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National Institute of Allergy and Infectious Diseases
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Request for Information (RFI): Inviting Comments and Suggestions on NIAID's Strategic Plan

Dear Dr. Marrazzo,

The Infectious Diseases Society of America (IDSA) and the HIV Medicine Association (HIVMA) appreciate the opportunity to provide written comments to the National Institute of Allergy and Infectious Diseases (NIAID) in response to its Request for Information regarding the NIAID Strategic Plan.

IDSA and HIVMA represent over 13,000 infectious diseases physicians, scientists, and other healthcare and public health professionals who specialize in infectious diseases (ID) medicine and research. Our members work across a variety of healthcare settings and in a wide array of infectious diseases research. IDSA and HIVMA are eager to continue collaborating with NIAID and foster key principles in its strategic plan.

A strong ID and HIV workforce, including a strong physician-scientist workforce, is critical to future discoveries in ID science and more effective treatments for infectious diseases and challenges like antimicrobial resistance (AMR) as well as detection of emerging pathogens. There is a continued need to expand early career pathways to more physician-scientists, build mentorship opportunities and bolster grant funding to ensure researchers and physician-scientists can complete their training and enter the research workforce. We believe strengthening the ID and HIV workforce is essential to achieving the priorities outlined in the Strategic Plan. We appreciate NIAID's work to support infectious diseases research and workforce development and have outlined our recommendations on the strategic priorities below.

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

- ***Increase knowledge into mechanisms of infection, transmission, pathogenicity, virulence, host-pathogen interactions, and development of drug resistance.***

IDSA continues to strongly support research on the development of drug resistance in bacterial, viral, and fungal infections. Antimicrobial resistance is an increasingly urgent threat in public health and clinical practice that should be prioritized in research. Areas of interest should align with the World Health Organization (WHO) global research agenda for AMR in human health, which is intended to generate evidence that informs policy on the subject, and the Presidential Advisory Council on Combating Antibiotic Resistant Bacteria (PACCARB) recommendations on AMR priorities.

Specific areas of research to consider under AMR include:

- 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.
- The impact of vaccination on infection by resistant pathogens, and on reducing downstream health care costs.
- Impact of and prevention of infections of implanted medical devices.
- Implementation science studies evaluating stewardship strategies in hospital and healthcare settings to determine effectiveness of preventing HAIs.
- 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.

Further, IDSA supports NIAID research initiatives such as the Centers of Excellence for Translational Research, which provides multidisciplinary research on AMR through NIAID partner institutes. Increasing mentorship opportunities through these Centers provides an opportunity to grow an ID research workforce prepared to find novel solutions to the increasing risk of AMR.

An additional area of host-pathogen and immune system biology that NIAID should prioritize is long COVID, and long-term sequelae and symptoms of viral infections. CDC studies have shown that at least 17 million Americans have long COVID, demonstrating the lasting impacts of the COVID-19 pandemic on patients with an ongoing need for clinical treatment. NIAID has the unique opportunity to ensure sufficient, dedicated funding to studying the host-pathogen interactions and immune related complications that contribute to long COVID symptoms. Research should also focus on how reinfection with COVID-19 impacts long COVID, the additional risk of long COVID due to reinfection, and implications of host-pathogen interactions in the development of long COVID. This research can inform therapeutic developments and help prevent future long COVID complications. In addition, research into long COVID should address other post-acute syndromes including myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). Some patients experiencing long COVID also experience ME/CFS, which has significant overlap and similar pathophysiology. The study of additional post-acute syndromes may offer insight into long COVID.

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).***

- ***Discover unique characteristics to advance specific and sensitive diagnostic technologies for infectious diseases.***

In collaboration with CDC, BARDA, and FDA, NIAID should support research into viable rapid, accurate, easily accessible, self-administrable diagnostic tests that are readable at the point-of-care or at-home. COVID-19 has proven the value and importance of point-of-care and at-home diagnostics, which free up scarce health care capacity in pandemic situations and increase access to diagnostics for vulnerable and underserved populations.

