



Preclinical Translation Services

Make Preclinical Translational Services part of your research team. As part of the Center for Industry Research Collaboration at Wake Forest Innovations, we provide preclinical expertise and critical resources for your project.

Comprised of experienced veterinary professionals, a GLP-compliant surgical suite and access to a 200-acre campus for large animal care and housing, our preclinical research team – Preclinical Translational Services – can conduct studies directly with you or in collaboration with a faculty expert at our institution.

Led by experienced veterinary clinicians and surgeons and staffed by veterinary research technicians with expertise in complex animal care, we are an ideal partner for model development and experimental surgeries. We provide high-caliber investigative technical, clinical and surgical services, with particular focus on large animal models such as swine, sheep and nonhuman primates.



Why Partner with Preclinical Translational Services

Our team is ready to support your preclinical study. Explore all the ways we can contribute to the success of your research.



Flexibility in Study Design and Scheduling

Because we focus on experimental surgery and model development, we are not locked into set surgery schedules or specific animal models. We can build your study and its timeline around your project milestones rather than our business model. Need custom solutions? We're the partner for you. We believe one size should not fit all and are experienced at taking a hypothesis and identifying the right model and techniques to answer the question.



Access to a Variety of Experts

The real benefit to working with an academic medical center is access to leading researchers in their field. With the combined expertise of our veterinary staff and faculty investigators, you can be certain your project will not only be managed by experienced researchers, but you will also have access to leading experts who can contribute to the unique needs of your project. Discover some of our leading investigators who could be a part of your next study: bit.ly/principal-investigators.



Reporting to Industry Standards

We understand how important quality data is to advancing your product into the next phase of development. We are meticulous about our reporting and ensure your data is delivered in an accurate, consistent and time-sensitive manner. And, if requested, our expert team can help you interpret the results. Do you need a GLP-compliant study? We have the training and GLP-certified facilities necessary to make it happen.



Expertise in Translational Research

Draw on our skills and expertise to produce quality preclinical data that will propel you into clinical trials. Because we focus on choosing animal models based on the specific needs of a study, we are careful to select the one that best translates to human anatomy for the intervention being studied. In addition, we can even include clinicians in your study to provide a clinical perspective. Their insight can often identify differences between preclinical and clinical environments, observations that will save time and money later in the process.

How We Can Support Your Study

Learn about our specialized capabilities and technical resources. In addition to the capabilities listed below, we also create custom models and experiment with new techniques. We are dedicated to finding a solution to your research problem.



Imaging

We have access to standard and advanced imaging tools to support your preclinical study needs, including:

- Ultrasound
- Portable X-ray and digital processor
- Magnetic resonance imaging (MRI)
- Computed tomography (CT)
- Position emission tomography (PET) and radiochemistry
- Linear accelerator



Diet Lab

The staff at our diet preparation laboratory develop custom nonhuman primate and other animal diets modeled after various human nutritional environments. Industry can access our established recipes for Western, Eastern and Mediterranean diets for their study or we can create a unique diet to test nutritional impact on the intervention being studied.



Large Animal Models

Wake Forest Baptist Medical Center is home to a world-class nonhuman primate center with the capacity to house more than 1,000 nonhuman primates and other large animal species. Our facilities can accommodate grazing animals, and many of our nonhuman primates have both indoor and outdoor housing. Providing our animals with quality care is one of our priorities.

In addition to a range of established animal models, our team offers expertise in developing custom animal models uniquely suited for your research project. If your study requires a new model for testing, we have the know-how to make that happen. Our most common models, include:

- Nonhuman primates
- Swine
- Sheep
- Goats



Experience in Advanced Surgical Procedures

Because we have exposure to such a wide range of research, including all types of anatomy and disease states, our preclinical surgeons can offer a wide range of surgical procedures. We collaborate with study sponsors and investigators to identify the right type of procedure to accomplish the research objective. Our most common procedures include:

- Vascular access ports
- Intrathecal access ports
- Telemetry
- Soft tissue surgery
- Abdominal surgery
- Vascular surgery
- Orthopedic surgery
- Neurosurgery
- Ophthalmic surgery
- Medical device implants



Operating Room and Surgical Equipment

Our preclinical operating room is a state-of-the-art, GLP-certified facility, fully equipped for most types of surgery. We have access to:

- Isoflurane and sevoflurane
- Air and oxygen
- Standard and extensive monitoring capabilities (heart rate, respiratory rate, pulse oximetry, end-tidal CO₂, electrocardiography, non-invasive arterial blood pressure, direct arterial blood pressure, central venous pressure)
- Blood gas analyzers
- Refractometer
- Ophthalmic equipment
- Fluoroscopy (C-arm)
- Endoscopy, laparoscopy and bronchoscopy

What It Is Like to Work with Us

We are intentional about simplifying and expediting the administrative aspects of the contract research process that can often complicate projects.

When it comes to finding a research partner, there are site visits, confidentiality agreements, budget development, protocols, regulatory approvals and contract negotiation—and those all happen before the science even starts. Then begins study coordination, data management, reporting and more.

Accomplishing all of these tasks at an academic medical center requires coordination and communication between groups that span the institution, including the Office of Sponsored Programs, the Institutional Review Board, the Institutional Animal Care and Use Committee, the Office of Clinical Research, core laboratories and you—the study sponsor.

That's why Preclinical Translational Services works alongside a dedicated Alliance Management team—made up of experts with industry and academic experience—that handles the administrative elements and paperwork involved in your study and helps ensure that the process meets or exceeds industry standards.

Our Alliance Management team will work tirelessly to make sure your project finishes on time and on budget, while our experienced Preclinical Translational Services team delivers superior results to help you make the best decision about your product going forward.

