

Facilities & Resources for Research at Tulane

INSTITUTIONAL ENVIRONMENT

Tulane University was founded in 1834 as the Medical College of Louisiana in response to a yellow fever epidemic. By 1847, the Public University of Louisiana was established when a law department and collegiate department joined the Medical College. In 1884, through the benefaction of philanthropist Paul Tulane and an act of the Louisiana legislature, the University was reorganized into a private institution and given its present name. Today, Tulane is served by 1,180 full-time faculty and 3,490 staff, and enrolls 13,531 undergraduate, graduate and professional students. Our ten schools and colleges offer undergraduate, graduate and professional degrees in the liberal arts, science and engineering, architecture, business, law, social work, medicine and public health and tropical medicine. These units provide a broad array of opportunities for education and research. The faculty compete successfully for peer-reviewed grants with sponsored research funds totaling \$135 Million annually.

Tulane is a proud member of the prestigious Association of American Universities, a select group of 62 universities with “pre-eminent programs of graduate and professional education and scholarly research.” Tulane is ranked by the Carnegie Foundation as a university with “very high research activity”, a classification shared by only 2 percent of more than 4,300 higher educational institutions rated by the foundation nationwide. Tulane was ranked among the top 50 national universities for 2016 by U.S. News and World Report. Tulane’s library system is ranked among the nation’s top 100 research collections. The University’s libraries house more than 3.2 million volumes, provide access to articles from tens of thousands of current serials, and serve as a gateway to electronic information resources. Tulane is a founding member of the Louisiana Optical Network Initiative, or LONI, a state-of-the-art, fiber optics network that connects Louisiana’s major research universities to one another and to Internet2. LONI provides one of the most advanced optical networks and most powerful distributed supercomputer resources available to any academic community.

Tulane is committed to the support and growth of the research enterprise. The Vice President for Research (VPR) is the university-wide senior research officer tasked with growing the research effort by facilitating the development of new interdisciplinary collaborations, supporting promising research initiatives, overseeing and facilitating compliance with federal research regulations, and resolving institutional and administrative barriers to progress. The VPR’s office is institutionally funded to provide high quality research support services. A University Research Compliance Officer serves to support the research compliance agenda. The research support offices of Sponsored Projects Administration, Human Subjects Protection, Comparative Medicine Program, Biosafety, and Technology Transfer and Intellectual Property Development report to the VPR and have been expanded to meet the needs of a research-active faculty. Tulane has made a significant commitment to the development of core equipment

facilities and to establishing mechanisms that encourage broad access. The Centralized Instrumentation Facility (CIF) includes current instrumentation for spectroscopy, imaging, NMR and other functions, as well as a Director and full support staff supported through institutional funds. Other core facilities include capacity for DNA sequencing, DNA diagnostics, Microarray analysis, Laser-assisted microscopy, Real-time PCR, Flow cytometry, specialized imaging and other contemporary research tools. Outstanding high performance computing capacity is available through Tulane's Cypress supercomputer. Other common-use research facilities include the Center for Computational Science, BSL3 laboratory facilities, and the Centralized Animal Research Facilities. For clinical investigations, Tulane offers the Clinical and Translational Research Center, a joint venture between Tulane University and Louisiana State University.

As of FY14, Tulane University campuses had a total of 491,318 square feet of research space.

HUMAN RESEARCH PROTECTION PROGRAM

The Tulane University Biomedical Institutional Review Board (IRB) and Social/Behavioral IRB are administered by the university's Human Research Protection Office as part of the Tulane Human Research Protection Program. The Program is fully accredited by AAHRPP, the Association for the Accreditation of Human Research Protection Programs. The Program maintains a comprehensive set of Standard Operating Procedures that incorporate federal and state human subject protection regulations and AAHRPP's accreditation standards. Compliance with applicable regulations, policies, and accreditation standards is accomplished through a rigorous initial review process for all proposed research projects and through the continuing review process, which must occur prior to the expiration date of the IRB approval. Initial and continuing reviews are conducted in accordance with federal guidelines. Additionally, compliance is ensured through for-cause and not-for-cause auditing conducted by the university's Research Compliance Office.

