INTRODUCTION
The McCaig Institute for Bone and Joint Health welcomed Joshua Mang as a new technician in the McCaig Institute Biomechanics Lab in May of 2023, succeeding Kent Paulson in his role.

EQUIPMENT AND MAINTENANCE
The Biomechanics Lab houses four primary testing machines: two large MTS frames, the 858 Mini Bionix, and the Electroforce 3230, all routinely maintained and fully operational, with emergency protocols in place.

FINANCIAL SUMMARY
Total expenses of $100,146 were incurred, including $90,254 for the technician salary and benefits of Mang and Paulson, graciously supported by the Section of Orthopaedic Surgery and the Department of Surgery. Maintenance expenditures accounted for $9,892.

PROJECTS

- Faculty of Veterinary Medicine
  - Model of equine stifle soft-tissue injury
    - Dr. Holly Sparks & 2 graduate students
  - Tendon and ligament strain in the equine forelimb
    - Dr. Holly Sparks & graduate student

- Industry
  - 4%

- Department of Cell Biology & Anatomy
  - Non-invasive ACL rupture in mice
    - Dr. Roman Krawetz & graduate student
  - Effects of antiepileptic drugs on bone remodeling
    - Dr. Roman Krawetz & graduate student

- Schulich School of Engineering
  - Collagenous structure changes in patients with spinal disorders
    - Dr. Neil Duncan & graduate student

- Department of Radiology
  - Atlas of articular cartilage across species
    - Dr. Sarah Manske & graduate student

- Faculty of Kinesiology
  - Zoledronic acid and ApoA-1 in ovariectomized mice
    - Dr. Brent Edwards & undergraduate student

- Department of Surgery/Section of Orthopaedic Surgery
  - Contribution of degenerated discs to spinal disorders
    - Dr. Ganesh Swamy & graduate student
  - Optimal dual plate configuration for humerus fractures
    - Dr. Prism Schneider & staff
  - Biomechanical analysis of femoral neck fixation
    - Dr. Prism Schneider & 2 residents

LAB USAGE (HOURS)

- 33%
- 30%
- 15%
- 9%
- 6%
- 2%
- 4%

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FOR BONE AND JOINT HEALTH

UNIVERSITY OF CALGARY