- ***Design and assess new or improved therapeutic and prophylactic vaccines, including identifying promising new vaccine targets and vaccine adjuvants, for infectious diseases.***

- ***Develop and evaluate pathogen-specific, broad-spectrum, and host-directed therapies to combat infectious diseases including antimicrobial resistant pathogens.***

Research on therapies to combat infectious diseases and biological threats is crucial to pandemic preparedness and readiness. With the lack of novel, effective antimicrobials being brought to market, and the increase of resistant infections, IDSA supports sustained research into the utilization of alternative therapies like monoclonal antibodies (mAbs), immunotherapy, antisense molecules, and phage therapy in the treatment of resistant infections. Research focusing on their utilization in multidrug resistant infections, such as tuberculosis and Candidiasis, should be prioritized. Novel therapies can be especially useful in patients that may not be able to tolerate antimicrobials or antibiotics. Alternative therapy research in conjunction with novel AMR development and research can offer new approaches to resistant infection treatment.

In addition, expanding research on long COVID to explore the efficacy of off label uses of pharmaceutical products can be helpful in finding novel therapeutic options. Research should also include studies on non-pharmaceutical interventions including physical therapy, behavioral, and nutrition focused changes in long COVID patients.

Support research and early development and testing of medical countermeasures against biological threats, whether naturally occurring or deliberately introduced.

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. These contracts should be designated for biological threats with high severity, such as those on the select agents and toxins list, and pathogens with pandemic potential, such as coronaviruses and influenza viruses.

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

We support the areas of focus for HIV research but highlight the need for the prioritization of implementation science and research. In defining HIV prevention and treatment, we urge NIIAD to apply a framework that encompasses holistic, person-centered care and syndemic-focused care, including mental health and substance disorder treatment and management, across the lifespan.

- ***Advance HIV/AIDS prevention strategies.***

The success of NIAID-supported research and researchers in developing highly effective biomedical HIV prevention necessitates new models for conducting HIV prevention research given that placebos can no longer be used as comparator. We urge NIAID to support the advancement of as many new prevention options and strategies as possible (including additional on demand products) and for all populations. In addition, NIAID should provide guidance in collaboration with the Food and Drug Administration on how to design clinical trials for prevention without using a placebo.

In addition, with every HIV prevention intervention, evaluations of behavioral interventions, e.g., adherence support and empowerment models, should be integral to NIAID's HIV prevention agenda to support implementation and maximize individual and population level impact.

- ***Drive research to discover and test safe and effective therapeutic and prophylactic vaccine candidates.***

Given the new paradigm to first investigate prophylactic vaccines in people with HIV, NIAID should invest in the development of surrogate marker profiles to predict sustained remission to reduce the risk of trials that require analytic treatment or interrupting treatment. It also is critical to ensure that all populations are included from the trial initiation, including gay and bisexual men, transgender men and women, cisgender women, and adolescents.

- ***Develop and assess novel treatments for HIV infection and approaches for sustained remission.***

As stated above, it is important to invest in the development of surrogate marker profiles to predict sustained remission to reduce the risk to people with HIV of trials that require analytic treatment or interrupting treatment. It also is critical to ensure that all populations are included from the trial initiation, including gay and bi-sexual men, transgender men and women, cisgender women, and adolescents.

We appreciate the use of the term "sustained remission" and recommend moving away from the term "cure" and consistently moving toward "durable remission" or "remission."

- ***Explore interventions to prevent and treat HIV coinfections and comorbidities.***

We recommend that NIAID prioritize and promote an HIV syndemic approach to address the co-occurring systemic and structural factors that promote global and domestic disparities in HIV incidence, treatment, survival and co-occurring morbidities. It is particularly important to include an enhanced focus on sexually transmitted infections (STI) given the persistent and worsening STI epidemic and the intersection of HIV with other STIs. We also urge NIAID to consider the highly successful REPRIEVE trial as a model for addressing other co-occurring conditions. It is critical to foster and enhance inter-institute collaborations with the institutes and centers to address associated conditions such as cancer, substance use, and challenges related to aging.

