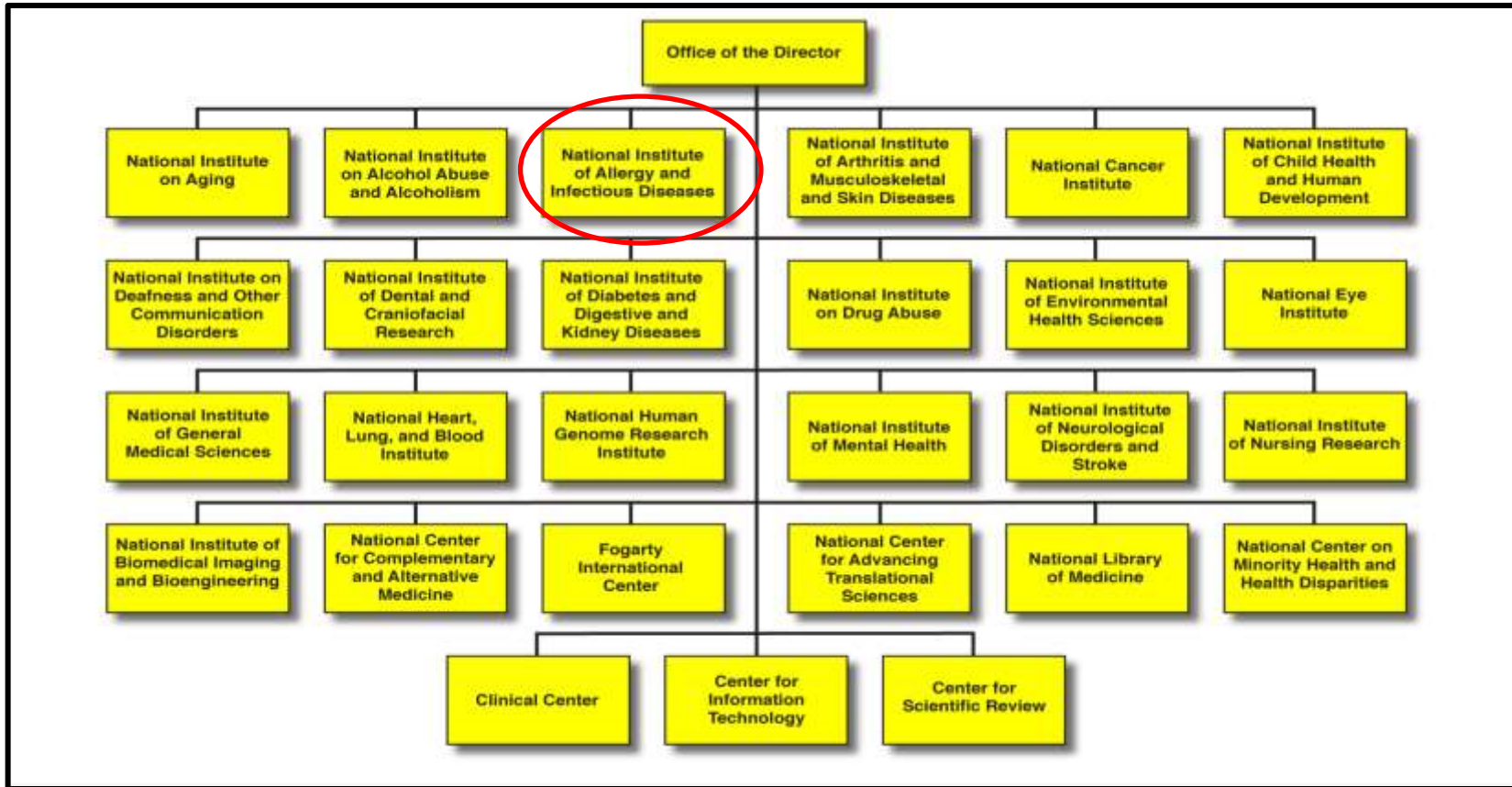
U.S. National Institutes of Health

National Institutes of Health Main Campus – Bethesda, Maryland

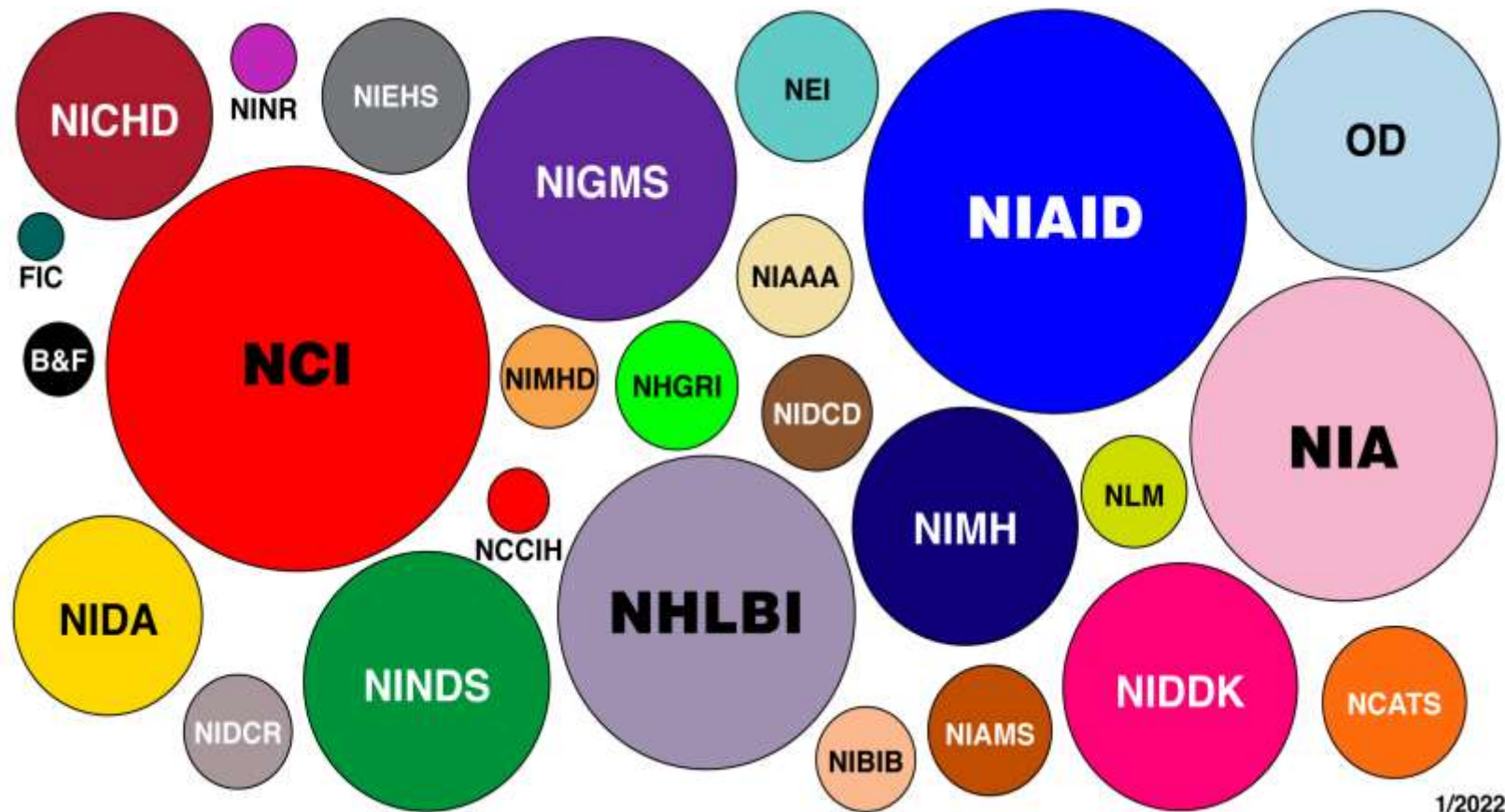


- 27 Institutes & Centers; 6,000 researchers; 27,000 staff
- NIH Clinical Center - largest *research hospital*
- National Library of Medicine - largest biomedical library (PubMed)

