Histopathology is an important endpoint for the critical evaluation of study specimens, models and devices. CBSET provides our partners with industry-leading, GLP-compliant anatomic pathology and histology facilities that specialize in the retrieval, sampling, preparation and histopathologic evaluation of valuable pre-clinical specimens or devices. CBSET Pathology is staffed by an experienced team of ACVP board-certified veterinary pathologists, research scientists, histomorphometrists, HTL/HT-certified histotechnologists and research technicians, who provide the expert guidance needed to develop the necessary methodologies and strategies for accurate, reproducible findings and concise, responsive interpretations. CBSET Pathology works together with our partners to produce the high quality data, reports and images required for successful completion of our partners’ study objectives, whether for method development and pilot programs or regulatory submissions.

**Laboratory capabilities include:**
- Small and large animal necropsy
- Complex tissue/device in situ retrieval
- Variable tissue fixation, trimming and digital macroscopic documentation
- High-resolution microangiography imaging (Faxitron)
- Paraffin processing, embedding, microtomy and staining
- Plastic resin processing and embedding, including Glycol Methacrylate (GMA), Epoxy (EPON, Spurr’s) and Methyl/Butyl Methacrylate (MMA)
- Precision sawing and EXAKT micro-grinding
- Plastic resin thin-section microtomy
- Cryotomy of frozen tissues
- Histological staining
  - Routine (e.g., Hematoxylin and Eosin)
  - Special stains (e.g., Verhoeff’s Elastin Stain, Masson’s Trichrome)
- Immunohistochemical staining in frozen, paraffin and resin-embedded tissues
- Immunofluorescence staining and imaging
- Scanning electron microscopy (SEM)
- Digital macro and microscopic imaging
- Custom processing, sectioning and staining

**Analysis and work product includes:**
- Interpretation of results
- Quantitative morphometric analysis
- Statistical analysis
- Data/report generation
- Image appendices
- Pathology peer review
- Consultation/slide reviews (in-house or secured Internet)
- Method development for novel devices or materials used in investigative studies
- Descriptive and semi-quantitative analyses (e.g., pathology scoring)
ABOUT CBSET
CBSET is an AAALAC accredited, not-for-profit, pre-clinical research organization dedicated to research, education, and the advancement of early-stage biomedical technologies. Our mission is to assist in methodologies uniquely suited for novel and innovative treatments for complex diseases. We offer a full range of GLP and non-GLP services, ranging from early product evaluation through lead optimization and pre-clinical safety, to physician assessment and training courses. We specialize in the development and application of techniques in the fields of cardiology, electro-physiology, orthopedics, wound healing, regenerative medicine, endoscopy/laparoscopy, drug and device delivery and safety, cellular therapy, and diagnostic imaging. Our world-renowned regulatory and scientific expertise helps transform early-stage concepts into novel therapies.

CBSET EXPERTISE
Our professionally trained staff and consultants provide expertise for all phases of biomedical discovery and development research including regulatory consulting, veterinary medicine, surgery and minimally invasive surgery, imaging, pharmacokinetics and drug metabolism, drug and device safety, pharmacology, lead optimization, and specialized histopathology and pathology. These individuals provide the basis for successful scientific collaborations, rapid concept advancements, unparalleled consultation services, and expert dissemination of information and findings to regulatory and scientific bodies.

CBSET offers a full range of GLP and non-GLP services, from early product evaluation through lead optimization and pre-clinical safety, to physician assessment and training courses. Our expertise includes:

- Stents/balloons
- Novel catheters/wires
- Robotic-assisted surgery
- Vessel sealing/closure devices
- Heart valve replacement/repair
- Cardiopulmonary bypass
- Beating heart technology
- Electrophysiology devices
- Tissue ablation devices
- Endovascular/NOTES surgery
- Laparoscopic surgery
- Orthopedic devices
- Novel surgical instruments
- Wound healing devices
- GLP training and regulatory consulting

CBSET FACILITIES
CBSET offers an unparalleled, GLP-compliant, 40,000 square foot state-of-the-art facility within minutes of Cambridge, Boston, and Logan International Airport. Our facility includes vivariums, catheterization/imaging labs, and full surgical suites containing the latest equipment for fluoroscopy, echocardiography [TEE/TTE], electrophysiology, IVUS, optical coherence tomography [OCT], endoscopy/laparoscopy, orthopedic surgery, and surgical video recording. CBSET offers dedicated labs for GLP-compliant SEM, specialty histopathology/pathology, metabolism and pharmacokinetics.