# Community & Stakeholder Input to Inform the Future of HIV Research

January 8, 2025





Advancing Clinical Therapeutics Globally for HIV/AIDS and Other Infections

**Priority areas**: Therapeutics (comorbidities, cure, TB, hepatitis)

The Office of HIV/AIDS Network Coordination (HANC) coordinates across all networks



# HIV VACCINE

Priority areas: HIV vaccines





**Priority areas**: Non-vaccine prevention; PrEP, integrated strategies



**Priority areas**: Maternal, adolescent & pediatric therapeutics

#### **Webinar Moderator**



Russell Campbell, MA HANC Director

# **Setting the 2034 Research Agenda**

- Every 7 years, NIH competitively reviews its HIV network funding, addressing significant changes in research priorities
- By establishing a forward-looking agenda now, NIH will determine the focus and structure of its HIV clinical trials networks through 2034



# **Network Competition Timeline**

- Spring 2024: Launch process with network presentations to SWG
- Summer through January 2025: Input from the stakeholders (investigators, community, etc.)
  - Webinars, blog posts on selected topics, thematic discussions, townhalls, written feedback
- Fall 2024: Preliminary discussion at ARAC and other advisory committees
- Jan 2025: Formal presentation to ARAC of the refined network and units structure for approval
- 2025: Begin RFA authorship
- Jan 2026: Publish RFAs
- Fall 2026: Applications due
- Winter/Spring 2027: Review
- Sept 2027: Applications to Council
- Dec 2027: Earliest start date

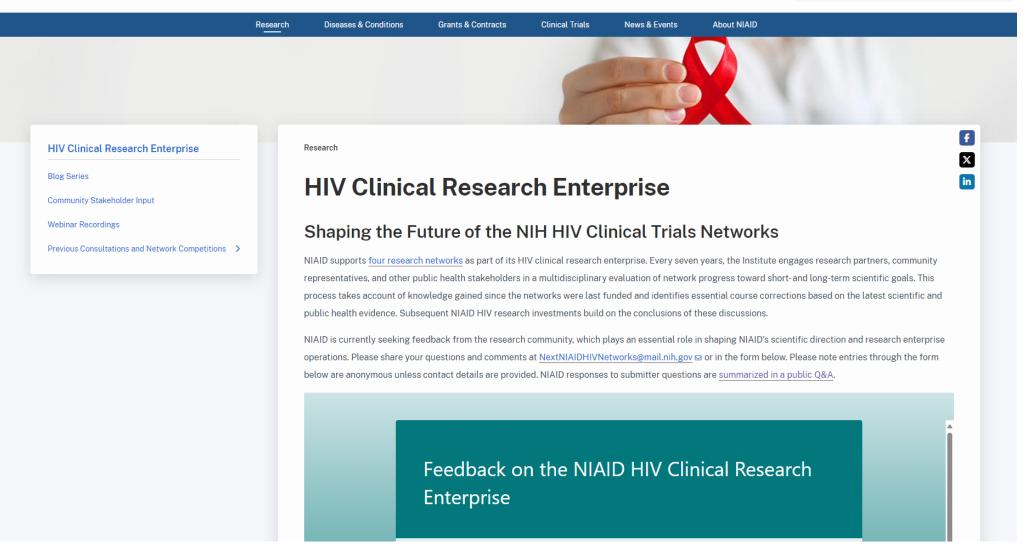
# **Outreach with Stakeholders**

- The vision and plans have been presented and discussed at multiple venues and at all annual network meetings
- This is the third webinar with Network community members and stakeholders, facilitated by the Office of HIV/AIDS Network Coordination (HANC)
  - The first focused on scientific priorities, May 30, 2024
  - The second on clinical trial units and clinical research sites, September 4, 2024
- The webinar today will focus on the proposed structures and research agendas for the next grant cycle

# **Outreach with Stakeholders**



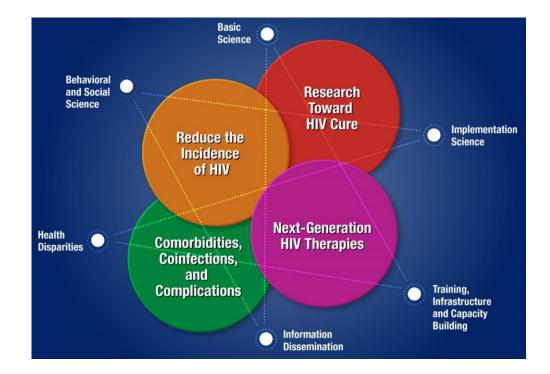
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#### https://www.niaid.nih.gov/research/hiv-research-enterprise