U.S. National Institutes of Health

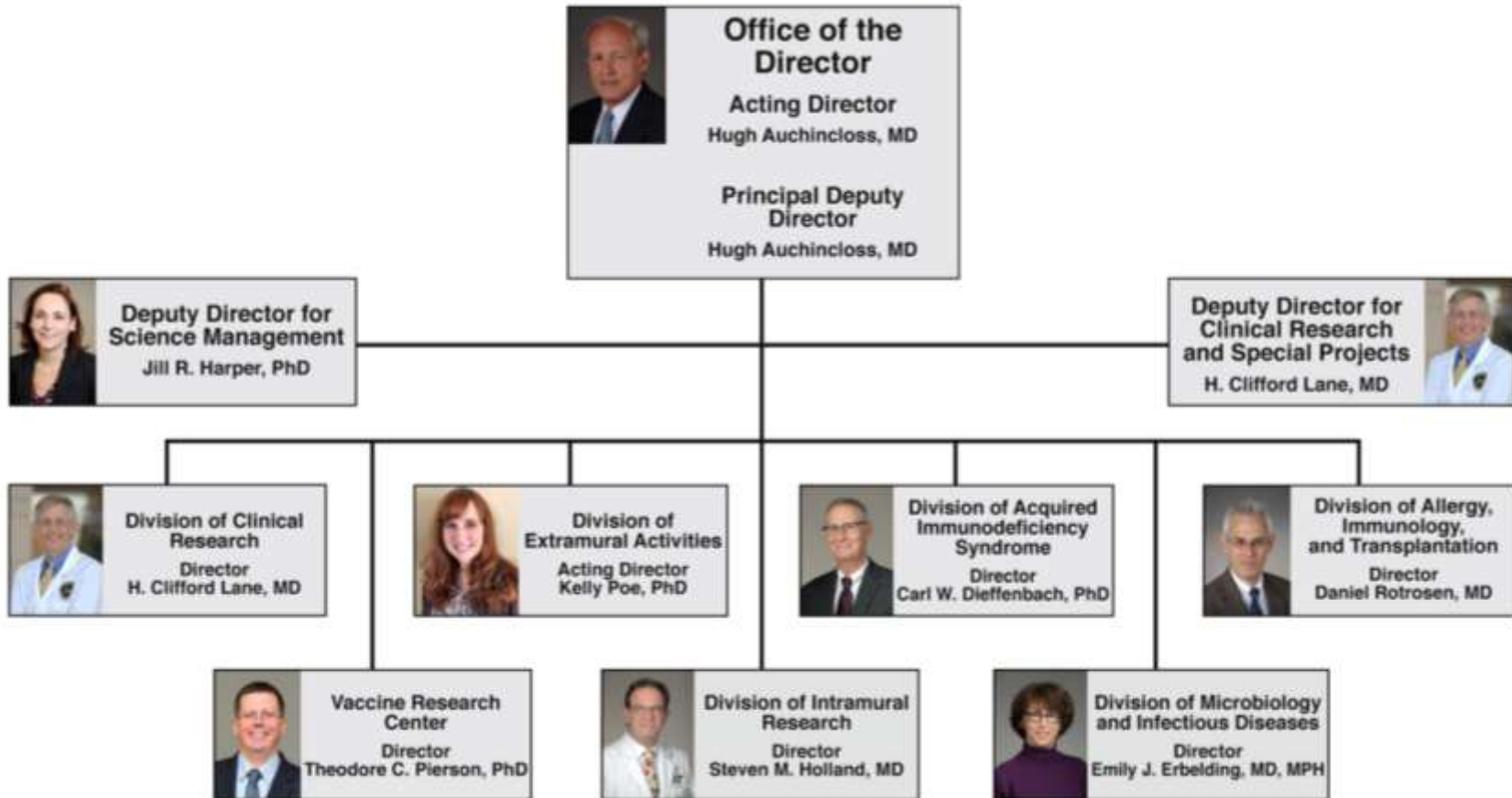


NIH Budget by Institute/Center, FY 2021



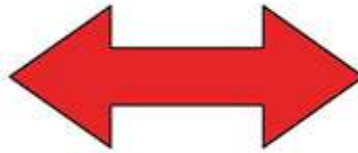
1/2022

NIAID Organizational Structure

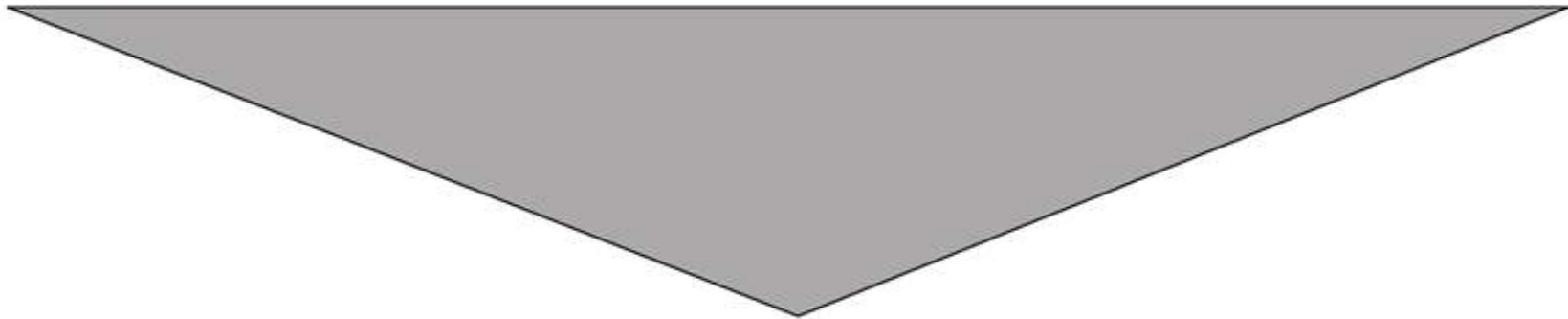


NIAID Research: A Dual Mandate

Maintain and “grow” a robust basic and applied research portfolio in microbiology, infectious diseases, immunology and immune-mediated diseases