BIOSAFETY PROGRAM

The Office of Biosafety is charged with ensuring the safety of personnel and facilities engaged in research involving biological materials at Tulane University. The objective of the Office of Biosafety is to minimize the health risk to those involved in research utilizing recombinant DNA, infectious agents and biological toxins, and in turn to protect the greater Tulane University community, the general public, and the environment. The office works together with the Institutional Biosafety Committee to achieve its objectives.

INSTITUTIONAL ANIMAL CARE & USE COMMITTEE

The Tulane University has established an Institutional Animal Care and Use Committee (IACUC) for the New Orleans campuses and second committee for the Tulane National Primate Research Center (TNPRC) campus. These Committees are composed of Tulane University faculty and staff as well as individuals representing the community at large. The charge of the IACUC as

mandated by NIH's Office of Laboratory Animal Welfare and the USDA is to ensure the humane care and use of animals used in research and compliance with guidelines and regulations. Consistent with federal law, the Tulane University IACUC provides assistance to investigators with the planning and conducting of animal experiments in accordance with the highest scientific, humane and ethical principles. The IACUC performs annual review of all approved protocols, inspection of facilities and laboratories, and twice-yearly review of the institutional programs for IACUC, veterinary care, training and occupational health and safety. The IACUC provides training for all committee members, for trainees in the lab animal residency program, for 4th year veterinary students and summer interns at the Primate Center. Training includes the history of the IACUC; laws, regulations, and policies that impact the care and use of animals; IACUC functions and the review process; researcher responsibilities and reportable situations. IACUC also provides a yearly workshop on the preparation of animal use protocols, and provides an orientation to the Department of Comparative Medicine, the latter required for all vivarium users.

The Tulane National Primate Research Center requires all personnel involved in the use, care or handling of animals or animal samples to complete a course required by the Animal Welfare Act at the time of hire orientation. Training is tailored based on job duties and classification. Individual investigators and staff are trained one-on-one by the veterinarian assigned to the research protocol.

Tulane's IACUC and centralized animal research facilities are fully accredited by Association for the Assessment and Accreditation of Laboratory Animal Care International (AAALAC).

CENTRALIZED ANIMAL RESEARCH FACILITIES

The Department of Comparative Medicine ensures high-quality, humane care and use of all laboratory animals at its three AAALAC-accredited locations. All faculty and staff with access to the animal research facilities are trained in accordance with related laws and guidelines of all federal and state agencies. All precautions are taken regarding the safety of animals and staff, and to maintain the integrity of scientific experiments. All appropriate transportation regulations and quarantines are strictly observed, and import/export and anesthesia/euthanasia procedures are performed according to the specific guidelines approved by the Institutional Animal Care and Use Committee. Access to animal research facilities is restricted to qualified personnel.

SPONSORED PROJECTS ADMINISTRATION

Sponsored Projects Administration assists faculty in identifying sponsors for research support, provides advice on proposal development, assists in preparing proposal budgets, serves as the Authorized Organizational Representative for both paper and electronic proposal submissions, and develops and implements policies and procedures involving the post-award aspects of sponsored projects.

TECHNOLOGY TRANSFER & INTELLECTUAL PROPERTY DEVELOPMENT

The Office of Technology Transfer & Intellectual Property Development seeks to translate research and knowledge from the laboratory and classroom into technologies that benefit the public, to provide superior services to the university, its faculty and students that enable all aspects of the research mission and further technology development, and to strengthen the regional economy of southeast Louisiana through creative use of the university's intellectual property.

TECHNOLOGY SERVICES CAPABILITIES

Technology Services at Tulane provides information technology services that meet the needs of the Tulane University community and facilitate Tulane's missions in education, research and service. A range of communication services, classroom and presentation services, equipment rental, media duplication, on-campus broadcasting, special event services, videoconferencing, and satellite downlinking are offered.

SHARED RESEARCH FACILITIES

<http://tulane.edu/research/researchers/core-facilities.cfm>