## Concept Clearance – Reissue of Limited Competition Small Grant Program for ORIP Veterinary Scientist Special Emphasis Research Career Award (SERCA) K01 Recipients (R03)

The National Institutes of Health (NIH) has long recognized the importance of building a strong physician-scientist workforce, including veterinary scientists, as highlighted in foundational workforce development reports that, while not recent, remain relevant and informative (Biomedical Research Workforce Working Group Report June 2012 and Physician-Scientist Workforce Working Group Report, June 2014). To support this goal, the Office of Research Infrastructure Programs (ORIP) supports SERCA K01 grants under the Mentored Research Scientist Development Award (Parent K01). These awards provide a mentored research experience to help them transition into independent investigators focusing on comparative medicine, biomedical research, and translational sciences. The transition from K-grant to R-grant is a critical career juncture. Recognizing the challenges of this phase, several NIH Institutes - NHLBI, NIAID, NIAMS, and NIDDK - have developed limited competition R03 grant program to supplement the career development of their K-grant recipients and enhance their competitiveness for R01 or equivalent grants. Similarly, ORIP established its own R03 program in Fiscal Year (FY) 2017 to facilitate the progression of SERCA K01 awardees toward independent research careers.

The ORIP R03 program aligns with ORIP's mission to provide "research training opportunities for veterinary scientists" and with Strategy 3.1 of its Strategic Plan 2021–2025, which highlights: (1) promoting "innovative approaches to training and developing the careers of veterinarians working in biomedical research"; (2) investing "in training and mentorship innovations for the development of veterinary scientists as independent researchers and collaborative team scientists"; and (3) supporting "career development and training that prepares graduate veterinarians to pursue research that fills major gaps in biomedical and biobehavioral science and expands knowledge in emerging areas critical to human health." From January 13, 2018, to December 1, 2024, ORIP received 42 applications and issued 13 awards (31% success rate) under three Notices of Funding Opportunity (NOFOs): PAR-17-301, PAR-21-090, and PAR-23-127. The current NOFO, PAR-23-127, offers three annual application deadlines, enhancing flexibility for SERCA K01 awardees compared to the single annual deadline in previous iterations.

ORIP's R03 program is intended to support research projects that can be carried out in a short period of time (2 years) with limited levels of funding and resources and that may provide preliminary data to support a subsequent R01 or equivalent application. This R03 program supports different types of projects, including but not limited to pilot and feasibility studies; secondary analysis of existing data; small, self-contained research projects; development of research methodology, and development of new research technology. The R03 program is limited to ORIP SERCA K01 awardees who are encouraged to submit an R03 application after completion of the first two years (24 months) of their K01 award. However, they are ineligible if they have already successfully competed for an R01 or equivalent award. The SERCA K01 award must be active (not in a no-cost extension) at the time of submission. Resubmission applications may be submitted any time prior to the K01 award expiration date, provided the K01 award is still active (not in a no-cost extension) at the time of submission. The second year of the R03 award does not require concurrent K01 support. SERCA K01 awardees may receive funding for only one R03 grant award. R03 applicants can request a budget of up to \$150,000 in direct costs for two years.

The program has achieved notable success since being launched in FY 2017, with the first NOFO (PAR-17-301) being released in FY 2017 followed by receipt of the first round of applications eligible for submission in FY 2018. Thirteen grant awards were made from FY 2019 and FY 2024 from a total of 42 applications submitted from FY 2018 to FY 2024. Seven of the 13 grantees have applied to NIH for R01 grants in FY 2025 while 3 grantees already have been awarded R01 grants. After receiving R03 grants, several grantees have advanced in following years to the rank of Associate Professor (7 grantees) and Assistant Professor (1 grantee). The remaining grantees have maintained their positions as Assistant (4 grantees) or Associate (1 grantee) Professors. The 13 grantees collectively have 16 publications (13 research, 1 review, 2 clinical) associated with their R03 grants, 15 of which are last author publications, indicating their independent status. Relative citation ratios for these publications ranged from 0.23 to 2.04. In terms of translation, publications clustered primarily between animal-oriented research and molecular/cellular research. These publications covered a wide range of topics including microbiome, intestinal ischemia reperfusion injury, T-cell development, B-cell targeted treatments, and various types of cancer. The program's outcomes demonstrate its effectiveness in supporting SERCA K01 awardees as they transition to independent and productive research careers.

To address the ongoing need for transition support between K01 and R01 grants for veterinary scientists, ORIP requests the concept clearance from the Council of Councils to continue support for the "Limited Competition Small Grant Program for ORIP Veterinary Scientist SERCA K01 Recipients (R03)". This continued investment will ensure the sustained development of veterinary scientists into leaders in biomedical research.