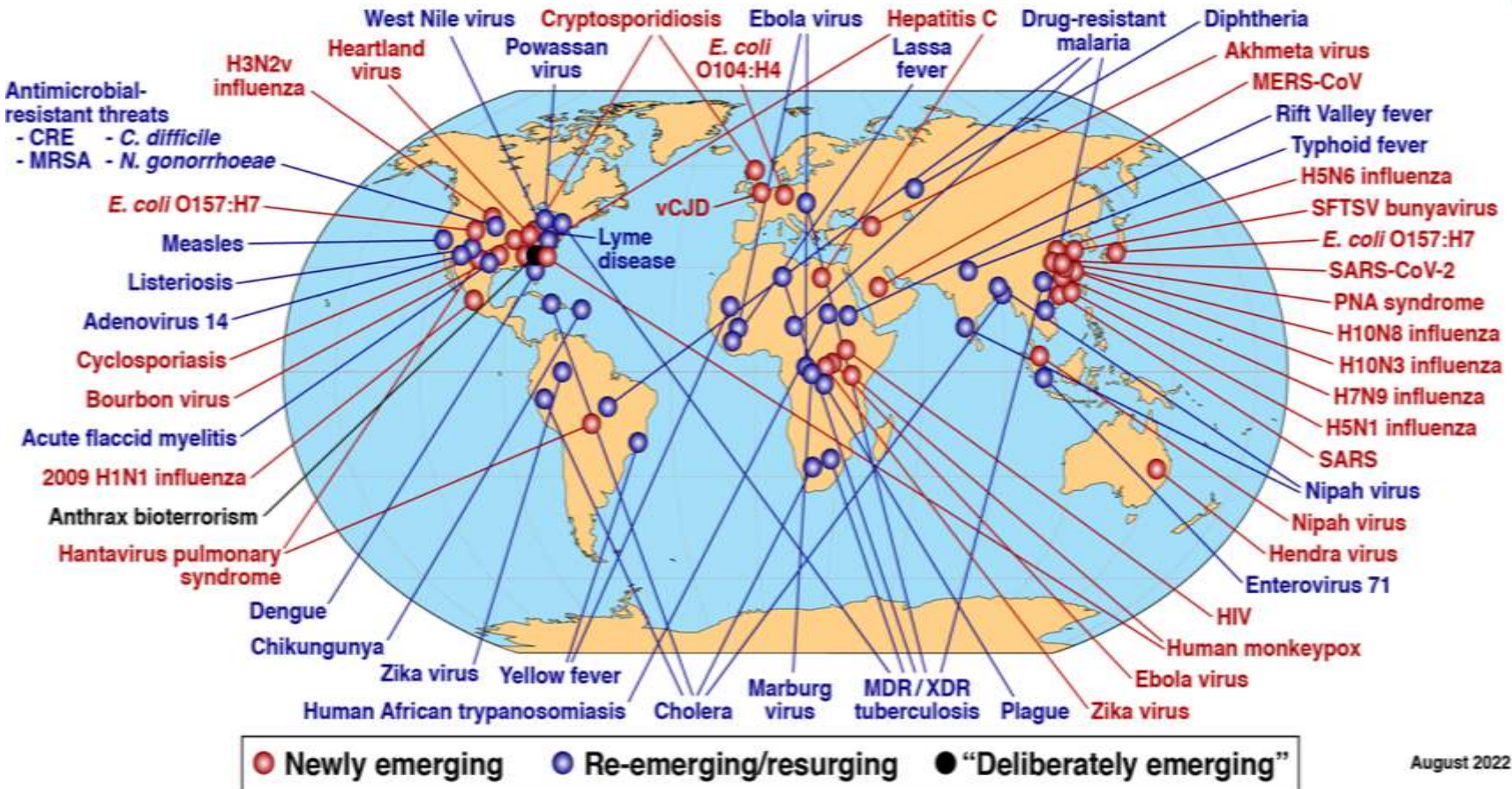


Respond rapidly to new and emerging disease threats



New/Improved Interventions

Global Examples of Emerging and Re-Emerging Infectious Diseases

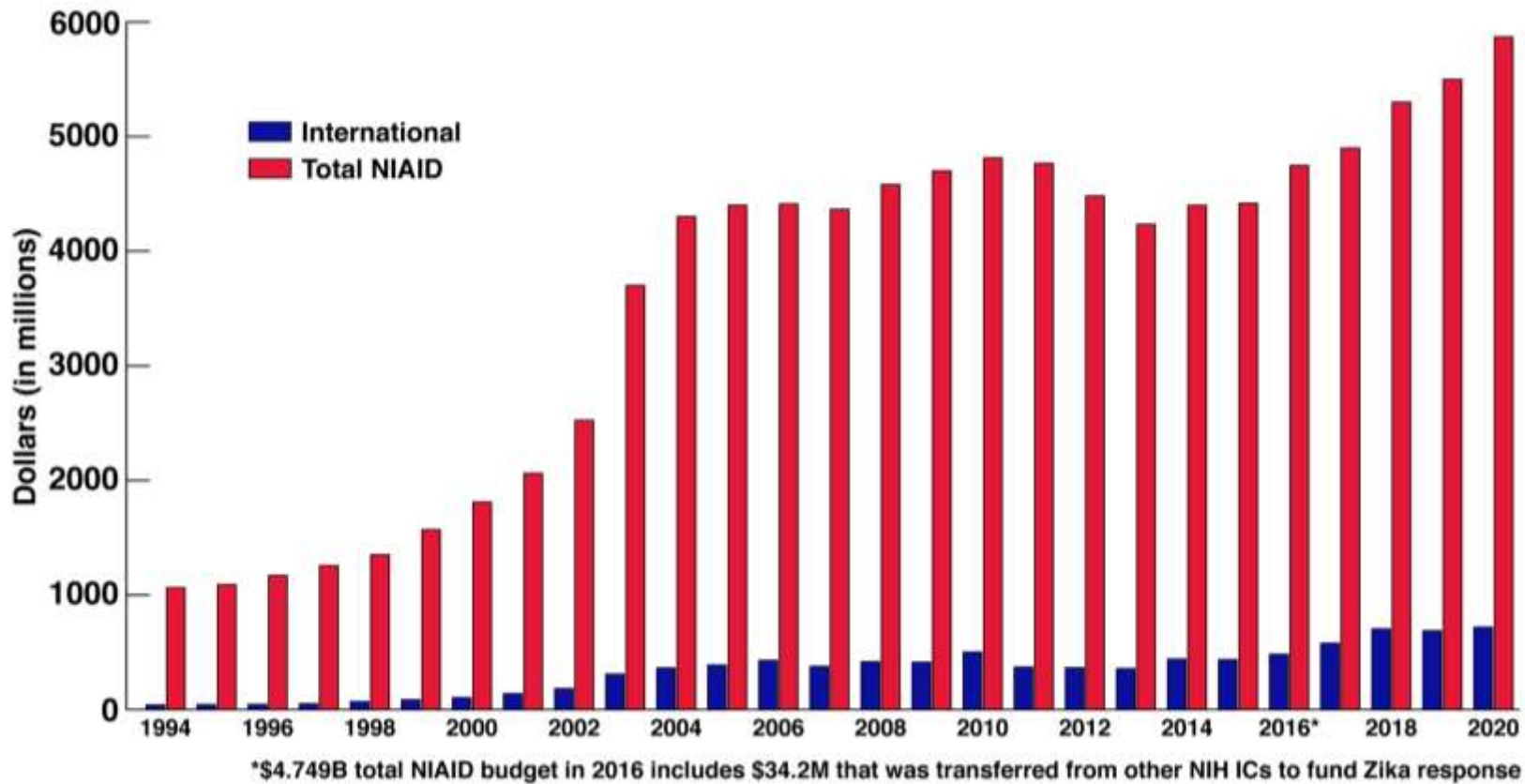


August 2022

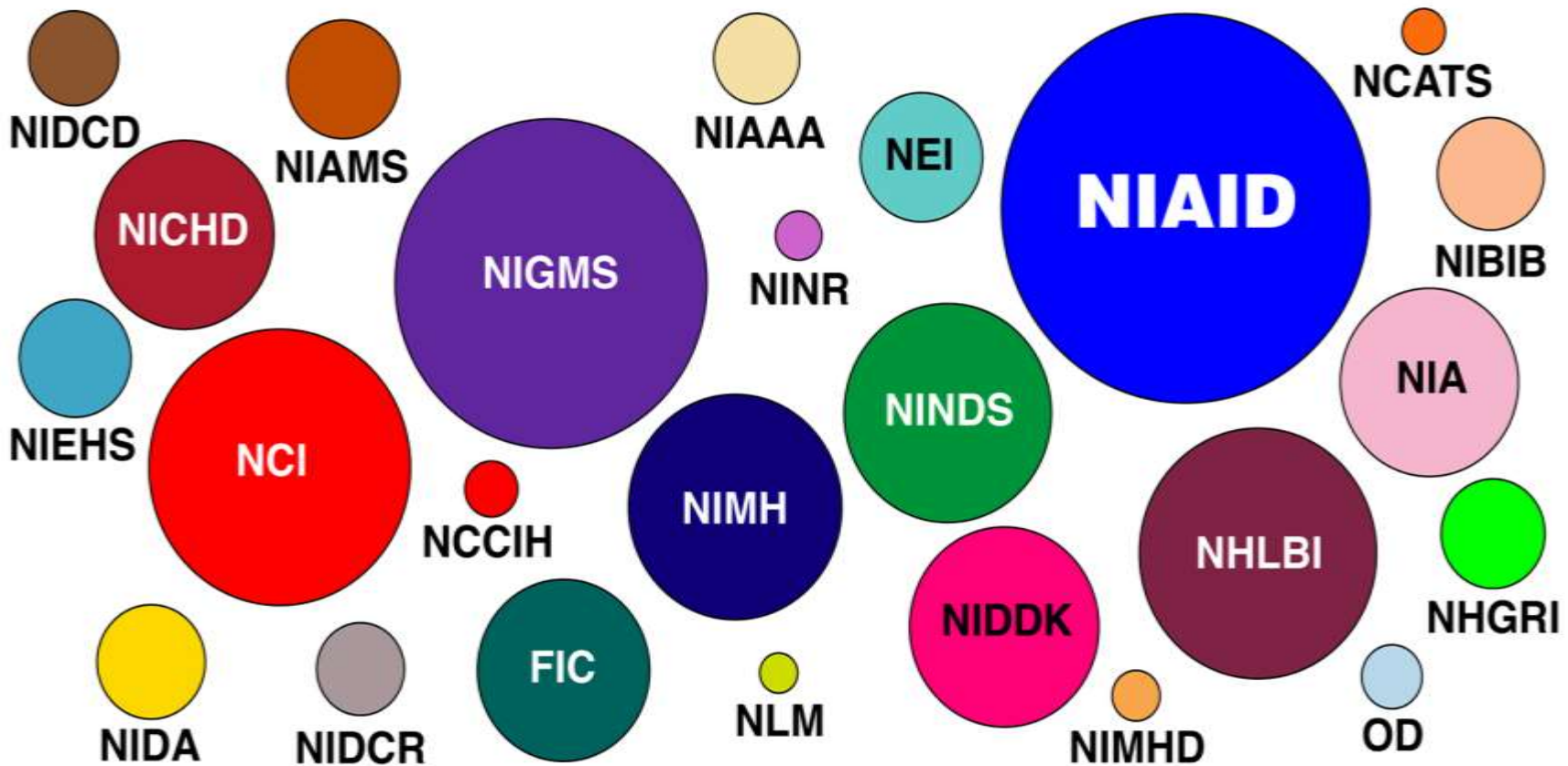
NIAID Strategic Priorities, FY 2023

- Maintain a robust portfolio of **basic and translational research** in microbiology, infectious diseases and immunology
- Accelerate **research on SARS-CoV-2**: next-generation vaccines and medical countermeasures
- Develop **universal influenza vaccines** and enhance effectiveness of seasonal influenza vaccines
