hivma
hiv medicine association

1300 Wilson Boulevard Suite 300 / Arlington, VA 22209
703-299-1215 / f 703-299-8766 / info@hivma.org / www.hivma.org

Submitted electronically to: ODOARRFI19@nih.gov

May 12, 2017

Maureen Goodenow, PhD
Associate Director of AIDS Research, NIH
Director, Office of AIDS Research (OAR)
National Institutes of Health
5601 Fishers Lane. Room 2E40
Rockville, Maryland 20852

Re: Request for Information for the Development of the Fiscal Year 2019 Trans-NIH Plan for HIV-Related Research

Dear Dr. Goodenow:

The HIV Medicine Association (HIVMA) is pleased to provide comments regarding the development of the OAR's Fiscal Year 2019 Trans-NIH Plan for HIV-Related Research. HIVMA is a medical professional association nested within the Infectious Diseases Society of America representing more than 5,000 HIV clinicians and researchers working on the frontlines of the HIV epidemic across the United States and around the globe.

HIV research today stands at a critical juncture with robust scientific opportunity offering reason to be optimistic on a number of fronts including the quest for a vaccine and a cure. However, flat funding of HIV research at the NIH since 2015 threatens to imperil our progress. The role of the OAR in coordinating the HIV research agenda across the Institutes and Centers is more important than ever to ensure that scarce research dollars are allocated as wisely as possible to have the greatest impact in addressing the HIV/AIDS epidemic.

We understand that the overarching high-priority areas of research as delineated in the NIH Director's Statement of August 12, 2015 (NOT-15-137) will remain in place, but that the OAR is seeking feedback on areas of scientific and research opportunity that can refine the NIH HIV/AIDS research agenda and optimize the investment of HIV/AIDS research resources to search for critical strategies to prevent, treat, and cure HIV/AIDS. Below are our responses to the questions set forth in the Federal Register Notice regarding this Request for Information:

1. What are the emerging areas of science that could impact HIV/AIDS prevention, treatment, care, and eradication that we need to focus on?

In the areas of prevention and treatment, a top priority should be the development of a safe and effective long-acting injectable anti-retroviral agent or broadly neutralizing antibodies which could reduce new infections and improve health outcomes by decreasing or eliminating barriers to medication adherence. Ongoing research to develop monoclonal antibodies as candidate microbicides and vaccines should also continue to be prioritized.

In addition, strategies to improve the implementation and uptake of existing biomedical prevention interventions are critically important including pre-exposure prophylaxis (PrEP) in hard to reach populations– such as young people who are among those at greatest risk of acquiring HIV infection but often are not engaged with the health care system. Critical research questions also remain unaddressed about the acceptability and effectiveness of PrEP among at-risk women in the U.S. With the U.S. Preventive Services Task Force (USPSTF) presently evaluating the evidence base for recommending PrEP as a clinical preventive service, it is now even more pressing to address these research gaps.

Research is needed to improve the delivery of HIV care; we need to develop and test novel approaches to improving rates of linkage to and retention in care, especially among adolescents and young adults. The same strategies that may work relatively well with older adults are not as effective with young people. In particular, the use of social media and other technology platforms including testing approaches such as "virtual medical visits" hold potential to better engage young people in care who might otherwise be averse to attending a regular schedule of clinic visits. Discovery of new models for retaining young people in long term care may also hold promise for improving the management of other chronic disease conditions.

In the area of eradication, a priority focus should be to advance the science by capitalizing on promising discoveries regarding biomarkers for the HIV reservoir, immunologic approaches that may promote control of the virus without antiretroviral therapy, and anatomic compartments in which HIV may persist. Advances in other fields, such as those applied to cancer immunotherapy, in informing strategies to control HIV also deserve evaluation. Care must also be taken to ensure that there is adequate coordination between the HIV vaccine and cure research agendas in order to best benefit from the synergies that exist between these two areas.

We also think it is essential that TB research (basic science, translational, clinical, implementation science) be a major focus of the Trans-NIH Plan for HIV-Related Research. Tuberculosis (TB) is the leading cause of death worldwide due to an infectious disease and remains the leading cause of death among persons with HIV infection. If TB is not more aggressively addressed, a recent CDC study estimates that the proportion of new drug-resistant TB cases in four key high-burden countries will increase substantially by 2040. The limited understanding of the biology of Mycobacterium tuberculosis and the host immune responses also hampers the ability to develop new tools (including an effective

vaccine, new TB drugs, TB diagnostics including a point of care test, biomarkers) that are urgently needed to enhance TB/HIV control. For example, there is lack of available biomarkers or other predictive tools which would allow targeting of therapy for latent TB infection (LTBI) among individuals at high risk for progression to active TB. This is incredibly important given that recent estimates that 1.7 billion people (23% of the world's population) are infected with M. tuberculosis and have LTBI. Although there is substantial evidence to indicate the benefits of use of isoniazid preventive therapy (IPT) in preventing TB and reducing mortality among PLHIV in high TB burden low and middle income countries, there has generally been poor uptake of this basic TB prevention measure among PLHIV and additional implementation science research around HIV/TB is needed. Furthermore, incredibly, the optimal duration of TB preventive therapy among PLHIV is not known which leads to conditional and conflicting recommendations. New and shorter treatment regimens are needed for LTBI for PLHIV, new drugs and shorter regimens for active TB disease which have limited drug-drug interactions with antiretroviral therapy are also urgently needed for PLHIV. This is highlighted by the development of only one new FDA-approved drug for TB in the last 40 years. New anti-TB drugs and treatment regimens are urgently needed to combat highly drug resistant TB which is associated with incredibly high morbidity and mortality among PLHIV. New and better diagnostics including a simple point of care test is urgently needed to enhance case TB detection in resource limited areas where only 40% of all TB cases and 20% of MDR-TB cases are detected.

