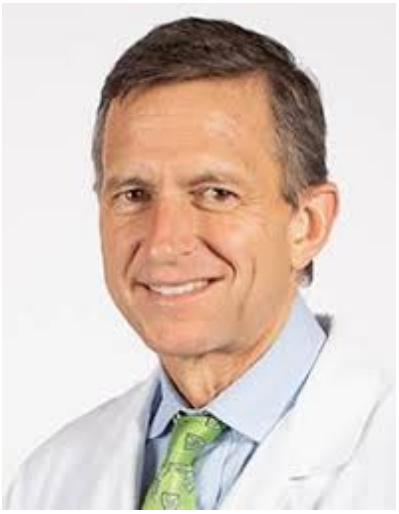
Penn Center for Musculoskeletal Disorders
University of Pennsylvania

Looking Forward to the 2025 PCMD Annual Scientific Symposium - November 12, 2025



Preparations are well underway for the 21st Annual Penn Center for Musculoskeletal Disorders Scientific Symposium in the Smilow Rubinstein Auditorium and Commons to be held on Wednesday, November 12, 2025. The year's keynote speaker will be Dr. Scott Rodeo from Weill Medical College of Cornell University, New York-Presbyterian Hospital and Hospital for Special Surgery.

The day will begin at 8am with registration and poster set-up followed by scientific presentations from new Center Full and Affiliate members and PCMD Pilot Grant recipients. The symposium will also include lunch and a judged poster session with prizes for trainees. The day will conclude with a reception in the commons area of Smilow. Registration is free but is required.

Penn Center for Musculoskeletal Disorders Grant Renewal

Announcement - PCMD Renewal

The PCMD center will be submitting the renewal application and we need your help with the required NIH information. In the coming days, we will be reaching out to each member to request the following information.

1) NIH biosketch in the new format
2) Extramural Grant Support for Center Members Table:
   -Name
   -Principal Investigator
   -Supporting Organization & Grant Number
   - Project Period (Total Years)
   -Current Annual Amount (Direct)
3) A 1-3 paragraph description of your research program
4) A brief summary/listing of actual or potential uses of the 3 Cores we will be proposing:
   - Musculoskeletal Histology *(frozen, paraffin, plastics, also including bone histomorphometry)*
   - Biomechanical Testing *(including both small and large samples).*
   - CT Imaging *(including micro-CT).*

Spotlight News/Publications From Our Members

Congratulations to Affiliate Member Spencer Szczesny, PhD from Penn State University!

On receiving the 2025 Y.C. Fund Early Career Award by the American Society of Mechanical Engineers. The award was established to recognize young investigators who are committed to pursuing research in the field of Bioengineering and have demonstrated significant potential to make substantial contributions to the field of Bioengineering. Such accomplishments may take the form of, but are not limited to, design or development of new methods, equipment or instrumentation in bioengineering; and research publications in peer-reviewed journals.

Congratulations to Jennifer Kalish, MD, PhD!

Dr. Kalish R01 entitled "Mechanisms of Macroglossia in Beckwith-Wiedemann Syndrome" was funded by the National Institute of Dental and Craniofacial Research, NIH.

Macroglossia (tongue overgrowth) is a cardinal feature of Beckwith-Wiedemann syndrome (BWS) and patients can have difficulty with breathing, eating, and speaking. This proposal will define the cell composition and cell-specific molecular mechanisms of tongue overgrowth in BWS. This work will leverage our unique collection of BWS tongue samples through our BWS Registry and BioRepository. We will utilize single-nuclei transcriptomic analysis of cell composition and interaction and *in situ* analysis of the interface between the key cell types through immunohistochemistry and characterize satellite cell proliferation and differentiation potentials *in vitro* and *in vivo* models. This work represents the first mechanistic study of BWS tongue.

This project was supported by the PCMD Pilot Grant program.

Congratulations to Riccardo Gottardi , PhD!

Dr. Gottardi R01 entitled "Decellularized Crtilage and Progenitor Cells for Laryngotracheal Reconstruction" was funded by the National Heart, Lung, and Blood Institute (NHLBI), NIH.

Close to 10% of the over 20,000 premature children every year develop airway disorders that often require laryngotracheal reconstruction using cartilage harvested from the rib cage, but this approach is invasive and cannot be applied to younger children, which motivates an urgent need for new, improved technology. We propose an innovative approach to produce functional cartilage for grafting using decellularized meniscus from a cadaveric donor where selective digestion of tissue components creates channels for recellularization with autologous cell sources obtained by a minimally invasive biopsy. The *in vitro* and *in vivo* proposed studies are aimed at defining new, less invasive and more effective therapeutic options for laryngotracheal reconstruction.

