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<https://www.vet.upenn.edu/research/core-resources-facilities/comparative-pathology-core>

VETERINARY PATHOLOGY SERVICES	FEE	SERVICE DESCRIPTION
Academic rate for non-University of Pennsylvania investigators is 1.5x (fees in red); commercial/industry is 2x.		
Necropsy Training	\$150/hour \$225/hour	Complete demonstration of autopsy procedures to qualified personnel by a board-certified veterinary pathologist. Training includes proper tissue dissection for organ weights, interpretation of gross lesions, and appropriate tissue trimming techniques.
Photomicroscopy Per slide Composite creation for publication	\$15 (\$22) \$30 (\$45)	Composites for publication will be formatted in Adobe Photoshop to the journal specifications.
Slide Evaluation Single tissue per slide 2 tissues per slide 3 tissues per slide >3 tissues per slide	\$25 (\$37)/slide \$35 (\$45)/slide \$45 (\$67)/slide \$60 (\$90)/slide	Tissues evaluated histologically by a board-certified veterinary pathologist with a final interpretative report.
Complete pathological assessment (comprehensive pathological phenotyping of new mutant mouse lines or toxicological pathology screening) Mouse, complete Other lab rodents and rabbit, complete Dog and other large animals, complete Necropsy only Necropsy with tissue processing	\$325 (\$485)/animal \$425 (\$630)/animal \$1000 (\$1500)/animal 50% complete fee 70% complete fee	<ul style="list-style-type: none"> Recommend multiple animals from each experimental group, including an adequate number of age-, sex-, and strain-matched controls. Brief ante mortem observation period, followed by euthanasia. Body weight and blood collection.* Complete autopsy with organ weights. Thorough organ/tissue selection and sampling for histopathological examination. Tissues fixed in formalin, trimmed, embedded, sectioned and H&E stained. Tissues evaluated histologically by a veterinary pathologist with a final interpretative report.
*Clinical Pathology services are available at an additional cost (see below).		
IMMUNOHISTOCHEMISTRY (IHC), IMMUNOFLUORESCENCE (IF), and IN SITU HYBRIDIZATION (ISH) SERVICES	FEE	Leica BOND RXm Automated Immunostainer
IHC: Working protocols Chromogenic IHC, FFPE Chromogenic IHC, frozen/cytology IF, single marker labeling, FFPE IF, single marker labeling, frozen/cytology IF, multiple markers labeling	\$20 (\$30)/slide \$25 (\$37)/slide \$20 (\$30)/slide \$25 (\$37)/slide \$10 (\$15)/each addl marker	Antibodies and protocols already optimized on our platform.
IHC: Novel antibody characterization Chromogenic IHC IF single marker labeling IF multiple markers labeling	\$200 (\$300)/antibody \$250 (\$375) \$50 (\$75)/each addl marker	Workup and optimization of new antibodies (and applications) that have not been previously tested on our platform.
ISH (RNAscope®), chromogenic singleplex	\$90 (\$135)/slide	Service provided using the RNAscope® technology.
TISSUE MICROARRAY (TMA) SERVICES	FEE	
TMA generation 15 well block 40 well block 70 well block	\$75 (\$110)/block \$200 (\$300)/block \$400 (\$600)/block	Generation of a TMA starting from paraffin or OCT blocks. The service does not include the selection of the blocks.
TMA annotation/evaluation	\$5 (\$7)/per well	Evaluation and annotation of TMA slides by a veterinary pathologist.

