

Vivarium Resources

The University's AAALAC-accredited vivarium includes a new 26,255-square-foot, state-of-the-art animal research facility scheduled for occupancy in early 2027. The facility is designed to support a broad range of preclinical research while maintaining rigorous standards of animal welfare, biosecurity, and regulatory compliance, with an emphasis on investigator access to dedicated procedural space.

The vivarium provides housing and procedural support for mice, rats, guinea pigs, and zebrafish. Dedicated clean rooms are available for breeding colonies and immunocompromised models, including nude mice used for tumor xenograft studies. The facility supports infectious disease research at the ABSL-2 level, arthropod studies (ACL-2), and studies involving chemical hazards and radioisotopes (e.g., C-14). Mouse and rat housing utilizes Tecniplast individually ventilated cage (IVC) systems to ensure optimal environmental control and animal health.

Advanced in vivo research and imaging capabilities include IVIS, VEVO ultrasound, an irradiator, and a two-photon microscope. Multiple animal preparation and procedure rooms support imaging workflows and experimental procedures, supplemented by several portable anesthesia machines. Behavioral research infrastructure includes water maze, elevated plus maze, open field testing, and SmartCage systems. Additional physiological research capabilities include a mouse treadmill, hypoxia and hyperoxia chambers, acidosis chambers, and a two-cycle perfusion pump.

The vivarium includes two fully equipped necropsy suites, each with Euthanex euthanasia chambers, and provides in-house hematology and serum chemistry analysis (VetScan). Technical support is provided by experienced and licensed laboratory veterinary technicians who assist investigators with surgical procedures, blood collection, perfusion, and necropsy.

In addition to the vivarium, the institution maintains a separate ABSL-3 facility located within the Laboratory for Infectious Disease (210 square feet), providing investigators with access to high-containment infectious disease research when required. Collectively, these resources support a wide range of translational and mechanistic studies while ensuring compliance with AAALAC standards and institutional animal care and use policies.

Short NIH "Facilities & Other Resources" Version

Animal Facilities

The institution maintains an AAALAC-accredited vivarium, including a new 26,255-square-foot state-of-the-art facility scheduled for occupancy in early 2027. The vivarium supports research using mice, rats, guinea pigs, and zebrafish, with ABSL-2 infectious disease capabilities, ACL-2 arthropod research, and infrastructure for studies involving chemical and radiological hazards (e.g., C-14). Resources include dedicated clean rooms for breeding and immunocompromised models, advanced imaging and research equipment (IVIS, VEVO ultrasound, irradiator, two-photon microscopy), behavioral and physiological testing platforms, portable anesthesia systems, a two-cycle perfusion pump, in-house necropsy and clinical pathology capabilities, and experienced veterinary technical support. Mouse and rat housing utilizes Tecniplast IVC systems. A separate 210-square-foot ABSL-3 facility is available within the Laboratory for Infectious Disease.