#### Due: May 27, 2024

Responses to the NIAID <u>Request for Information</u> (RFI) must be submitted via e-mail to: <u>NIAIDStrategicPlanRFI@niaid.nih.gov</u>

#### TEMPLATE

May 27, 2024

Jeanne Marrazzo, MD NIAID Director National Institute of Allergy and Infectious Diseases 9000 Rockville Pike Bethesda, MD 20892

#### Request for Information (RFI): Inviting Comments and Suggestions on NIAID's Strategic Plan

Dear Dr. Marrazzo,

My name is [name and credentials here]. I'm writing as [insert your title, relevant details here. You can include that you're a member of IDSA/HIVMA]. I appreciate the opportunity to comment on NIAID's strategic plan as a member of the infectious diseases (ID)/HIV research community. [any additional comments here, such as your area of research, your concerns around ID/HIV research issues, or overarching comments can be included here].

The important ID research priorities set forth by NIAID will all require a robust ID scientific workforce, including ID physician-scientists. I am deeply concerned about the recruitment challenges facing the field of ID, and particularly ID research. In last year's match, only 50.8% of ID physician fellowship programs filled, [Add any additional examples of ID research workforce challenges in your area]. To recruit and retain physicians and scientists in ID, I strongly encourage NIAID to further prioritize investments in training, research funding and other support for early career ID physician-scientists, such as training grants and K awards, and to increase investment in the "K to R transition". I am also concerned about low NIH paylines for established investigators as they too are essential to the ID research pipeline. Tangible support for physician-scientists in ID is critical to maintaining a robust workforce.

# Priority 1: Advance foundational research on the immune system, host-pathogen interactions, and pathogen biology.

#### IDSA/HIVMA highlights for Priority 1 will recommend a focus on the following:

- The importance of AMR research, focusing on areas such as:
  - The impact of climate change on AMR prevalence, spread, and development in different populations.
  - New approaches to infection prevention and treatment of AMR in hospitals and healthcare settings.

- Assessing the impact of vaccination on infection by resistant pathogens, and on reducing downstream health care costs.
- Evaluating stewardship strategies in hospital and healthcare settings to determine effectiveness of preventing HAIs.
- Construct new platforms for antimicrobial development to fill gaps for treatment of resistant infections, and bridges for collaboration with pharmaceutical companies to ensure their appropriate and equitable use and accessibility.
- Researching long COVID and long-term sequelae/symptoms of other viral infections to inform therapeutic developments and to help prevent future long COVID cases.

# Priority 2: Apply foundational knowledge of the complex interactions between microbes and the immune system to develop and test medical countermeasures against known infectious diseases (non-HIV/AIDS).

## IDSA/HIVMA highlights for Priority 2 will recommend a focus on the following:

- Support research into viable rapid, accurate, easily accessible, self-administrable diagnostic tests that are readable at the point-of-care or at-home.
- The development and utilization of alternative therapies like monoclonal antibodies (mAbs), immunotherapy, antisense molecules, and phage therapy in the treatment of resistant infections (in conjunction with continued research into novel antimicrobials) – we would especially prioritize interventions that would help treat multidrug resistant infections.
- NIAID should support additional federal contracts to be provided to academic research centers and laboratories to support the rapid research and development of medical countermeasures for pathogens with pandemic potential.

# Priority 3: Apply knowledge of HIV/AIDS to reduce HIV incidence through the development of safe and effective prevention, treatment, and cure strategies.

Priority 4: Apply knowledge of basic immunology to develop and enhance intervention strategies for asthma, allergic and immune-mediated diseases, and transplantation.

### IDSA/HIVMA highlights for Priority 4 will recommend a focus on the following:

- Prioritizing research that explores seeks to understand and mitigation of infectious diseases complications in stem and solid organ transplantation and immunosuppression induced by biologics and other treatments for allergic and rheumatological disease.
- Consider transplantation as an essential facet of testing viral therapeutics and interventions, so that patients who have undergone a transplant can have therapeutic options during a public health emergency or pandemic.
- Develop treatments for cancer, inflammatory diseases, and prevention of transplant rejection that maximize efficacy and minimize infectious complications.

# Priority 5: Support innovative research efforts to prepare for and respond to nationally or internationally significant biological incidents affecting public health.

### IDSA/HIVMA highlights for Priority 5 will recommend a focus on the following:

- Developing novel therapeutics for vector borne diseases (VBDs)
- Bolstering "warm base" clinical trials and research that can be scaled up in the event of a pandemic or public health emergency (PHE).
- Supporting research on universal flu vaccines, and generalized pan genus and family vaccines.
- Supporting further research on potential efficacy of broad-spectrum monoclonal antibodies (mAbs) for early intervention strategies.
- Funding training programs for genomic sequencing, bioinformatics, and proteomics efforts.
- Prioritizing research that characterizes vector range expansion, vector transmission of emerging and reemerging diseases, and the impact of climate change on future vector dynamics.
- Prioritizing research that characterizes the effect of social determinants of health, environmental, and psychological factors on epidemic/pandemic emergence and evolution.

In addition to these areas, NIAID requests comments in the following topics: diversity, equity, inclusion, and accessibility (DEIA); Women's Health; health disparities; research inclusivity; and global health. Other topics of interest include infrastructure and research facilities, data science and sharing, and workforce training.

### IDSA/HIVMA comments will highlight the following key points:

- Improving NIAID's involvement in the dissemination of public health related research to the public, and growing trust in federal science.
- Prioritizing cross-discipline research that involves behavioral science, implementation science, and health systems science.
- ID Workforce issues:
  - Increased support for programs that help mid-career physicians and clinicians adopt clinical research as part or all of their practice. Supporting this transition can grow the physician-scientist, and overall research workforce, and bridge the gap between research and clinical practice.
  - Increasing early-career physician-scientist funding through the expansion of K, T, and F grants and increasing K award pay lines to pre-2016 levels. Grant evaluations should focus on research commitment and potential rather than past achievements.
- Improving DEIA in research (not only for researchers, but for physician-scientists to better incorporate clinical research):
  - Create early career reviewer programs at NIAID-funded institutions for investigators and physician-scientists from populations that are underrepresented in science and medicine.
  - Provide stronger support for mentorship programs targeting underrepresented and firstgeneration students.
  - Strengthen focus on scientific workforce diversity, including programs for midcareer awards (e.g., K24) to cultivate diverse mentors at every stage of the pipeline.
  - Provide more funding opportunities for early-stage investigators from underrepresented groups, such as the predoctoral <u>F31 NRSA Individual Predoctoral Fellowship to Promote</u>

<u>Diversity in Health-Related Research mechanism</u>. Similar initiatives could increase retention of underrepresented students.

 Facilitate training for NIAID funded researchers engaged in clinical trial studies targeted at underrepresented communities that encourage transparent communication and collaboration with the communities with whom they work. Include training for culturally competent communication through diverse communities.

Thank you for your dedication and continued support of these issues in ID/HIV research. If you have questions about these comments or would like to connect, please contact me at (contact info here).

Signed, [your name]