

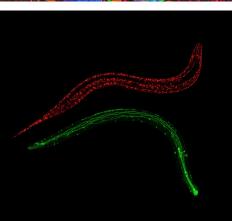
ORIP Strategic Plan

2021-2025

Infrastructure for Innovation

For the complete Strategic Plan, please visit orip.nih.gov/strategic-plan.







ORIP's Mission Statement

ORIP advances the NIH mission by supporting infrastructure for innovation. This support is focused on research resources, including animal models for human diseases, cutting-edge scientific instrumentation, construction and modernization of research facilities, and research training opportunities for veterinary scientists. Through continued engagement with NIH Institutes, Centers, and Offices and the biomedical research community, ORIP empowers and expands existing programs and develops new initiatives to support NIH research at the forefront of scientific progress.

Division of Construction and Instruments

The Division of Construction and Instruments (DCI) Shared Instrumentation Program provides access to innovative technologies to groups of NIH-funded investigators working in all areas of biomedical research within NIH's mission. The program supports the acquisition of commercially available instruments that are costly but essential to carrying out cutting-edge basic, translational, and clinical research. Examples of funded instruments include X-ray diffraction systems, nuclear magnetic resonance and mass spectrometers, optical microscopes, biomedical imaging systems, computer and data storage clusters, and high-throughput systems.

DCI also provides support to modernize biomedical research facilities through the acquisition and installation of equipment and alterations and renovations of conventional and specialized biomedical research facilities. Such projects must be undertaken at an institutional animal research facility, core facility, or other shared-use space that provides access and services to many researchers so that a sizeable local research community draws long-term benefits from the updated operations and functions.

Small Business Program

Advancing biomedical research requires commercially available methods and technologies to improve animal models for human disease and enhance the care and use of these crucial animal resources. The primary goal of ORIP's small business programs is to attract innovative Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) projects that benefit research communities associated with ORIP's mission. SBIR/STTR projects of special interest to ORIP include those that develop biomedical methods and technologies that relate to improvements in animal models for human disease and the care, use, and management of laboratory animals.



ORIP awards grants to support research resources, such as animal models for human disease and cutting-edge biomedical instrumentation.



ORIP plans, organizes, and conducts workshops, both independently and in collaboration with NIH Institutes, Centers, and Offices to identify and pursue scientific opportunities.

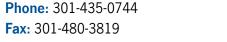


ORIP supports research training opportunities for veterinary scientists to capitalize on their distinct perspective and expertise based on a deep understanding of comparative medicine and insight into animal models for human diseases.

Contact Us

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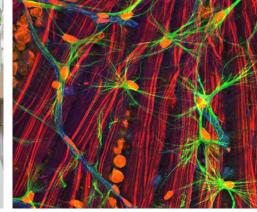
OFFICE OF RESEARCH INFRASTRUCTURE PROGRAMS

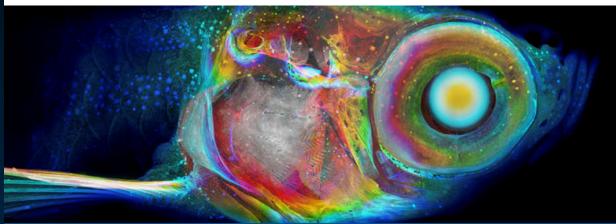


Infrastructure for Innovation









About ORIP

The National Institutes of Health (NIH) established the Office of Research Infrastructure Programs (ORIP) in December 2011 when the appropriations bill for Fiscal Year (FY) 2012 was passed by Congress and signed into law. ORIP released its first strategic plan at the beginning of 2016 and implemented that plan over the next 5 years. The interior of this brochure summarizes the themes and strategies of ORIP's second strategic plan, which is for 2021–2025.

ORIP is part of the NIH Office of the Director, Division of Program Coordination, Planning, and Strategic Initiatives, which identifies scientific research gaps and emerging opportunities, as well as arising public health challenges. The two main divisions of ORIP are the Division of Comparative Medicine and the Division of Construction and Instruments.

Division of Comparative Medicine

The Division of Comparative Medicine (DCM) supports comparative models of human disease (e.g., rodents, invertebrates, fish, nonhuman primates, and other species) and other biological materials that biomedical scientists use in their research. This support includes research resources to develop new animal models and shared resources to distribute, characterize, maintain, and archive these models for use by other biomedical researchers. Other resources support and supply biological materials and reagents for use in research, including cells, tissues, organs, and medically important venoms.

DCM also invests in training programs to help veterinary students and veterinarians participate in a variety of hypothesis-based research experiences in laboratory animal medicine, comparative medicine, and pathology. The programs are designed to encourage talented veterinary scientists to pursue careers in biomedical research and to advance translational research by increasing the engagement of veterinary scientists. Other awards are available to help increase diversity in the biomedical research workforce or facilitate the reentry of individuals into active research careers after an interruption for family responsibilities or other qualifying circumstances.





Theme 1

Animal Models to Advance the Study of Human Disease

Animal models and related resources play an essential role in biomedical discovery by facilitating the development of better approaches to diagnose, prevent, and treat human diseases. Scientists rely on a broad array of animal models that mimic the various pathogenic events leading to disease; they also depend on related resources that facilitate the rigorous and reproducible application of animal models to critical questions about human health. To advance the study of a wide range of human diseases, ORIP will—

Strategy 1.1: Foster development of and provide support for animal models and research-related resources that meet emerging public health needs, prevent disease, promote health, and drive foundational science.

Strategy 1.2: Enhance access to a broad range of animal models with robust veterinary care and well-defined genomic and phenotypic data.





Theme 2

Innovative Instruments and Equipment to Accelerate Research Discoveries

The availability of new technologies is one key driver of scientific research. Scientific discoveries, in turn, drive the need for novel tools to enable the next generation of innovative research. This interplay of technological advances and scientific discoveries makes access to modern instruments and equipment a critical component of research progress. To accelerate research discoveries by maintaining the vitality of NIH's physical infrastructure programs and by meeting the changing needs of the research community, ORIP will—

Strategy 2.1: Support acquisition of modern scientific instrumentation.

Strategy 2.2: Modernize the research infrastructure of laboratories and animal research facilities.





Theme 3

Specialized Research Training in Animal Models and Related Resources

Biomedical training programs must prepare trainees for the full range of skills needed in the research workforce and increase the diversity of that workforce. Expertise in the use of animal models and related resources continues to be essential to the advancement of basic and translational science. In particular, veterinary scientists have special expertise that is vital to the use of animal models in research. To increase the specialized research training of investigators and research support staff who are responsible for the oversight and use of animal resources, ORIP will—

Strategy 3.1: Promote innovative approaches to training and developing the careers of veterinarians working in biomedical research.

Strategy 3.2: Support training and career development that promotes diversity in health-related research.

Strategy 3.3: Promote career development of researchers and support staff skilled in the use and oversight of disease model and research resources.





Theme 4

Awareness of ORIP Resources and Programs

ORIP supports a wide range of resources—including animal models and related biomaterials, instrumentation and equipment, and training and career advancement—that are critical for conducting cutting-edge basic, clinical, and translational research. Many investigators who could benefit from ORIP programs, however, are unfamiliar with these resources. Other investigators might know about ORIP programs but need more information about how to access them. To accelerate efforts across the biomedical research enterprise, ORIP will—

Strategy 4.1: Foster collaborative research opportunities between ORIP-supported facilities and NIH Institutes, Centers, and Offices and other federal agencies.

Strategy 4.2: Expand outreach to the biomedical research community to raise awareness and dissemination of ORIP-supported resources and programs.