- Develop **medical countermeasures** for emerging and re-emerging infectious diseases
- Develop safe and effective **HIV vaccines, novel prevention strategies, optimized treatment methods** and new approaches towards a **cure**
- Develop new strategies for the **prevention and treatment of immune-mediated** diseases with an emphasis on immune tolerance

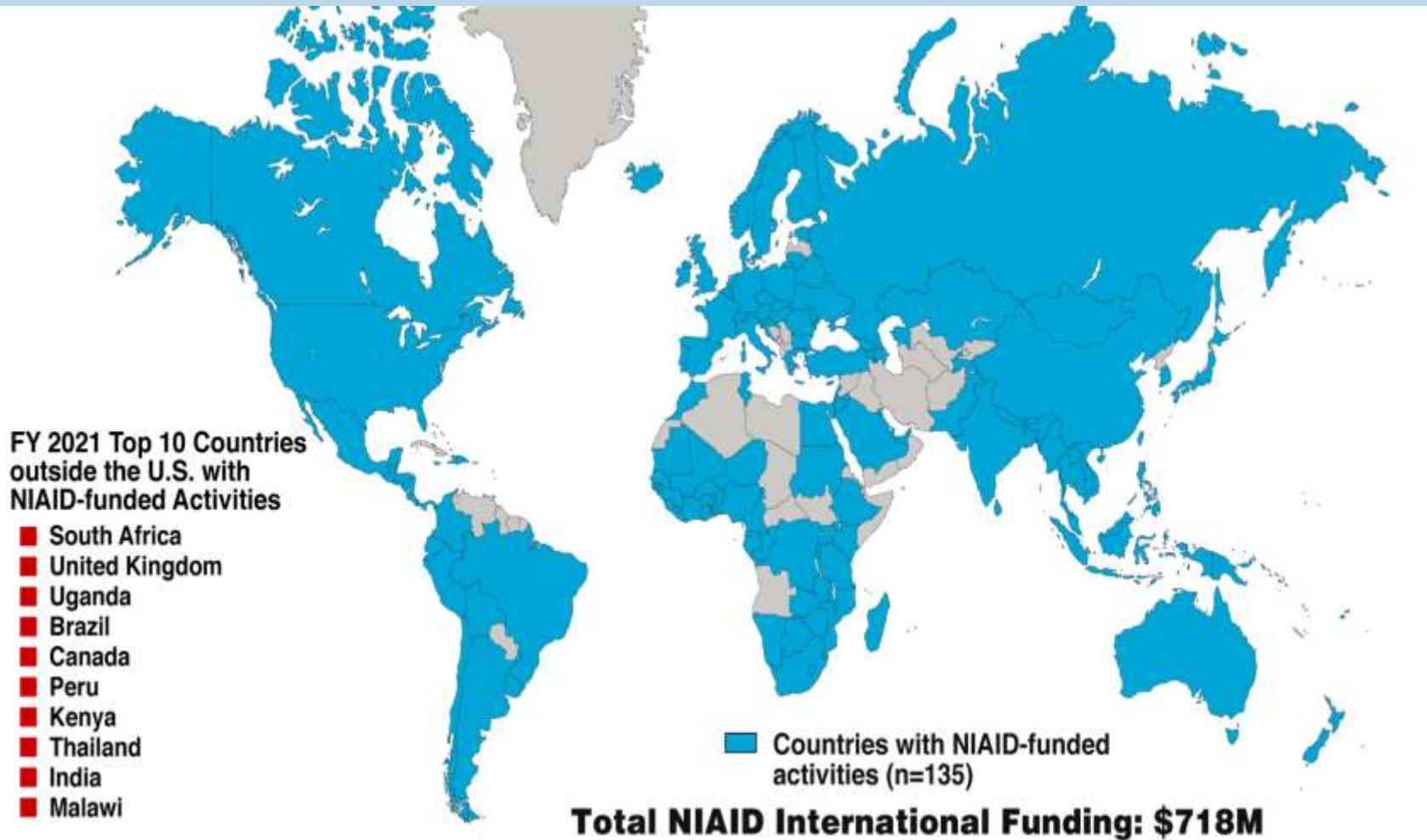
NIAID Support for International Research



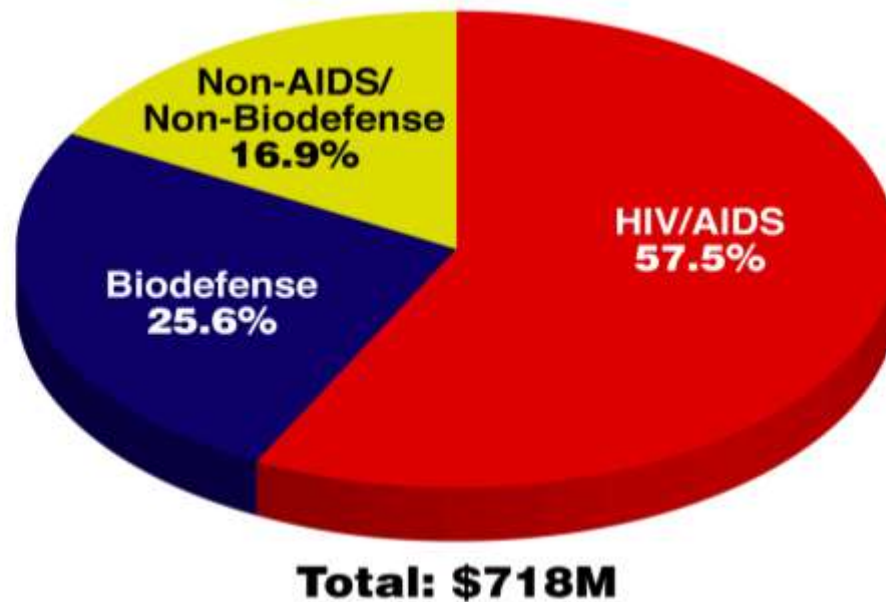
Number of NIH Grants with International Components, FY 2021



