



Pathology Core Research laboratory

The Pathology Core Research Lab (PCRL), located in the Lyons Harrison Research Building (LHRB) basement, provides state of the art histology and histomorphometric analysis of bone, implants and other tissue samples.



Histology

Histomorphometry

Core Users

Contacts

For histomorphometry studies we use the Bioquant® Image Analysis Software. Histomorphometry can be used to estimate cell numbers, positively labeled cells, cell volume, or distance measurements based on consensus standards. Also, it can be used to measure the amount of protein present in a band by comparison with the integrated optical density of a known standard.

Over the past ten years, our laboratory has assisted researchers from many departments such as: Pathology, Orthopedics, Cardiology, Physiology and Biophysics, Nephrology, Dental, Radiology, Biomedical Engineering, Rheumatology, Microbiology, Hematology/Oncology, Neuropathology, Neuroscience, Cell Biology and Physics.

Fistula paraffin section, VVG

H&E

Von Kossa

M. Trichrome

Human stented vessel-thrombus, ground section, H&E-like stain

Sheep shoulder, ground section

Monkey tibia, plastic section
Goldner's Trichrome

Mouse bone, paraffin section,
TRAP stain

Mouse tibia
unstained plastic section
double label fluorescence

Mouse xenograft, paraffin
section, CD31 IHC stain

Mouse tooth, paraffin
section, Alk Phos IHC stain

We perform Immunohistochemistry and Immunofluorescent stains on a full range of samples (frozen or paraffin sections) with different species (mouse, rat, rabbit, dog, monkey and human), & various type of tissues (soft tissues, xenografts, bones and teeth). We also provide consultation on antibody selection, tissue preparation and histomorphometric analysis.

Mouse Bone Fracture Model
Alcian blue/Orange G stain

Processing hard tissue requires highly specialized techniques, unique equipment, and technical expertise. Histological sections may be obtained from fresh frozen bones, decalcified and paraffin-embedded bones, or from non-decalcified, plastic-embedded bones & implants.

Mouse jaw,
plastic section, H&E

Masson's Trichrome

Von Kossa

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