Research on co-occurring conditions should evaluate all populations, including gay and bi-sexual men, transgender men and women, cisgender women, and adolescents.

- ***Foster partnerships to determine how best to implement effective interventions at scale to maximize impact.***

To fully support adoption of HIV prevention and treatment discoveries – implementation science with a focus on health equity should be a high priority for NIAID from the study design phase. In this regard, we recommend:

- Strengthening this goal by revising it to be "*Supporting dissemination and implementation science research to determine how best to implement effective interventions at scale to maximize impact."*
- Supporting dissemination and implementation science studies that explore the best strategies to equitably and effectively implement existing HIV testing, prevention, and treatment technologies to achieve maximal public health impact.
- Supporting research that explores how to successfully implement models of care for leveraging the primary care workforce and their effectiveness.
- Supporting research evaluating the impacts of federal and state policies affecting people with HIV and vulnerable to HIV and the ability of clinicians to provide health care services to people with HIV and vulnerable to HIV.

- Supporting research that explores the best approaches to foster partnerships and engage communities so that research programs and priorities align with their needs and preferences.
- Building research studies and programs up from the community and population level perspective and requiring a plan and investment in research to explore effective communications strategies on complex topics.
- Ensuring that as research programs are developed, resources are available to equitably disseminate findings to all affected populations, including frontline clinicians and community members. To reach these audiences, dissemination and implementation plans should go beyond academic publications and scientific conference presentations.
- Ensuring that programs for addressing issues related to access and affordability of novel drugs and other interventions are built into the research and implementation process.

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

IDSA supports prioritizing research that explores mitigation of infectious diseases complications in transplantation. These considerations should be built into clinical trials of therapeutics for ID complications. COVID-19 demonstrated the need to 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. In addition, it is important to 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.***

- ***Characterize prototype and priority pathogens, including understanding viral biology and structure, vector biology/ecology, host immune responses, mechanisms of immune evasion, and disease pathogenesis.***

With climate change increasing the range of vectors and zoonotic disease transmission, the dynamics of priority pathogen spread, and pathogen response to shifting environmental factors, an increased focus on research targeting these areas is needed. The recent range expansion of several different tick vectors like *Ixodes* and *Amblyomma spp*. and the projected increased range of *Aedes* mosquitoes into new parts of the U.S. underscores the continued importance of surveillance in tick-borne disease prevention.

Bearing these points in mind, NIH should support research in areas such as vector borne disease (VBD) transmission dynamics, the projected impact and expansion of vectors, and equity in the treatment and prevention of VBDs in different populations. Research should be multidisciplinary and interface with other relevant federal agencies such as the Centers for Disease Control and Prevention and US Department of Agriculture when possible, as many of these emerging and reemerging diseases are zoonotic and should be viewed with a One Health lens, and have a broad impact on public health. NIAID involvement with animal health researchers and veterinarian researchers to bolster research can be vital here. Additionally, research on host immune response in US populations to emerging vector borne diseases in the United States, such as dengue and West Nile virus, can help manage these emerging VBDs.

- ***Leverage expertise in infectious diseases, genomics, proteomics, bioinformatics, and access to clinical samples to develop and test rapid-response diagnostics for biological threats and emerging infectious diseases.***

Rapid diagnostics should be prioritized in pandemic preparedness focused research. IDSA recommends leveraging existing COVID-19 models and programs within NIH and NIAID like RADx to accomplish this goal. In addition to testing, NIAID should work with CDC and other federal agencies to develop guidelines that ensure that in a potential response to a biological or ID threat, successful tests for potential threats can be rapidly deployed and used in clinical practice.

IDSA further recommends increased funding to training programs for genomic sequencing, bioinformatics, and proteomics efforts. While NIAID has genomic programs centered on genetically based immune disorders, expanding training on genomics and bioinformatics in relation to ID would improve overall ID research, and develop stronger understandings of diagnostics, surveillance, and treatment of infectious disease and biological threats. This is especially crucial during public health emergencies (PHEs), when rapid genomic analysis is needed to conduct surveillance and develop diagnostic testing. Programs can be conducted through ID researchers and physician-scientists at institutes working with NIAID or NIH.