### **Research Priorities**

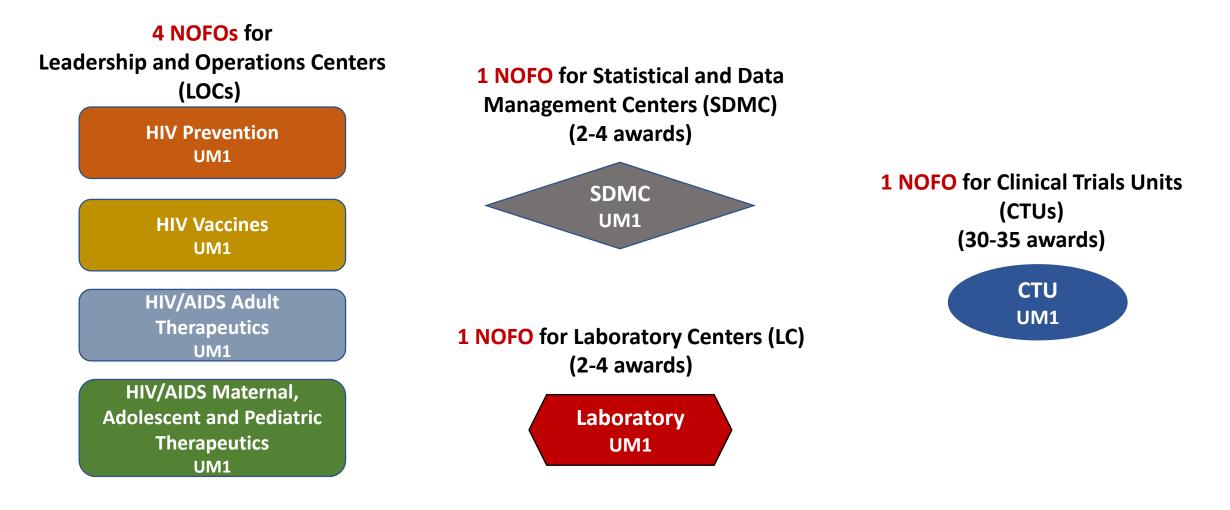
- HIV Prevention
- HIV Vaccines
- HIV Treatment
- HIV Cure
- HIV Co-infections & Co-morbidities
- Ending the HIV Epidemic (EHE)
- Pandemic Response



## **Network Evolution**

- NIH proposes to maintain four leadership groups
- The overarching themes of this renewal are innovation and collaboration
  - In this current grant period, the groundbreaking studies often sprouted from collaborations
  - Significant collaborations with NIMH, NICHD, NIDA, NHLBI, NIA, NIDCR, and NINDS
  - Enhance collaborations within NIAID
- Moving forward, additional collaborations are essential to address the full research agenda and advance implementation research plans
  - Expand collaborations with parts of NIH that lead the research agenda on non-infectious co-morbidities and other relevant diseases
  - Implementation research projects will originate through partnerships with implementers—CDC, HRSA, PEPFAR and others
- Equipping the clinical trials enterprise with the tools to maintain readiness for pandemic response is essential

# Seven Notice of Funding Opportunity (NOFOs) – UM1 RFAs



#### **Seven NOFOs Yield Four Networks**

# **Prevention Scientific Foci**

Novel biomedical methods of HIV prevention Behavioral and social science partnerships

Protection in key populations, including adolescents, women, MSM, and U.S. populations affected by health disparities Improve implementation of new biomedical and behavioral prevention strategies

# **HIV Vaccines Scientific Foci**

#### Establish vaccine efficacy

- Evaluate vaccines against sites of vulnerability
- Initiate pediatric studies once efficacy is established

# Define correlates of protection

• Partner to evaluate the most efficacious vaccine based on progress in the field

# Beyond preventive HIV vaccines\*

- Integration of Px Vx products with HIV Tx and Cure
- Evaluation of TB vaccine candidates
- \* With collaborating network partners

# **Therapeutic Scientific Foci**

#### **Novel and durable therapy**

- Pharmacology, drug formulations
- Long-acting formulations of ART, bNAbs and other novel therapeutic modalities

#### **Cure or ART-free remission**

- Clear, control or silence reservoir
- Immune-based interventions
- Gene/cell therapies

#### **Tuberculosis**

- Shorter and safer therapies for all forms of TB
- Diagnostics, drug susceptibility testing
- Biomarkers

# Co-morbidities and co-infections

- HBV cure strategies
- Long-acting formulations of HCV
- Cellular and immune dysregulation
- Prevent and treat end organ disease

# **Maternal and Child Scientific Foci**

# Optimized therapeutics for HIV and infectious co-morbidities

- Pharmacology, drug formulations
- Long-acting formulations of ART and bNAbs
- Postnatal prophylaxis
- Therapeutics for key co-infections (HCV, CS)

#### **Cure and immunotherapy**

- Very early newborn treatment incl. bNAbs
- Combination Immune-based therapies to clear, control or silence reservoir
- CNS and tissue reservoir targeting
- Gene/cell therapies
- Vaccine response against priority pathogens

