

## Concept Clearance - Reissue of National Primate Research Centers Program

The National Primate Research Centers (NPRC) Program was initiated in the 1960s by Congress. The NPRC Program supports scientists utilizing nonhuman primates (NHPs) by providing essential resources, including animals, state-of-the-art facilities, and expert training in both scientific and veterinary disciplines. Located across seven sites in the United States, these Centers are accessible to all investigators, with NIH-supported researchers receiving prioritized access. Recognizing the importance of coordination, the NPRC Consortium was formed in 2010. The Consortium enhances collaboration and oversees multiple working groups spanning a number of topics relevant to all NPRCs. It also hosts two key websites: one aimed at researchers, offering comprehensive details on available resources (<https://nprcresearch.org/primate/>), and the other designed for the public, offering educational materials on the role of NHPs in research, their contributions to biomedical advancements, and the ongoing efforts to ensure their proper care (<https://nprc.org/>).

The NPRCs were designed to sustain research across all scientific areas supported by NIH. They encompass scientific components that address studies in infectious diseases, aging, cardiovascular diseases, metabolic diseases, neuroscience and behavior, reproductive and regenerative medicine, genetics, respiratory diseases, cancer, and others. The NPRCs offer state-of-the-art facilities to house nonhuman primates (NHPs) and conduct advanced research, equipped with the latest technology and core services. These facilities support comprehensive behavioral assessments, cutting-edge imaging and diagnostic services for both clinical and research purposes, biomarker and pathogen assay services, and surgical procedures utilizing modern, minimally invasive techniques such as laparoscopy, endoscopy, and colonoscopy. These Centers are at the forefront of developing and refining NHP models of human disease as NHPs provide the translational link to human studies. To foster innovation, the NPRCs offer a pilot program designed to support early-stage investigators, first-time NHP researchers, efforts to improve NHP models, and preliminary studies that explore the feasibility of larger projects. In addition, the Centers also provide education and training to veterinarians, scientists, and clinical researchers focusing on NHP models, as well as providing public education at local and national levels.

The NPRCs offer an array of widely used resources that significantly advance research capabilities. Among these is a biomaterials query system, consisting of a database of available biomaterials at the NPRCs and other NHP centers, allowing researchers to request specific tissues securely online. The NPRC Consortium activities increase scientific and financial efficiency across the Centers by fostering collaboration and forming specialized groups such as the Aging Research, Infectious and Emerging Diseases, and Breeding Colony Management Working Groups. These groups address shared challenges across NPRCs, ensuring that best practices, protocols, and data are effectively shared. Additionally, the Macaque Genotype and Phenotype (mGAP) Resource offers genomic and phenotypic data from over 3,000 rhesus macaques located at 9 different NIH-supported NHP centers, including the NPRCs, as well as information on ~80 naturally occurring genetic disease models that have been identified so far.

In FY23, the Centers supported 871 active research projects involving approximately 1770 scientists and 685 trainees; the majority (79%) of these investigators were external to the NPRC. Approximately 2000 NHPs and more than 85,000 NHP samples were distributed to researchers, resulting in nearly 440 publications utilizing NPRC resources and capabilities. The NPRCs facilitated unique research projects across diverse fields, with infectious diseases (viral or bacterial), behavioral and systems neuroscience, and reproductive health research emerging as the leading areas of investigation. 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 is leveraged each year to provide high quality research in NHPs.

In light of the program's demonstrated success and the critical need to ensure national availability of NHP resources, ORIP requests concept clearance from the Council of Councils to continue its support for the National Primate Research Centers Program.