PENN CENTER FOR MUSCULOSKELETAL DISORDERS FUNDS AVAILABLE:

PCMD FUNDS AVAILABLE:

Summary Statement Driven Funding Request

If you have a recent summary statement from an NIH grant (eligible NIH mechanisms include all "R" grants such as R03, R21 and R01 and "K" grants such as K01, K08 on their first submission—please inquire regarding eligibility of other proposal mechanisms) which requires you to run additional experiments, gather additional data, provide feasibility for an approach, or similar, we can provide small funds ($1,000-$15,000) with a very short turn-around time in order to allow you to complete these experiments and resubmit your proposal with the best chance of success. Requests for funding will be evaluated on a rolling basis and priority will be given to Assistant Professors with encouraging initial review priority scores better than ~30-35%. The format of the "Summary Statement Driven Funding Request", which is limited to **one page**, is as follows:

Name of PI (must be a PCMD full member)
Title of Project Request
Specific Purpose of Request with Stated Outcome/Goal Referring Explicitly to the Summary Statement for Justification
Research Design and Methods
Budget with Brief Justification

Funding through this mechanism is available by submitting the one page proposal to **pcmd@pennmedicine.upenn.edu**

Affiliate Member Core Funding - Now Available

PCMD Funds Available for Affiliate members:

Affiliate members are now eligible for financial and intellectual support for PCMD core use. Center facilities and intellectual guidance are available to learners at all levels (e.g., faculty, trainees, staff) at other institutions. To a large extent, this effort is to provide increased opportunities to engage investigators at affiliate institutions (defined broadly) that do not have extensive resources supporting musculoskeletal research.

All potential requests for support should start with an email to either a Core Director/s or to Lou Soslowsky at **soslowsk@upenn.edu** to discuss your needs. For more information on this please visit the Affiliate Member Core Funding page at **https://www.med.upenn.edu/pcmd/affiliate-member-core-funding.html**

Upcoming Seminars 2025

June
27

Friday, June 27, 2025, 1:30 pm-2:30 pm / CRB Austrian Auditorium
Joint with IRM
Noodle Hop Hop - On the Development and Evolution of Skeletal Proportion
Kimberly Cooper, PhD
Professor, Cell and Developmental Biology
University of California, San Diego

September
30

Tuesday, September 30, 2025, 1:30 pm-2:30 pm / CRB Austrian Auditorium
Translational Opportunities at the Intersection of Immunoengineering, Mechanobiology, and Regenerative Medicine
Robert E. Gudberg, PhD
Robert and Leona DeArmond Executive Director,
Phil and Penny Knight Campus for Accelerating Scientific Impact;
Director, Wu Tsai Human Performance Alliance at Oregon;
Professor, Department of Bioengineering;
Vice President, University of Oregon

October

Tuesday, October 21, 2025, 1:30 pm-2:30 pm / CRB Austrian Auditorium

21

Modulating Inflammatory Factors to Prevent the Painful Pathoanatomy in Discogenic Low Back Pain
Simon Tang, PhD, MSCI
Associate Professor of Orthopaedic Surgery
Washington University

November
12

Wednesday, November 12, 2025, 8:00 am-6:00 pm / Smilow Rubinstein Auditorium & Commons
Annual Scientific Symposium
Regulation of Post-Natal Growth Plate Maturation
Keynote Speaker:
Scott Rodeo, M.D., Professor and Vice Chair of Orthopaedic Surgery
Weill Medical College of Cornell University

December
2

Tuesday, Decemeber 2, 2025, 1:30 pm-2:30 pm / CRB Austrian Auditorium
Repair Patrol: Sox9 Lineage Cells as Sentinels of Skeletal Regeneration
Francesca Mariani, PhD,
Associate Professor of Stem Cell Biology and Regenerative Medicine
Keck School of Medicine, University of Southern California

View All Activities...

Orthopaedic Research Club (ORC) Seminars

Membership Page

IMPORTANT INFORMATION
Remember to include reference to support from the Center in your abstracts and publications. Cite Grant NIH/NIAMS P30AR069619 from the National Institute of Arthritis and Musculoskeletal and Skin Diseases of the NIH.
Support has also been provided by the Perelman School of Medicine at the University of Pennsylvania.

Penn Center for Musculoskeletal Disorders
University of Pennsylvania

Supported by the National Institutes of Health
U.S. Department of Health and Human Services
NIAMS

Penn Center for Musculoskeletal Disorders
University of Pennsylvania
3rd Fl Stemmler Hall, 3450 Hamilton Walk
Philadelphia, PA 19104-6081
Phone: 215-898-8654
www.med.upenn.edu/pcmd

If you have any news or information that you would like included in the next issue of the Musculoskeletal Messenger newsletter, please email the information to: **pcmd@pennmedicine.upenn.edu**