

Concept Clearance - Reissue of Limited Competition: National Primate Research Center (NPRC) Program (P51)

The current NPRC Program was initiated in the 1960's by Congress. The program has grown over the years, changing from regional to national centers in 2001. The overall objective of the NPRC program is to provide support for scientists who use nonhuman primates (NHPs) in their research by providing the animals, facilities, and scientific and veterinary expertise needed to enable research using NHPs as well as to support training opportunities. There are seven NPRCs located across the U.S., which are available to any investigator, with priority given to NIH-supported researchers. In 2010, the need to coordinate the NPRCs was recognized and resulted in the formation of the NPRC Consortium and the creation of a common strategic plan. Consortium Working Groups (WGs) were established as part of the strategic plan to promote sharing of best practices, protocols, and data. In addition, the NPRC Consortium supports 2 websites: (1) the first targets investigators and provides detailed information on the resources available to them (<https://nprcresearch.org/primate/>); and (2) the second targets the public and provides educational material on the use of NHPs in research, how NHPs have contributed to biomedical advances, and the progress in maintaining proper care of these valuable research animals (<https://nprc.org/>).

The NPRCs were designed to support research across the scientific areas of research supported by the NIH Institutes and Centers (ICs). Thus, the NPRCs have scientific components that include research areas such as: infectious disease, neuroscience and behavior, reproductive and regenerative medicine, genetics, cardiovascular, metabolic, obesity, and respiratory. In addition to scientific expertise, the NPRCs provide state-of-the-art facilities to house and perform research using NHPs. The facilities include the necessary equipment and core services to support behavioral assessments, imaging and diagnostic services for clinical and research purposes, assay services for biomarkers and pathogens, and surgical procedures including modern methods to reduce invasive impact (e.g., laparoscopy, endoscopy, coloscopy). The NHP colonies are well-characterized to include origin, genetics, pedigree information, and specific pathogen free (SPF) status. Some NPRCs have expanded SPF colonies. The Centers continue to develop and enhance NHP models of human disease as NHPs provide the translation link to human studies. The NPRC Program includes a pilot project program, which is designed to support: early-stage investigators, first-time NHP researchers, research to improve NHP models, and preliminary studies to provide data to support hypothesis-driven research. These projects are reviewed in an objective manner at each NPRC and awarded based on their merit. NPRCs provide education and training programs to promote development of veterinarians, scientists, and clinical researchers focusing on the NHP model. More recent developments include education of the public both at the local and national level.

The NPRCs have grown their research portfolios over the years with increased support from NIH ICs, other federal agencies, non-profits and in rare cases for-profit companies, which obtain services at a higher rate than NIH-sponsored researchers.

In one fiscal year (FY18): almost 1,000 research projects were supported; over 1,150 scientists were supported and the majority (82%) of these investigators were external to the NPRC; almost 81,000 NHP samples were distributed to investigators nationally or internationally; over 660 original articles, reviews or book chapters were published as a result of NPRC projects; and over 1,000 trainees, undergraduate and graduate students, postdoctoral fellows, and veterinary students/graduates, were supported.

Similar accomplishments were apparent in previous years. Of particular interest is how the P51 base grant award is leveraged by each NPRC. The base grant does not provide sufficient funds to fully support the individual NPRC activities. Other sources, including program income, institutional support, and philanthropic donations, provide additional resources to fund the NPRC. Thus, NIH's investment in the P51 base grants are leveraged each year to provide high quality research in NHPs. Based on the productive nature of the NPRC Program, ORIP requests continued support for the P51 Limited Competition Funding Opportunity Announcement.