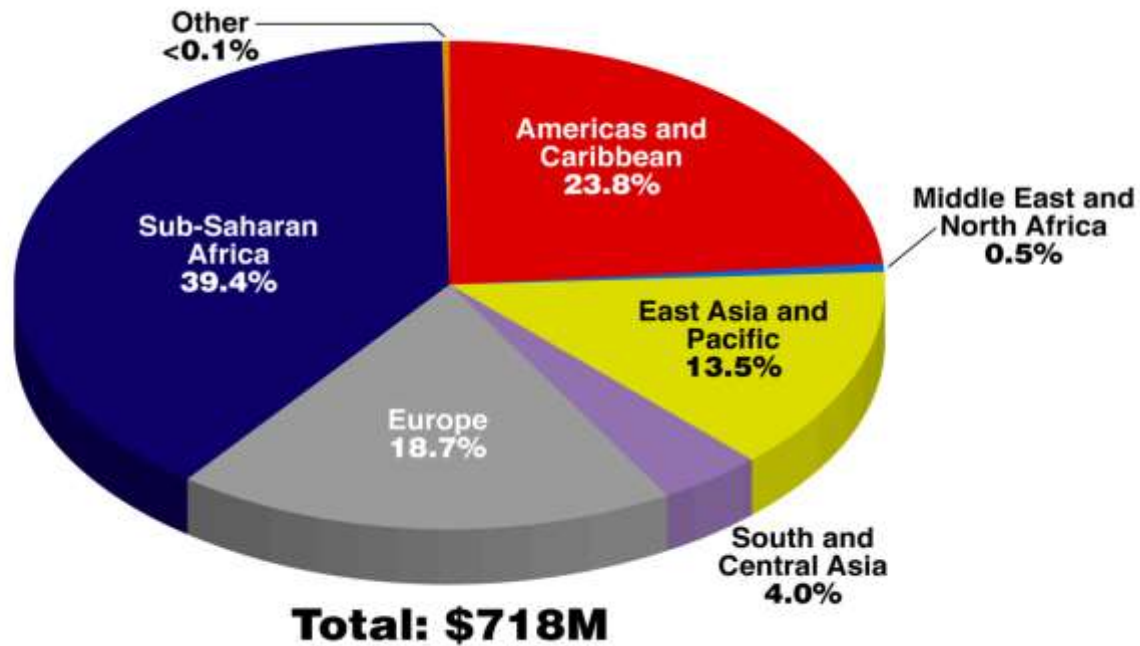
NIAID Global Health Research, FY 2021



NIAID International Funding by Mission, FY 2021



NIAID International Funding by Region, FY2021



Principles and Strategies for NIAID International Scientific Engagement

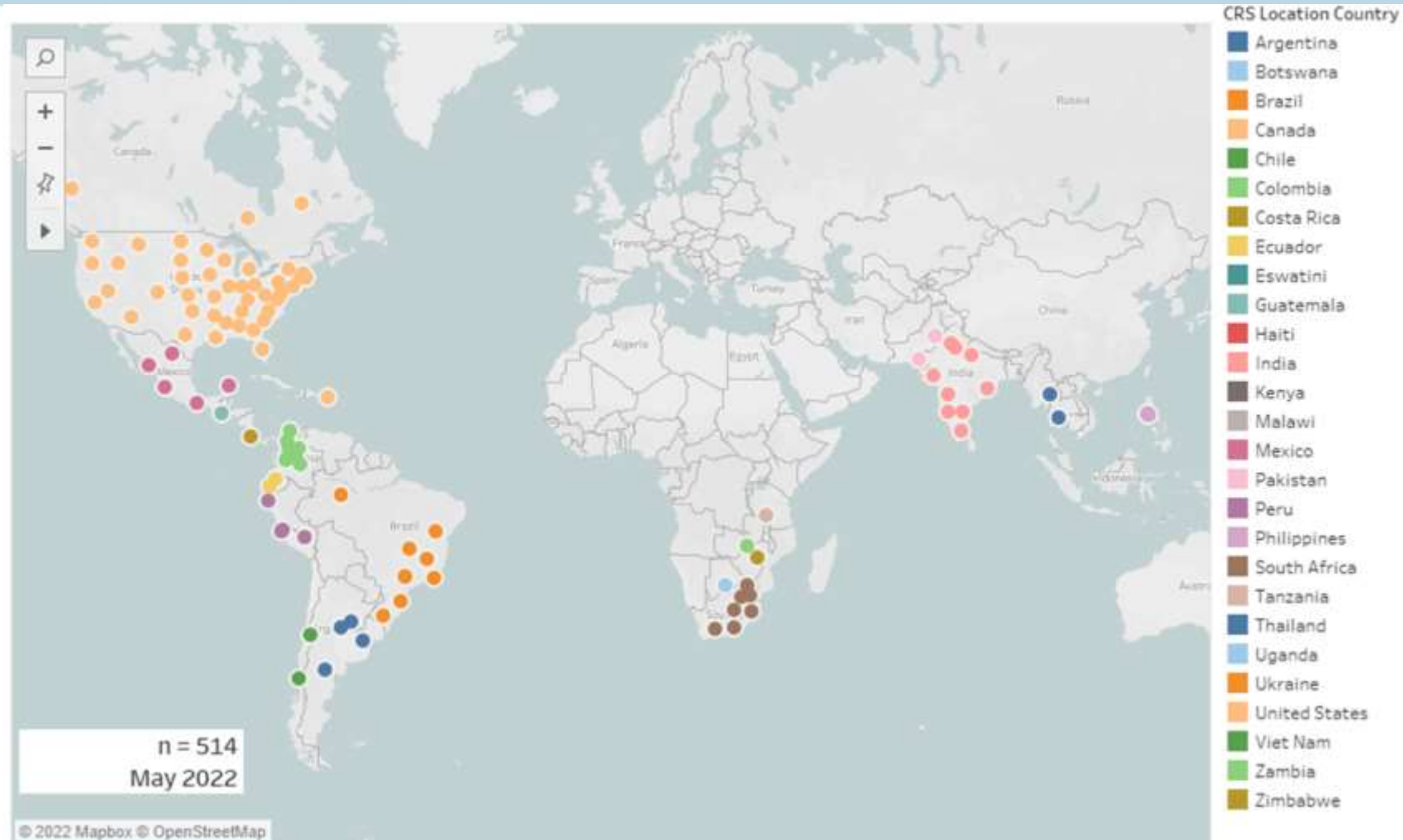
Principles:

- Highest scientific quality
- Highest ethical standards
- Shared interest and local relevance
- Mutual benefit in partnership