#### **Tuberculosis**

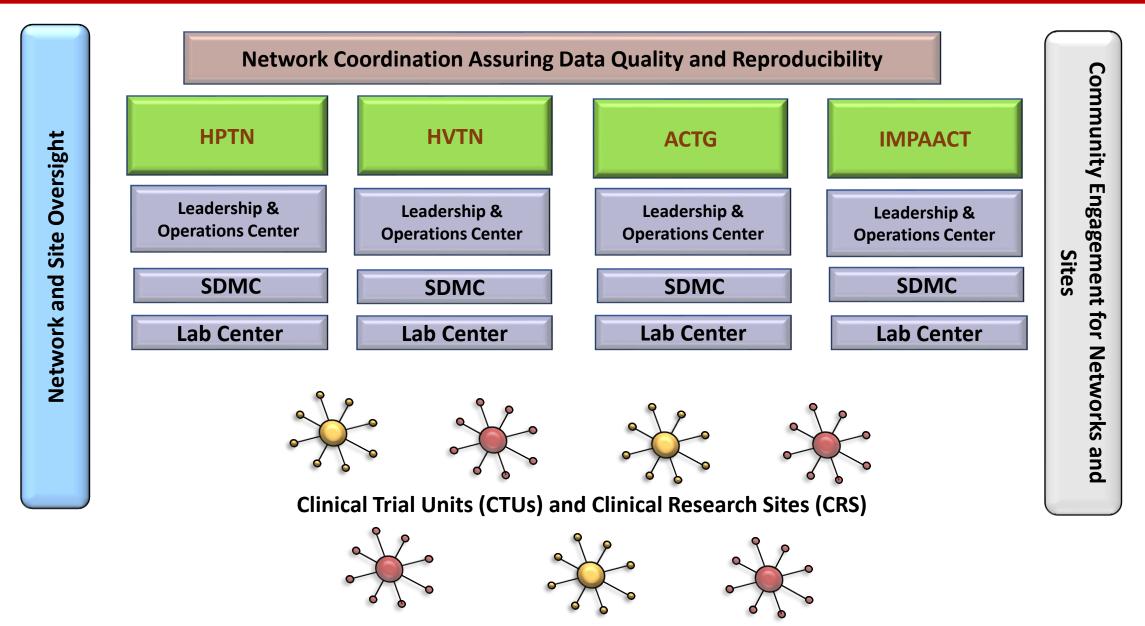
- Shorter therapies for DS and DR
- Improve TB preventive therapy
- Pharmacology, drug formulations
- Optimized diagnostics, biomarkers

#### **Brain and mental health**

- Optimal TB neurocognitive development
  and mental health
- Neuroprotective therapeutic approaches or those targeting neurocognitive and mental health disorders

### **Clinical Trial Units & Clinical Research Sites**

### **HIV/AIDS Network Structure**



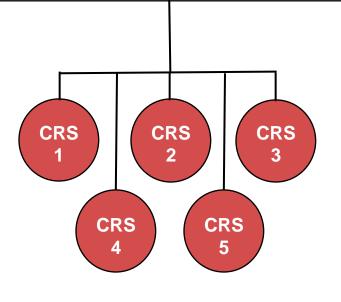
# **Critical Infrastructure: CTUs**

- A Clinical Trials Unit (CTU) is a cohesive, integrated unit consisting of clinical research sites, community engagement structures, pharmacies, laboratories and other clinical research resources which participate in the breadth of studies developed by the NIAID HIV/AIDS networks. A CTU coordinates and executes clinical trials in accordance with the networks, NIAID and other applicable policies.
- Last recompeted in December 2020
- To be awarded in December 2027
- Funded 35 CTUs



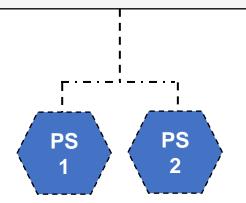
#### **Clinical Trials Unit**

- Administrative capacity
- Shared resources
- Mentoring and oversight

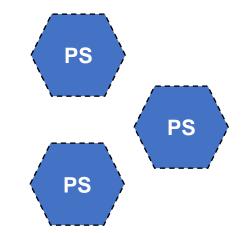


#### **Clinical Research Sites**

Scientific Contributors & Trial Implementers



#### Protocol Specific Clinical Research Sites Short Term Trial Implementers



Protocol Specific Clinical Research Sites Short Term Trial Implementers

# **Looking Forward: Adjustments**

- 1. Clinical research sites with strong community ties to populations affected by health disparities
- 2. Advancing implementation science research
- 3. Streamlining laboratory capacity

# **Finishing the Current Cycle**

- What can be accomplished prior to the end of the current grant cycle?
- What adjustments in structure and scientific direction should be made to accelerate the pace of discovery?
- How should we build implementation research needs into our plans?

### **Questions?**