Lastly, in the context of the national opioid epidemic we need more research into HIV prevention and treatment among the highly vulnerable population of injection drug users.

2. What do you think the OAR/NIH should know about the HIV/AIDS epidemic that will impact research?

As noted in the 2016 Progress Report on the National HIV/AIDS Strategy: Updated to 2020, despite progress in some areas, we must discover novel ways to more effectively deploy existing prevention and treatment tools among the most vulnerable but hard to reach populations, including by engaging with them outside of clinical settings. It is imperative to focus on populations in which the latest CDC reports show alarming increases in incidence of HIV infections, in particular a 35% increase among 25-34 year old gay and bisexual males and a 24% increase among Latino gay and bisexual males. Transgender women also continue to be at high risk of HIV infection.

It will also be important to focus on young people, and in particular among young MSM of color, as a priority considering the Progress Report findings that:

- At the end of 2013 of the estimated 60,900 youth living with HIV in the United States, 51% (31,300) were living with undiagnosed HIV—the highest rate of undiagnosed HIV in any age group;

- Among youth who were diagnosed with HIV in 2014, only 68% were linked to care within 1 month—the lowest rate of any age group; and
- Among youth who were diagnosed with HIV in 2012 or earlier, 55% were retained in HIV care and 44% had a suppressed viral load—the lowest rate of viral suppression for any age group.

We also urge renewed attention to improving our ability to engage adolescents and young adults in clinical trials. We share concerns expressed in a May, 2016 letter from the President's Advisory Council on HIV/AIDS (PACHA) about the reduction in critical research capacity that may have resulted from the NIH's transition from the Adolescent Trials Network III (ATN III) to a network formed using the U19 mechanism. As recommended by the PACHA, we urge establishment of an independent and interdisciplinary external advisory group with stakeholder representation to monitor and assess the U19 progress. We agree with the PACHA that the advisory group should involve key community members with expertise in pediatric and adolescent research as well as youth stakeholders.

In addition, with more and more people living longer with HIV infection, research must continue to address HIV and aging issues, such as cardiovascular disease, liver and renal dysfunction, cancer, and neurological disorders. In particular, the impact of persistent inflammation on these disorders deserves additional attention, and new interventions aimed at preventing these complications need to be vigorously pursued. The coordinating role of the OAR is critical to advancing the field of HIV and aging so that HIV-related research involving other conditions and organ systems does not get diffused across different Institutes in a way that important synergies and opportunities are missed.

3. Within the HIV/AIDS research mission of the NIH, what are the three most important and/or promising scientific developments in the HIV/AIDS field that you would recommend for NIH funding? In fiscal year 2019? Over the next three to five years (fiscal years 2019 – 2023)?

In our view, the top three immediate priorities for the OAR in FY2019 should be in the areas of: 1) developing long-acting agents for both treatment and prevention; 2) pressing forward with cure research with attention to the synergies and potential areas of convergence that exist with the vaccine research field; and 3) filling significant gaps in the area of PrEP research with regard to adolescents and young adults and well as women who have an indication for PrEP. It will additionally be crucial to increase our focus on linkage and retention strategies for hard to reach populations, given that diagnosed patients who are not retained are the greatest proportion of transmitters. Over the longer term, the priorities may shift depending on where both the epidemic and the science are headed.

4. HIV/AIDS research at the NIH is a continuum from basic science through implementation research. The NIH supports this continuum through the institutes and centers in collaboration with other government agencies and nongovernmental organizations. How can the NIH improve the HIV/AIDS research program? Please include appropriate metrics and evaluation approaches.

The OAR has played a critical role as an "institute without walls" in ensuring effective collaboration and coordination of HIV research across the Institutes and Centers. Collaborations with some Institutes (including NIDA, NIMH, NCI, NIDDK) have historically been stronger than with others, with a contributing factor to success being the existence of a point person within a given Institute that has a strong understanding of HIV. To forge coordinated efforts, it would be useful for every institute receiving HIV/AIDS research dollars to have a point person familiar with HIV and to convene regular meetings of this group of staffers – a role well-suited to the OAR.

It will continue to be important for the OAR, in collaboration with OGAC, the CDC and others, to play a leading role in helping to ensure a strong US role in fostering coordinated efforts in the area of international HIV prevention and treatment research.

We additionally recommend that the OAR seek to engage community-based organizations in discussion about novel ways to better engage young people in HIV treatment and care and involve them in HIV research.

Lastly, it would be useful to identify the allocation of HIV/AIDS research dollars that is supporting each of the OAR's high priority research areas, to provide a better sense of how the portfolio is presently balanced. This cannot be deduced with complete accuracy from the OAR annual budget because the line items do not match up directly with the priority research area categories.

Thank you for your consideration of our views, and please count on us as a resource in the important work of the OAR. We can be reached through HIVMA Senior Policy Officer, Kimberly Miller at kmiller@hivma.org.

Sincerely,

Wendy Armstrong, MD, FIDSA
Chair, HIVMA Board of Directors