- ***Apply knowledge gained from prototype pathogen research to define key antigenic targets for viral family vaccine strategies, utilizing technologies such as artificial intelligence.***

IDSA strongly supports novel research focused on pathogen family vaccines. Broad spectrum pan genus and pan family virus vaccines are essential to future responses to ID threats; these vaccines can be rapidly deployed, and ideally have higher efficacy in the protection of populations in early stage PHE responses. IDSA similarly supports further research on the potential efficacy of broad-spectrum mAbs for early intervention strategies. Research should target improving efficacy in human models, and better characterizing passive immunity in mAb utilization for infectious diseases.

IDSA supports ongoing efforts at NIAID and NIH to develop a universal flu vaccine. Research should be dedicated to a universal vaccine, as well as an H5 specific universal vaccine for use in humans to prevent the transmission of highly pathogenic avian influenza (HPAI). With the emergence of HPAI in US livestock, human spillover cases will become increasingly likely with spread of HPAI through cattle and poultry. Research needs to target the most effective way to protect at risk populations, such as workers in livestock and dairy facilities.

- ***Develop and evaluate pathogen agnostic and pathogen-specific therapeutics, as well as broad-spectrum protective strategies through trained innate immunity and immunomodulation.***

As previously stated, VBDs remain a key area of concern in emerging and re-emerging infections. While developments have been made in the treatment of VBDs, there are still limited therapeutics available. For instance, tick-borne diseases with lower prevalence, such as babesiosis and anaplasmosis, are often neglected in research due to lack of funding and difficulty in mounting clinical trials. Additionally, therapeutic options for rapidly emerging tick-borne diseases like Powassan are virtually nonexistent. Currently, there is little incentive to develop treatment options for certain VBDs despite their growing impact. IDSA recommends designating research funding through to VBDs with lower prevalence or recent emergence as a public health threat. These funding opportunities might be effective as partnerships between industry and federal research. In addition, these partnerships can target vaccine and therapeutic development for rapidly emerging tick-borne diseases, including specific research areas like developing therapeutic alternatives to doxycycline for intolerant patients infected with *Ehrlichia spp*.

- ***Develop and support efficient, flexible, and responsive clinical trial capacity and clinical research expertise to be able to respond to biological incidents affecting public health***.

Many aspects of a response cannot be scaled up quickly and must therefore already be in place and ready to mobilize before a crisis. For example, training clinicians, researchers, and other medical staff to be ready to scale up clinical trial capacity in the event of a PHE a successful response can take years. Investments in training and preparedness need to be built into federal research, and incorporate lessons learned from clinical trials from COVID-19 into updated response guidelines. This is especially relevant in clinical trials that are seen as "warm base" research, which can help fill in readiness gaps in clinical trial capacity. Ongoing research and clinical trials on infectious diseases such as COVID-19 or influenza can then be utilized to rapidly study and conduct emergency clinical trials for emerging respiratory viruses. NIAID should identify trials that can serve as "warm base," or designated readiness trials, that can quickly be scaled up to serve as clinical trials for emerging biological or infectious diseases threats. These clinical trials should prioritize equity and ensure that at risk populations for biological threats are included in studies to ensure. Additional recommendations include:

