

# Production-Level Surgery

Bringing precision, reproducibility, and scale directly to your vivarium.



## Overview

In preclinical research, even small procedural variables can compromise data quality. Transporting surgically prepared animals between facilities introduces stress, recovery variability, and delayed timelines. By conducting model development on-site, within your vivarium, we eliminate those variables and deliver consistent, ready-for-study cohorts.

**The result:** accelerated study starts, greater reproducibility, and improved welfare, all fully aligned with the 3Rs. Research teams gain immediate access to validated surgical models, without the variability or logistical burden of centralized suppliers.



## Why This Matters

- **Accelerate Discovery:** Eliminate transport and acclimation time—animals are on-study faster and projects stay on schedule.
- **Improve Reproducibility:** Conduct surgery, recovery, and study within the same vivarium to remove variability.
- **Scale Without Bottlenecks:** Expand capacity rapidly with standardized workflows and flexible on-site expertise.
- **Simplify Operations:** Replace vendor logistics and scheduling with one coordinated, on-site surgical team.
- **Strengthen Translational Rigor:** Maintain stable surgical conditions and produce cleaner, more predictive data.
- **Advance Animal Welfare:** Remove transport stress, reduce attrition, and fully align with the 3Rs principles.



Vascular  
Catheterizations



Non-Vascular  
Catheterizations



Cardiac Models



Neuro Models



Device  
Implantation



Soft Tissue  
Surgeries



### Proven Leadership: Brad Gien, BSc, CM

Brad has more than 25 years of experience in large-scale surgical model programs in regulated research environments. His leadership drives our on-site production services, combining technical precision with a commitment to animal welfare and consistent study outcomes.

# Operational Standards & Scientific Integrity

- ✓ Strict biosecurity and aseptic technique protocols, executed by experienced surgeons trained in production-level rodent models
- ✓ Comprehensive equipment access, including all surgical and anesthesia systems, plus custom microsurgical tools tailored to each procedure
- ✓ Standardized, validated SOPs optimized for reproducibility and scale
- ✓ Integration with our imaging, analytics, pathology, and regulatory experts for end-to-end support

**Comprehensive Surgical Capabilities:** our on-site programs encompass a full range of preclinical surgical models, customized for study goals, procedures, and instrumentation.

| Category                        | Representative Procedures                                                                                                                                                                                           |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vascular Catheterizations       | Jugular, carotid, femoral, and portal vein catheterizations; intracardiac access; supports PK/PD, infusion, and sampling studies.                                                                                   |
| Non-Vascular Catheterizations   | Bile duct (closed-loop or ligation), intraduodenal, intrajejunal, intragastric, intracolonic, and bladder catheterizations; enables localized dosing and absorption modeling.                                       |
| Cardiac & Neuro Models          | Myocardial infarction (MI), transverse aortic constriction (TAC), intracisternal, intraventricular, and intrathecal approaches; reproducible hemodynamic and neurophysiological models.                             |
| Telemetry & Device Implantation | Telemetry implantation using DSI, EMKA, TSE, ADI technologies, and custom device systems; cardiovascular, respiratory, and CNS signal monitoring; long-term data collection in conscious subjects.                  |
| Soft Tissue Surgeries           | Nephrectomy (unilateral or 5/6), splenectomy, ovariectomy, oviduct ligation, vasectomy, and related reconstructive procedures; standardized techniques supporting metabolic, reproductive, and toxicologic studies. |

\*We work in all rodent research models, including mice, rats, hamsters, and guinea pigs.

## Why Endpoint & PRA?

Production-level surgery demands both expert technique and operational infrastructure. Together, we combine deep scientific expertise with scalable, standardized operations, delivering high-quality, on-site surgical models ready for study.

**One team. One standard. Trusted models, created where your science happens.**