ORIP Concept Clearance: HIV/AIDS Scholars Programs (Ko1, R21, R13) Reissue

Stephanie Murphy, V.M.D., Ph.D., DACLAM Director, Division of Comparative Medicine, ORIP





Office of Research Infrastructure Programs (ORIP)

Concept Clearance: Reissue

HIV/AIDS Scholars Program (K01, R21, R13)

Objective: To facilitate development of effective HIV/AIDS treatment and prevention by increasing the workforce that can employ nonhuman primates (NHPs) as preclinical models in HIV/AIDS research

Funds Available and Anticipated Number of Awards: Contingent upon NIH appropriations and the submission of meritorious applications

Award Project Period: 3 years (K01), 2 years (R21), 4 years (R13)

Council Action: Vote for approval of the concept for "HIV/AIDS Scholars Program (K01, R21, R13)"



Background

- NIH Strategic Plan for HIV and HIV-Related Research for FY 2021-2025 identified a national need to train the next generation of HIV/AIDS researchers and to achieve specific national priorities for decreasing the number of new HIV infections
- ORIP's Report of the Expert Panel Forum on Challenges in Assessing Nonhuman Primate Needs and Resources for Biomedical Research issued in 2018 identified a pressing need to expand the pool of skilled NHP researchers in the United States
- Combined, these recommendations point to a shortage of researchers using NHP models in preclinical HIV/AIDS research



Background

- In FY 2016, ORIP and the NIH Office of AIDS Research (OAR) launched the HIV/AIDS Scholars Program which focused on HIV vaccine research
 - HIV/AIDS Vaccine Scholars Program (K01)
 - Annual Conference for Early Stage HIV/AIDS Vaccine Researchers (R13)
- K01 and R13 FOAs were broadened in FY 2019 beyond HIV vaccine research to include other NIH priorities for HIV-related research using NHPs as preclinical models
- In FY 2020, ORIP and OAR added an R21 FOA to address the challenges ESIs face to acquire their first research project grant from NIH, particularly when using expensive NHP models



HIV/AIDS Scholars Using NHP Models Program (K01)

- Provides salary and research support to investigators within 10 years of completing their terminal professional degree or residency training and who have at least two years of postdoctoral training or equivalent
- Grants provide 3 years of support for intensive research career development under guidance of an experienced mentorship team
- Research and mentorship must be in the field of HIV/AIDS translational studies using NHPs as preclinical models.
- Up to \$100,000 salary support and \$100,000 research support (direct costs) per year
- Lead ICO ORIP; Participating ICOs NIAID, NIMH



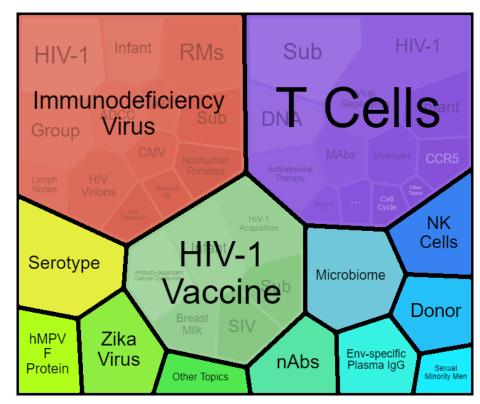
ESI HIV/AIDS Research Using NHP Models (R21)

- Provides research support to investigators within 10 years of completing their terminal professional degree or residency training and who have at least two years of postdoctoral training or equivalent
- Grants provide 2 years of research support
- Allows ESIs to develop new research directions and to position these researchers to be competitive for new research project (e.g., R01) funding
- Up to \$200,000 research support (direct costs) per year
- Lead ICO ORIP; Participating ICOs NIMH



Program Progress from FY16 to FY21 - K01 and R21

- 16 K01 and R21 grants awarded from 27 applications
- 6 grantees competed successfully subsequently for NIH funding
- Many of these grantees have advanced to Assistant or Associate Professors, and industry scientists
- Grantees have resulted in 86 publications, with grantees listed as first or senior author on 31 publications
- 76 research articles received a relative citation ratio of 1.21



Topic areas of research articles from HIV/AIDS Scholars awards based on extracted abstracts (from iSearch)



Conference for Early Stage HIV/AIDS Researchers Using NHP Models (R13)

- Provides support to conduct a workshop/conference/meeting
- Objective is to provide early stage HIV/AIDS researchers with guidance on conducting preclinical research using NHP models addressing NIH HIV/AIDS research priorities
- Conference topics include
 - Statistical and host genetics considerations
 - Methods to translate the results of NHP studies to clinical trials in humans
 - Developing skills related to networking, grantsmanship, and goal/milestone-driven projects
 - How to develop new NHP research programs to better reflect clinical observations and findings in HIV/AIDS patients
- Award provides 4 years of support for one meeting per year, with up to <\$75,000 (total costs) per meeting per year
- Annual conference for ESIs conducting HIV translational research in NHP models is not limited to K01 Scholars



Program Progress from FY16 to FY21 - R13

- Conferences were organized and evaluated by the HIV Vaccine Trials Network (HVTN)
- First conference series took place from 2017-2019 in Washington, D.C.
 - Collectively the 3 conferences drew 125 total attendees from 39 institutions and four countries,
 79 of whom were ESIs
- HVTN successfully adapted to the limitations imposed by COVID-19 pandemic and held conferences virtually in November 2020 and September 2021
 - Conferences were well attended
 - ESI attendees reported an enhanced understanding of leading scientific issues in the field, improved career development skills, and a broader appreciation of what it means to be a senior investigator
 - ESIs established new research collaborations, developed peer support groups, and expanded professional networks



Concept Clearance

Vote for approval of the concept for "HIV/AIDS Scholars Program (K01, R21, R13)"