- Support is needed for registries, biobanks and data queries — particularly for emerging and rare diseases — is desperately needed. This is crucial for advancing therapies for immunocompromised people for whom randomized clinical trials are not possible. Different trial instruments — e.g., registries, large observational studies (pragmatic and retrospective) conducted via EMR searches and randomized trials — need to be considered. In addition, modeling and novel statistical tools that reach answers faster should be considered.
- Vaccine and drug trials provide opportunities for collaboration with industry, including outreach to other disciplines to leverage trials to explore mechanistic hypotheses.
- The ACTIV program provided a model for public-private partnerships to increase trust and access to research across the U.S. and internationally while leveraging scientific innovation and support across several industry partners.
- Administrative burdens should be reduced to incentivize additional sites to engage in clinical trials, including rural and other sites that serve underserved populations. Without reasonable accommodations, the burden of participation may be too high to include these sites.
- Research that addresses intersections between public health, health disparities, environmental challenges, climate change and testing therapies and vaccines provides opportunities for specific settings.
- The National Center for Advancing Translational Science model used for COVID-19 research deserves consideration. It has the benefit of supporting Clinical and Translational Science Awards, which support training and collaboration between centers. This approach also supports training and mentorship of early career physician-scientists as part of the grant, which helps bolster the physician-scientist pipeline.
- Resources are needed for clinical trial networks to support platforms that can evaluate multiple interventions to be studied against one comparator as was done with success during the COVID-19 pandemic. This approach could be useful for enrolling key populations, e.g., people who use substances, transgender women, adolescents, and pregnant people, rather than just studying new drugs in the population who are easiest to study but often are not the most in need of new prevention, treatment or care options.
- Clinical trial participation should be made more accessible by investing in technologies to facilitate data collection in a manner that allows people to participate without significant disruptions in their professional and family commitments. Other strategies to maximize participation include:
    - Providing access to multiple locations for clinical trials, particularly in rural communities or in communities with higher vulnerability to HIV.

    - Offer home visits.
    - Utilize mobile trial vans.
    - Provide travel incentives to reach clinical sites.

- Support dissemination and implementation science studies to understand the most effective public health strategies to address pandemics, including the following:
    - Studies on communication strategies and developing trust in public health.
    - Studies strategies to increase and optimize equitable uptake of vaccines and other preventative measures.
    - Strategies to optimize adherence to public health guidance, including non-pharmaceutical interventions.

In addition to the above research priorities identified by NIAID, IDSA recommends the following as priorities for the next NIAID strategic plan.

Strengthening the ID Workforce

ID practice and research faces ongoing workforce shortages that have been exacerbated by low compensation and the strain of the COVID-19 pandemic. This is especially true for the physician-scientist workforce, which requires an extra year of training that is often not covered under the student's grants or scholarships. The persistence of emerging and re-emerging infectious diseases threats, the growing trend of AMR, and the necessity of ID expertise and support throughout other medical specialties make strengthening the ID clinical and research workforce a priority. However, it continues to be incredibly difficult for many early career ID researchers and physician-scientists to receive the funding needed to enter and remain in the workforce. Many of these researchers have a difficult time obtaining funding through NIAID's grants. This disincentivizes students and trainees from pursuing a career in ID research, as other fields and specialties have greater chances for funding and may be less cost prohibitive.

Recommendations to increase and sustain growth in the ID workforce through the strategic plan include:

- Increase 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.
    - This is especially true for K99 awards. The number of K99 awards is very limited and physician applicants in the general pool may compete with non-physicians who have been in research training longer and have more publications and accomplishments. The physician-scientist K99 - Physician-Scientist K99/R00 may require changes to be more beneficial because the funding in the first years is lower than a K award.
    - Expanding the T32 to include a wider range of scholarly work involved in training for ID clinical research.
- Explore ways to tie K funding to other NIH-funded network awards to incentivize inclusion of early-stage investigators (ESI) as part of their teams as PIs on subprojects.
- Increase 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.
- Develop pathways for researchers from HIV-impacted populations and scientists from across the translational spectrum who are from community and/or in close connection with community.

- Provide resources to meaningfully engage community—based providers in clinical research to ensure they have the tools necessary for them to successfully engage in studies.
- Develop pathways at all educational levels for diverse learners to ensure a robust cohort of people entering the HIV research workforce.
- Promote other avenues of sustained funding beyond traditional resources, such as the Research Career Development Awards (K). More and different types of funding opportunities are needed to reduce barriers for new researchers.
- Recruit from a diverse pool of researchers, including nurse practitioners, physician assistants, pharmacists and physicians in community-based settings by enhancing training opportunities and pathways for clinicians to connect with clinical trial and research networks.
- Increase opportunities for non-US citizens and increase international collaboration to include non-U.S. citizens or green card holders eager to engage in research, particularly in underserved areas.
- Partner with external organizations to encourage STEM and research education.
- Expand opportunities for students to acquire research.