DIGITAL PATHOLOGY		FEE	Aperio VERSA & eSlide Manager
Digital Slide Scanning	BF 20x BF 40X FL 20X FL 40X FL 63X oil	\$5 (\$7.5)/slide \$10 (\$15)/slide \$10 (\$15)/slide \$15 (\$22)/slide \$20 (\$30)/slide	<p>The Aperio VERSA is a digital slide scanner that provides brightfield and fluorescence imaging of tissues configured to a sophisticated database management system (eSlide Manager) for central storage, analysis, and sharing. The system is fully integrated with advanced imaging software, which offers state-of-the-art quantitative analysis of tissues, cells, and subcellular structures (Image Analysis Service).</p> <p><u>Tier I:</u> BF/IF Positive pixel count, BF Color Deconvolution, BF Nuclear, IF Area Quantification <u>Tier II:</u> BF/IF Cytoplasmic, Membrane, Microvasculature, Simple Genie <u>Tier III:</u> Integration of Tier I/II algorithms with Genie</p> <p>Note: Complicated Genie algorithms have to be discussed with the pathologists on a case-by-case basis.</p>
Image Analysis	Generation of algorithms:	Tier I \$100/Algorithm Tier II \$150/Algorithm Tier III \$250/Experiment	
Running the analysis:	- Simple whole slide analysis - Complex slide analysis	\$8/slide \$16/slide	
Image analysis training	Hourly fee (minimum 30 minutes)	\$150/hour	
HISTOLOGY SERVICES		FEE	
Trimming		\$3 (\$4.50)	Standardized grossing and orientation of tissue specimens
Processing		\$3 (\$4.50)	Paraffin-embedding of tissue specimens
Standard sectioning (uncharged slides)		\$2 (\$3)	Standard microtome sectioning of paraffin blocks
Standard sectioning (charged slides for IHC)		\$4 (\$6)	Standard microtome sectioning of paraffin blocks
Specialized sectioning (uncharged slides)		\$5 (\$7.5)	Tailored microtome sectioning of specific structures
Specialized sectioning (charged slides)		\$7 (\$10)	Tailored microtome sectioning of specific structures
H&E Stain		\$2 (\$3)	Standard H&E stain
Decalcification		\$2 (\$3)	Pre-processing of tissue samples containing bone
OCT embedding		\$10 (\$15)	Embedding of tissue specimens for frozen preparations
Frozen section, unstained charged slide (for IHC)		\$7 (\$10.5)	Cryostat sectioning of OCT embedded tissue specimens
Histochemical stains	Level I Level II Level III	\$4 (\$6) \$6 (\$9) \$8 (\$12)	<u>Level I</u> Gram, PAS, Acid fast, Congo red, Iron, Toluidine blue, Alcian blue <u>Level II</u> Trichrome, Luxol-Blue, Melanin bleach, Giemsa, Copper <u>Level III</u> GMS, Warthin-Starry, Von Kossa
Paraffin strip		\$10 (\$15)/tube \$5 (\$7)/addl tube	Collection of serial microtome sections from FFPE material for DNA or RNA extraction
Archived material retrieval		\$5-\$10 (\$7-\$15)/case	Database search and retrieval of archived tissue specimens
CLINICAL PATHOLOGY SERVICES		FEE	
Comprehensive Research CBC*		\$12 to \$17 (depending on number of samples submitted)	Panel contains RBC, WBC, HCT, HGB, Erythrocyte indices, WBC differential, platelet count, absolute and percent reticulocyte count, and pathologist review
Blood smear, cytological evaluation		\$30.00/slide	Pathologist review of blood smear includes written report with leukocyte differential, assessment of morphology, and interpretive comments
Bone marrow, cytological evaluation		\$75.00/slide	Pathologist evaluation of bone marrow cytology with written report; concurrent CBC submission allows for improved analysis
Other samples, cytological evaluation		\$50.00/slide	Pathologist evaluation of masses, organs, skin, etc
Custom Chemistry Panels*		Individual and combination of tests available – inquire for pricing and options.	<u>Examples of routine tests:</u> Glucose, BUN, Creatinine, calcium, phosphorous, magnesium, Total protein, albumin, (globulin), cholesterol, ALT, AST, ALP, GGT, Total bilirubin, Sodium, Potassium, Chloride, ECO ₂
Shipping and handling		\$40.00/1-10 samples \$60.00/11-20 samples \$80.00/21-30 samples \$100.00/31-40 samples	Shipping and handling fees for outsourced clinical pathology tests
<p>* Services are offered through IDEXX BioAnalytics (https://www.idexbioanalytics.com/welcome-portal).</p> <p>- Investigators are responsible for collecting their own materials (slides, blocks, left over of samples, etc.) following the conclusion of the project. Please be advised that after 3 months from the conclusion of the project, any material left behind by the investigators will be automatically discarded.</p> <p>- A 30% increase of the original fee is charged for STAT requests. The CPC reserves the right to assess the feasibility of STAT requests on a case-by-case basis.</p>			