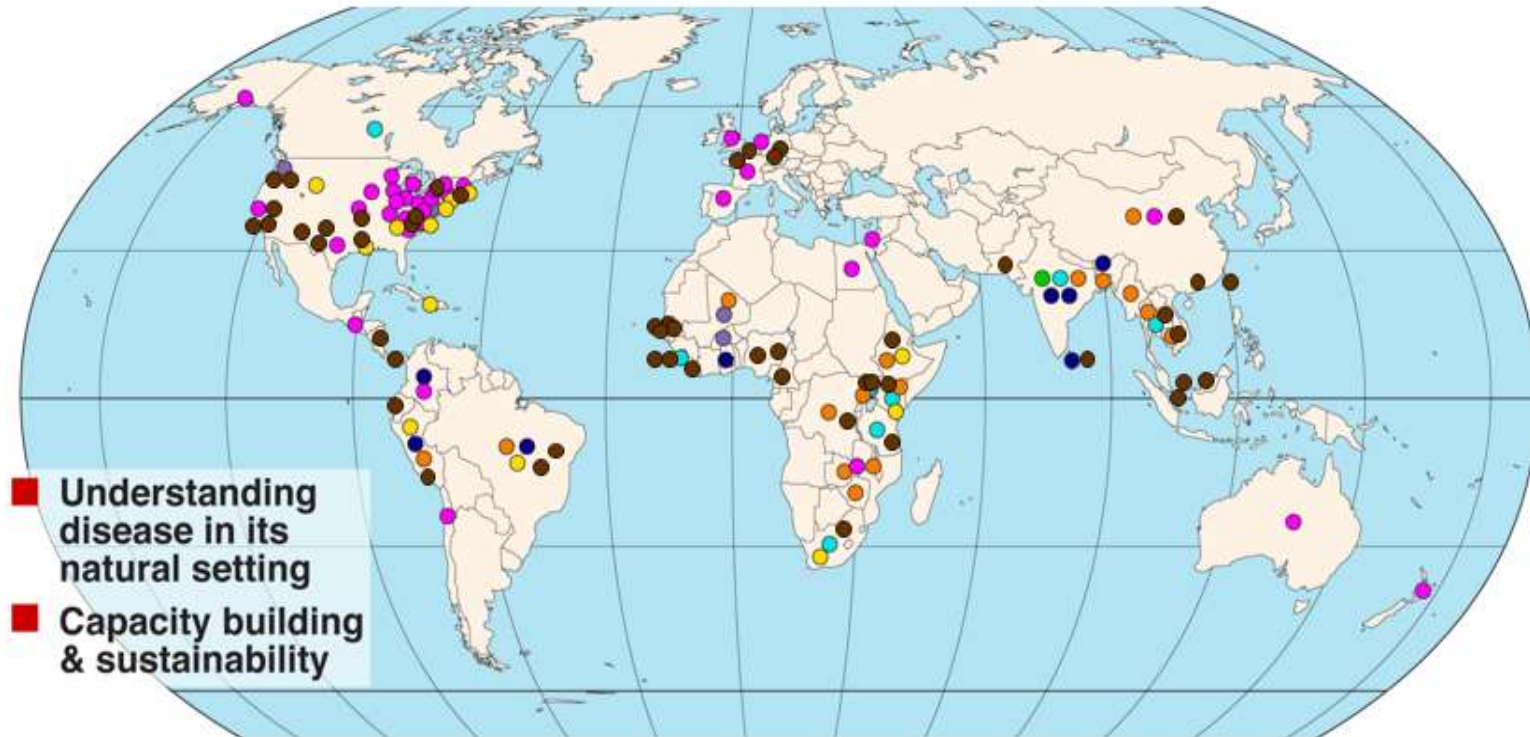
Strategies:

- Local leadership and community support
- Human and lab capacity investment
- Sustained commitment
- Work with other funding organizations

Division of AIDS: Clinical Research and Epidemiology Sites



Division of Microbiology and Infectious Diseases: International Research Programs



- Understanding disease in its natural setting
- Capacity building & sustainability

- Tropical Medicine Research Centers (TMRC)
- International Collaborations in Infectious Disease Research (ICIDR)
- International Centers of Excellence in Malaria Research (ICEMR)
- Malaria Vaccines: Clinical Research and Trial Sites
- NIAID Centers for Research in Emerging Infectious Diseases (CREID)
- Indo-US Vaccine Action Program (VAP)
- NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS)
- Tuberculosis Research Unit and Tuberculosis Clinical Diagnostics Research Consortium

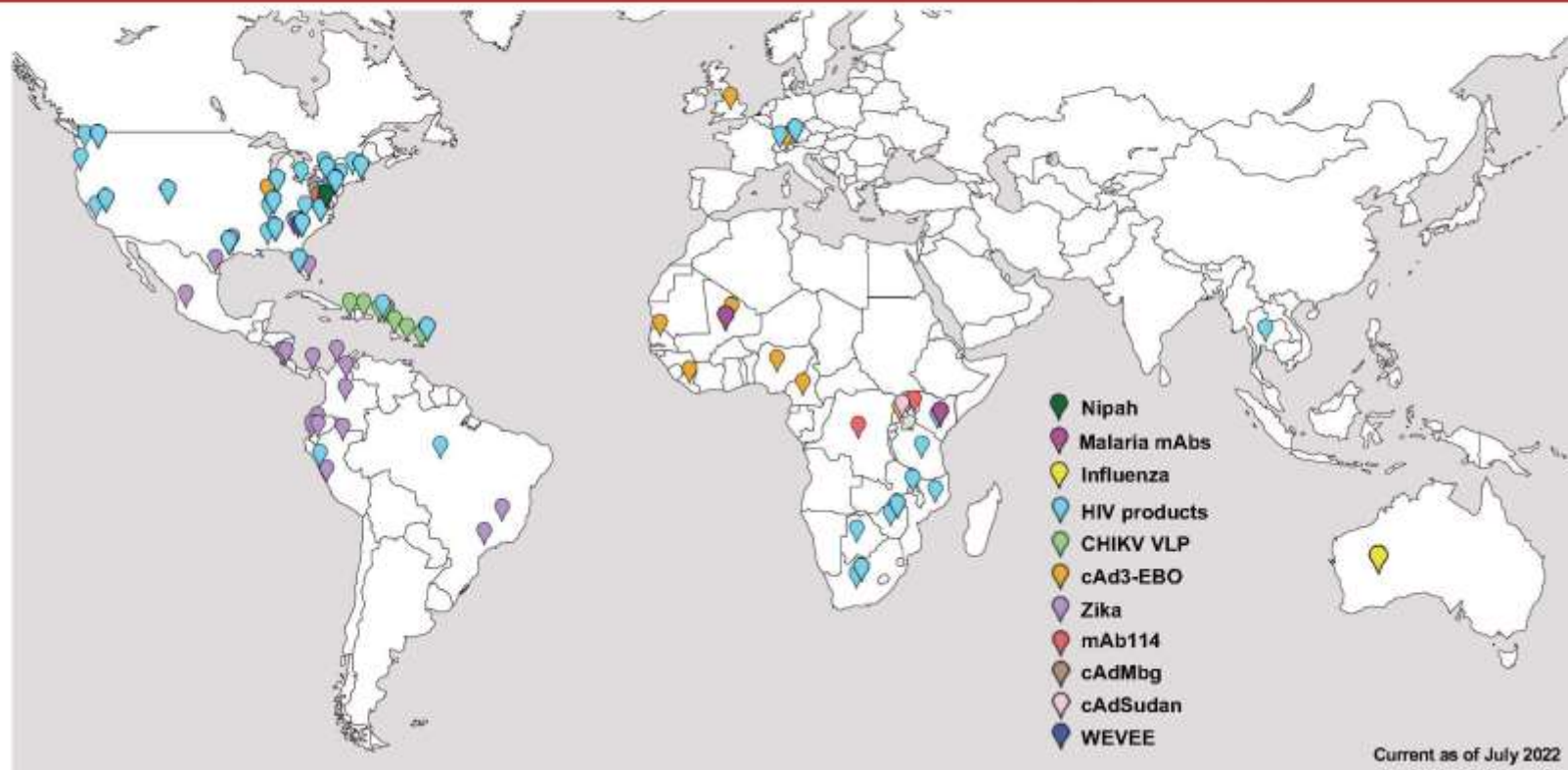
Division of Allergy, Immunology, and Transplantation (DAIT)



