Dear Dr. Fauci,

The Infectious Diseases Society of America (IDSA) strongly supports the National Institute of Allergy and Infectious Diseases’ (NIAID) commitment to strengthening the pipeline for early career researchers. We enthusiastically endorse new mechanisms designed to improve young investigators’ career prospects, such as the Stimulating Access to Research in Residency (StARR R38) award. We also were pleased to see an increase in the R01 award payline for fiscal year 2019. However, particularly relative to the R payline increase, we were deeply concerned to learn that the final NIAID K award paylines for FY19 remained at the 18th percentile (with the exception of K99s).

We believe that the current baseline level of funding for K awardees is detrimental to the support of a strong infectious diseases (ID) physician-scientist pipeline. Although we appreciate that NIAID may set initial paylines conservatively and fund additional applications at the end of a fiscal year, low paylines often discourage trainees from taking the time to apply for funding at the outset. At a time when we are seeing an increased need for ID researchers to combat antimicrobial resistance, global outbreaks, and biosecurity threats, there are growing concerns about the decreasing numbers of researchers entering ID. To the extent that low K award success rates might contribute to this issue, we urge NIAID to increase existing K award paylines, prioritize K to R faculty transitions, and consider implementing additional mechanisms to improve the funding landscape for early career researchers and better support the objectives of the NIH Next Generation Researchers Initiative (NGRI).

Below please find several slides illustrating the NIAID K award paylines and success rates relative to other NIH Institutes and Centers (ICs) using NIH RePORT data from previous years. These data support the finding of a significant decline in NIAID support for young investigators using the K mechanism.
**K08 Success Rate Over Time: NIAID Compared to All Other ICs**

These data show that success rates for K08 grants at NIAID have decreased considerably since 2014 and are now well below the success rates for all other NIH ICs during the same period. Despite a substantial budget increase in FY18, NIAID K payline impact scores have remained stagnant since 2017 and have decreased from previous years. As K awards remain one of the best ways to fund young investigators, and the only clear way that enables them to enter the NIH extramural pipeline, it is imperative that NIAID prioritize ways to increase the likelihood of success with this funding mechanism. The current funding levels are inadequate to train and sustain the next generation of physician-scientists.

**K23 Success Rate Over Time: NIAID Compared to All Other ICs**
These data show that the success rates for K23 at NIAID have also fallen precipitously since 2014 and are well below the success rates for all other NIH ICs for 2017.

**Decline in KO8 Applications to NIAID**

There has been a decline in the number of K08 applications to NIAID since 2008 with a nadir in 2012 of less than 40 applications. The trend for the number of K08 applications to NIAID compared to all other ICs has also declined since 2008.
The number of K23 applications to NIAID has increased since 2016. The trend for the number of K23 applications to NIAID as compared to all other institutes has also increased since 2016. This indicates that there is a growing interest in patient-oriented research, so funding should be appropriately adjusted to reflect these trends.

Questions and Future Considerations

NIAID has previously communicated that the total number of K awards has remained flat due in part to the increasing costs of K awards over time. IDSA understands this challenge and continues to advocate for higher overall funding for NIAID. We had hoped that funding increases provided in recent years would have been sufficient to boost support for both R and K awards. It would be helpful to better understand any additional factors that have led to maintenance of the current number of K awards and an increase in the R payline, particularly given the widespread attention to enhancing the pipeline for the next generation of physician-scientists.

It would also be helpful for applicants, mentors, and institutions to have access to metrics relating to K award applications and success rates. For example, what is the number of first-time applicants relative to reapplicants? What are the success rates for both initial submissions and resubmissions, and how many times have applicants reapplied? There is a perception among
many fellows that successful K applicants have prior training in advance of their fellowship (e.g., MS, PhD), and it would be helpful for NIAID to report on its website what proportion of K awardees have received prior training. Data of success rates by gender would also be of interest as NIH and academic institutions increase their focus on enhancing the research pipeline to optimize diversity, equity, and inclusion. Additionally, NIAID may want to consider collecting data on the number of K awardees who transition to R awards as an indicator of success under the NGRI.

We recognize that comprehensively addressing the funding challenges faced by early-career researchers will require a collaborative effort by stakeholders and NIH. We stand ready to aid NIAID as it refocuses efforts on early-career investigator support, and look forward to working together to ensure the sustainable support of a diverse biomedical research infrastructure that facilitates new advances in patient care. Should you have any questions, please do not hesitate to contact Jaclyn Levy, IDSA’s Senior Program Officer for Science & Research Policy, at jlevy@idsociety.org or 703-299-1216.

Sincerely,

Paul G. Auwaerter, MD, MBA, FIDSA
President, IDSA