UW Center for Translational Muscle Research

2026 UW CTMR ANNUAL SYMPOSIUM

Wednesday, September 16, 2026 | 9:00am – 6:00 pm PT

Orin Smith Auditorium (Building C)

UW SLU | 850 Republican St | Seattle, WA, 98109

THEME: ENGINEERED MUSCLE TISSUES AND ORGANOIDS

8:45 am **Coffee and Tea**, Building C Lobby

9:00 am **General Welcome & Keynote Speaker Introduction**
Mike Regnier & Nate Sniadecki, PhD*, CTMR*
Jennifer Davis, PhD, Introduction of Biofoundry

9:10 am **Keynote Session I**
Kevin Healy, PhD, Jan Fandrianto and Selfia Halim Distinguished Professorship in Engineering, Departments of Bioengineering, and Materials Science and Engineering, University of California, Berkeley
Title: ***Exploiting new approach methodologies (NAMs) for discovery and optimization of heart therapeutics***

10:00 am **Break**

10:20 am **CTMR Pilot Grant Awardees** (Year 7)
Moderator: ***David Beck, PhD****, Co-Core Director, CTMR Quantitative Analysis Core*

Shabnam Salimi, MD, MSc, FAHA, Acting Assistant Professor, Department of Anesthesiology & Pain Medicine
Title: ***From Metabolomics to Epigenetics Signatures of Aging Skeletal Muscle and Mice Frailty***

Guy Odom, PhD, Research Associate Professor, Department of Neurology
Title**: *Linking cardiac biophysical performance to protein redesign of micro-utrophin in DMD mice***

Wentao Zhu, PhD, Acting Assistant Professor, Department of Anesthesiology & Pain Medicine
Title: ***Investigating the Metabolic Basis of Chronic Pain in Spinal Muscular Atrophy (SMA) Through Comprehensive Metabolomics Analysis***

Matthew Childers, PhD, Research Scientist 4, Department of Bioengineering
Bert Tanner, PhD, Associate Professor, Washington State University
Title: ***Molecular dynamics simulations of myosin and thick-filament regulatory protein phosphorylation***

Pat Boyle, PhD, Associate Professor, Department of Bioengineering

The *UW Center for Translational Muscle Research* is supported by NIAMS Award Number P30AR074990.

Joe Powers, PhD, Assistant Professor Department of Laboratory Medicine & Pathology and Mechanical Engineering
Title: ***Effects of filamin C deletion on multiscale structure-function relationships in muscle***

Alec Smith, PhD, Assistant Professor, Department of Neurobiology & Biophysics
Title: ***Investigating the functional effect of b-adrenergic stimulation on CRISPR-edited human iPSC-derived myoblasts harboring ALS-associated mutations***

Jenny Robinson, PhD, Assistant Professor, Mechanical Engineering, and Endowed Chair in Women's Sports Medicine and Lifetime Fitness Orthopaedics and Sports Medicine
Title: ***Estradiol-Dependent Regulation of ERα Isoforms and Mechanotransduction in Human Mesenchymal Stromal Cells (hMSCs)***

12:00 pm **Lunch Break & Vendor Fair**, C123A/B

1:30 pm **Keynote Session II**
Introduction/Moderator: ***Mike Regnier, PhD****, CTMR Director*
Hector Rodriguez, PhD, Vice President of New Targets, Kardigan
Title: ***From bench to bedside: a LGMD story***

2:20 pm **Recent CTMR Pilot Grant Awardees** (Year 8)
Moderator: ***Dan Raftery, PhD****, Core Director, CTMR Metabolism*

Matthew Campbell, PhD, Research Assistant Professor, Radiology
Presented by **Rian Sherper, Research Associate**
Title: ***Exercise training effects in three-dimensional engineered muscle tissue***

Xinxian Deng, PhD, Research Associate Professor, Lab Medicine & Pathology

Christine Disteche, PhD, Professor, Lab Medicine & Pathology

Title**: *Functional analyses of muscle cells with a different number of sex chromosomes***

Haiming Kerr, PhD, Acting Assistant Professor, Medicine, Division of Gerontology and Geriatric Medicine
Title: ***AMPK regulation of contractility in 3D-engineered muscle tissues under humanized cachectic conditions***

Cole DeForest, PhD, Professor, Chemical Engineering & Bioengineering
Title: ***In-Situ Manipulation of cMyBP-C Function in Human iPSC-Derived Cardiomyocytes***

Michael Bamshad, PhD, Professor, Pediatrics

Christian Mandrycky, PhD, Research Scientist 4, Bioengineering
Title: ***Characterizing a newly generated rat model of Distal Arthrogryposis***

Alec Smith, PhD, Assistant Professor, Department of Neurobiology & Biophysics

Title: ***Modeling sexual dimorphism in skeletal muscle function using stem cell-derived engineered tissues***

3:20pm **Break**

3:40 pm **Invited Speakers**
*Moderator: **Jen Davis, PhD**, Co-Core Director, CTMR Quantitative Analysis Core*

Nicholas Geisse, PhD, CEO of Curi Bio – **Talk Title: TBA**
Nate Sniadecki, PhD, Professor, Mechanical Engineering, UW – **Talk Title: TBA (Cardiac MPS standard)**

4:30 pm **Lightning talks**
*Moderator: **Joe Powers, PhD**,*

4:50 pm **Poster Session & Networking Reception- Light appetizers and drinks to be served**

6:00 pm **Symposium Wrap Up**

Scan below for a digital copy of the SCHEDULE

Scan below for a digital copy of the ABSTRACT BOOK **of poster presentations**

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Questions? Please contact: Katie Mitzelfelt, kmitz@uw.edu

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