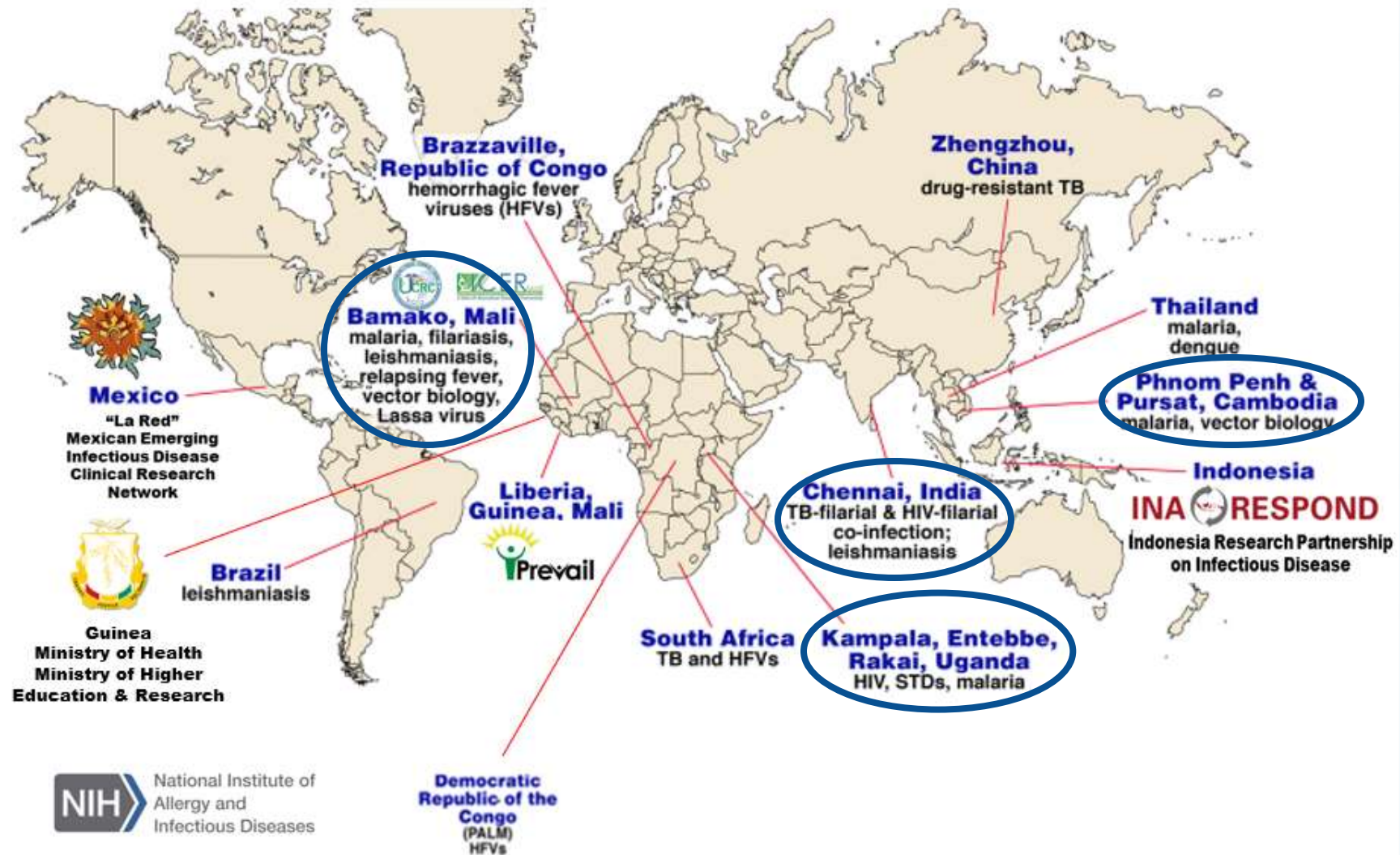
Vaccine Research Center (VRC)

Clinical Reach of VRC Products

32 Countries (50+ trials by other Sponsors)

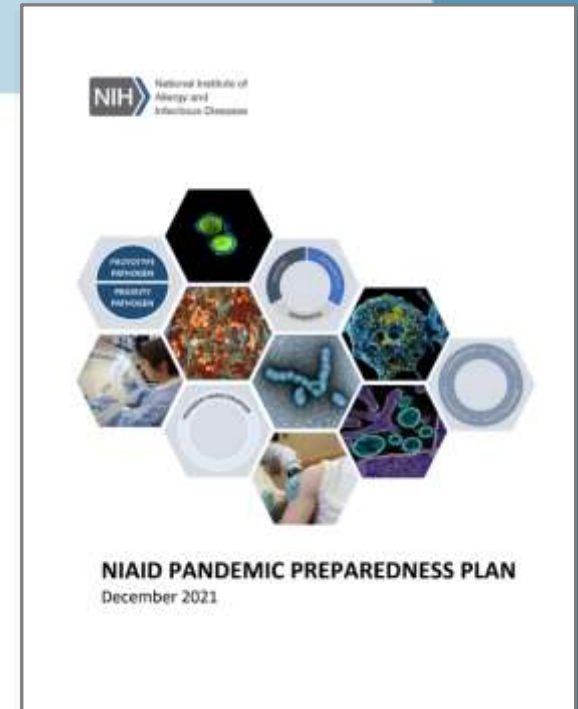


Major Intramural International Research Collaborations



NIAID Pandemic Preparedness Plan Goals

- **Systematically characterize known pathogens of pandemic concern and increase research and surveillance on novel threats before they emerge**
- **Shorten timelines between outbreak onset and authorization/approval of diagnostics, therapeutics and vaccines**
- **Fill existing gaps in research, infrastructure, technology and expand non-clinical, pre-clinical, and clinical testing capacity**



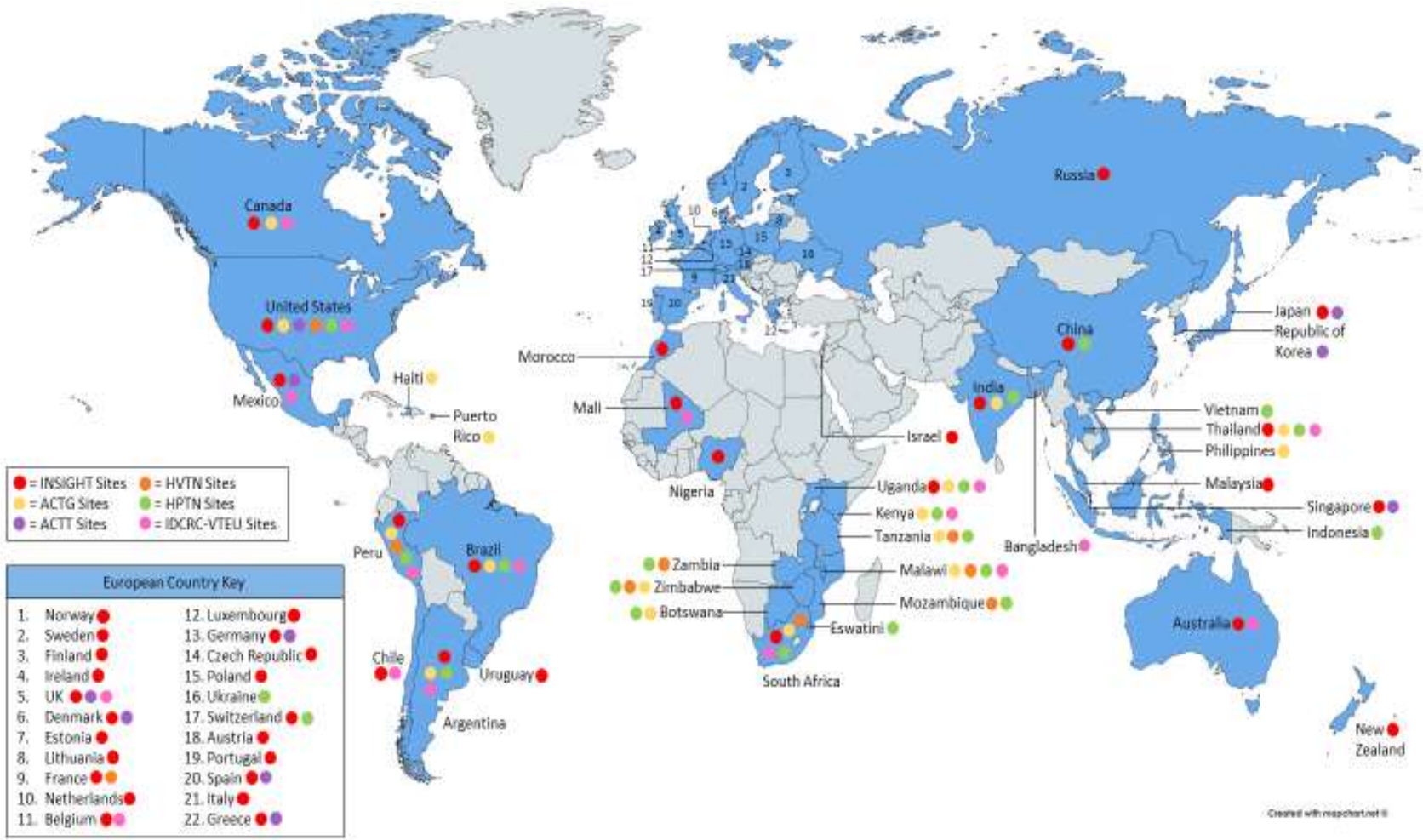
NIAID Efforts to Advance Pandemic Preparedness