Increase Support and Focus on Implementation Science and Public Health Research

The current NIAID strategic plan outlines a comprehensive research agenda for developing key biomedical understanding and technologies to combat infectious diseases. However, IDSA recommends the addition of a concrete scientific agenda dedicated to ensuring that these biomedical tools and knowledge are implemented and disseminated in an effective and equitable manner to achieve their promise and lead to maximal public health impact. This scientific agenda is relevant for the range of NIAID priorities, including combating AMR with stewardship programs, achieving goals for Ending the HIV Epidemic, or combatting the next pandemic.

The current strategic plan focuses on research from T1 to T3 on the translational research spectrum but is relatively silent on T4 and T5 research. In addition to programs designed to facilitate implementation and dissemination of research findings, the strategic plan for NIAID should also support an interdisciplinary scientific research agenda—that includes broader disciplines including epidemiology, socio-behavioral science, participatory research, economics and market research--to generate the knowledge for how to best achieve these aims.

Research Communications

IDSA urges NIAID to include science communications as a strategic priority for federal research. COVID-19 highlighted the need for transparency and strong public outreach to ensure that the information contained in and evolving nature of research conducted through federal agencies is disseminated to, understood by, and accepted by the public. This approach can build a sense of trust and accountability in the implementation of research findings, especially in public health emergencies when clear scientific information is needed most. Cross disciplinary research that incorporates behavioral science and implementation science into strategies to communicate NIAID's research would be beneficial to achieve these goals. There is also a pressing need to research effective ways to combat mis- and disinformation tactics that undermine faith in science and medicine.

Improving DEIA in Research

IDSA believes that diversity, equity, inclusion, and accessibility (DEIA) must be an institutional priority to research. Commitment to DEIA requires resources, funding and support for NIH-funded institutions. Additionally, it requires structural changes centered on improving representation of underrepresented

groups at all levels of research through collaborative efforts. These efforts not only bolster research that is more representative and equitable but can bolster a clinical research workforce that betters reflect the principles of DEIA. **Recommendations to grow DEIA through the strategic plan include:**

- Create and bolster 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 first-generation 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 F31 NRSA Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research mechanism. 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 with diverse communities.
- Ensure that women and other populations, such as pregnant people, adolescents, transgender women, children and other populations, are included in clinical trial development and enrollment.
- Ensure that clinical trials continue and are supportive even in states where there are statutes or pending legislation that negatively impact LGBTQ+ individuals, women and other historically marginalized populations.
- Establish equitable enrollment goals and geographic distribution in clinical trials.

To further promote DEIA in the workforce, NIAID should prioritize ways to target support to researchers early in the training pipelines. Students, trainees and researchers from underrepresented populations must be given resources early in their education to facilitate their transition across the stages of their careers. Financial challenges and lack of mentorship for students from underrepresented populations at various stages limits recruitment and retention. Groups like first generation students and researchers are highly underrepresented in research and medicine because they are not given the needed resources and opportunities to succeed. A study found that first generation physician-scientists are less likely to apply to MD-PhD than to MD programs, often due to a lack of social, cultural and financial capital. This failure of inclusion perpetuates a systemic lack of diversity and accessibility in the physician-scientist workforce, which in turn limits overall expansion of the physician-scientist workforce and DEIA considerations in patient care and clinical research. Targeted initiatives are needed to provide crucial support and resources necessary for students and researchers from underrepresented backgrounds to successfully advance through the training pipeline into the workforce.

IDSA welcomes continued collaboration on the NIAID Strategic Plan. If you have questions about these comments or would like to connect, please contact Eli Briggs, director of public policy, at ebriggs@idsociety.org.

Sincerely,

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IDSA President

Allison Agwu, MD, SCM
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