- **Research and Development of Vaccine and Monoclonal Antibody for Pandemic Preparedness Centers (ReVAMPP)**
 - Characterize and develop MCM for select pathogens
- **Antiviral Program for Pandemics (APP)**
 - Develop new antivirals for COVID-19 and prepare for other pandemic threats
 - Establish Antiviral Drug Discovery (AViDD) Centers for pathogens of pandemic concern
- **Pandemic Response Repository Microbial Immune Surveillance and Epidemiology (PREMISE)**
 - Utilize immunologic and virologic screening to identify candidates to develop into countermeasures for pathogens of pandemic potential



COVID-19 Prevention Network

COVID-19 Therapeutic Networks



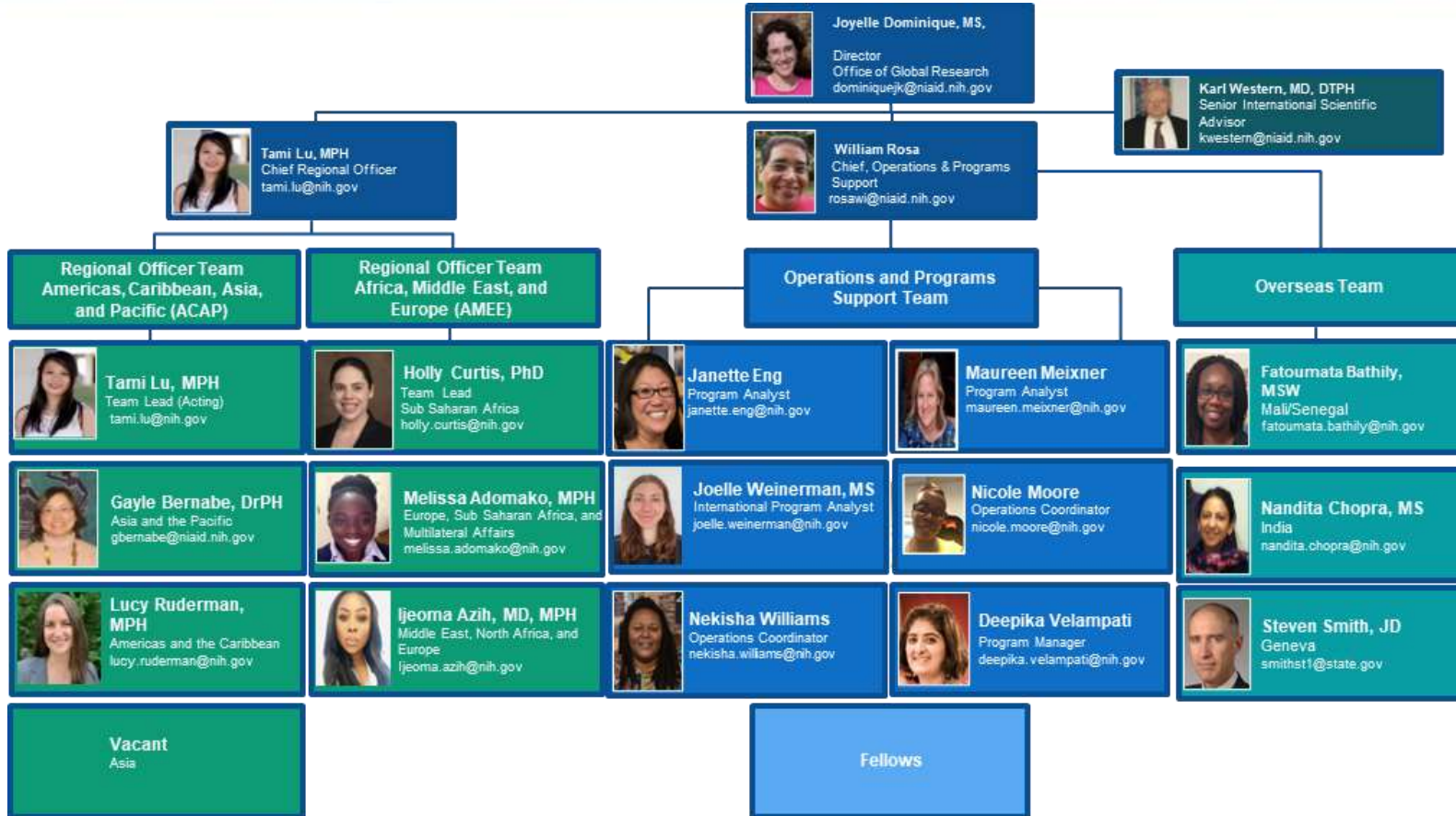
NIAD

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Challenges and Lessons Learned

- Science impacted by global events
- Preparedness
- Research capacity
- Sample and data sharing
- Funding

OGR Staff Organization



NIAID Involvement in Americas and the Caribbean

Disease / Research Priorities

- COVID-19, chikungunya, dengue, HIV/AIDS, influenza, leptospirosis, malaria, NTDs, TB, and Zika

Major NIAID Activities

- Dengue vaccine development and evaluation
- Zika in Infants and Pregnancy (ZIP) Study
- HIV/AIDS clinical trials and epidemiology networks
- International Centers of Excellence for Malaria Research (ICEMR)
- Regional Prospective Observational Research in Tuberculosis (RePORT)
- Tropical Medicine Research Centers (TMRC)
- Centers of Excellence for Influenza Research and Response (CEIRR)
- Centers for Research in Emerging Infectious Diseases (CREID) Network



Questions?

The screenshot shows the NIAID website with a navigation bar at the top containing links for Research, Diseases & Conditions, Grants & Contracts, Clinical Trials, News & Events, and About NIAID. The main content area features a large banner for 'Volunteer for COVID-19 Clinical Studies' with a sub-header and a 'Volunteer Now' button. Below the banner are three article cards: 'Influenza Research at NIAID', 'New Data Sets on Access to Clinical Data', and 'Antiviral Program for Pandemics'. At the bottom left is a 'Director Anthony S. Fauci, MD' section with a photo and links to 'About the Director' and two recent publications. At the bottom right is a 'Newsroom' section with links to the NIAID Newsroom, latest news releases, media team contact, Twitter, and YouTube.

Research Diseases & Conditions Grants & Contracts Clinical Trials News & Events About NIAID

Volunteer for COVID-19 Clinical Studies

NIAID conducts and supports clinical trials evaluating therapies and vaccine candidates against severe acute respiratory syndrome coronavirus type 2 (SARS-CoV-2), the virus that causes COVID-19.

[Volunteer Now](#)

Influenza Research at NIAID

NIAID is conducting and supporting research to find new and improved ways to diagnose, treat and prevent influenza infection.

New Data Sets on Access to Clinical Data

NIAID's cloud-based, secure data platform enables sharing of anonymous patient-level clinical data to help generate new knowledge to treat and prevent infectious diseases such as COVID-19.

Antiviral Program for Pandemics

NIAID's research program to develop safe and effective antivirals to combat SARS-CoV-2 will also build sustainable platforms for targeted drug discovery and development of antivirals against viruses with pandemic potential.

Director Anthony S. Fauci, MD

[About the Director](#)

[NIH COVID-19 Vaccine Kick-Off Event at the NIH Clinical Center](#)
Webcast

[The Story Behind COVID-19 Vaccines](#)
Publication

Newsroom

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