



Science in Motion

From the Chair



Dr. Richard van Emmerik, Kinesiology
Department Chair



We are now well into our fall 2025 semester and I am happy to report that the Department of Kinesiology is thriving! No doubt we are in challenging times in academia but, as you will read in this newsletter, we have wonderfully talented and collegial faculty and staff that continues to ensure our students' success as well as our excellence in research.

The department currently has 14 tenured/tenure-track faculty, 7 full-time lecturers, 2 research faculty, 3 administrative staff, 2 full-time undergraduate advisors, approximately 650 undergraduate majors, ~40 graduate students, and several postdoctoral fellows. Its research and teaching activities are organized into the areas of Biomechanics, Movement Neuroscience, Physical Activity & Health and Physiology. Our research spans the entire range from the molecular level, how actin and myosin interact, to community-based physical activity promotion programs.

In this newsletter you will see some of the wonderful and exciting activities that our faculty and students have been involved in. Our success is across the board, with one of our lecturer faculty, Eliza Frechette, winning the prestigious University Distinguished Teaching Award. In research, several of our tenure-track faculty received significant research grant funding, including Ned Debold obtaining an R35 'NIH 'career' award, Wouter Hoogkamer a National Science foundation grant on wearable technologies and, last but not least, Katherine Boyer and Jane Kent an R01 on energy cost of walking and aging. I am also excited to report that we are in the process of developing extended MS degree programs in Human Performance (with a focus on strength and conditioning) and Sport Science, targeting data analytics.

The department has several important scholarships supporting undergraduate and graduate students. These include the Patty Freedson Undergraduate Health and Wellness Scholarship, the Frank Rife Undergraduate Scholarship in Kinesiology supporting student internships, and the Priscilla Clarkson Graduate Scholarship in Kinesiology, supporting dissertation research. Support for these scholarships contributes in a very important way to our students' success and career opportunities.

I am also pleased to announce that this year we will be celebrating our 60th anniversary! The department was established in 1965 as the first to be named "Exercise Science" and later renamed to Department of Kinesiology. We will have a celebration with our undergraduate students this coming spring and in June are organizing a research symposium for graduate alumni. This event is planned in the new School of Public Health and Health Sciences student hub, which will open in the spring of 2026 next to our good-old Totman building on campus! I hope you enjoy catching up with the happenings in the Department of Kinesiology. We have lots of great news to report and hope that you consider submitting newsworthy items to include in our future newsletters. We would love to hear from you!

Richard van Emmerik, PhD, FNAK

Professor and Chair, Director of Motor Control Laboratory
Department of Kinesiology

HAPPY 60TH BIRTHDAY TO THE UMASS KINESIOLOGY DEPARTMENT! 1965-2025



Exterior view of the Totman building

Kinesiology 60th Anniversary Conference and Celebration

Celebrate 60 years of the Kinesiology graduate program with us on June 14-16, 2026, at UMass!

What: A two-day scientific conference celebrating the scientific achievement of the Kinesiology graduate program.

Where: In the new Hub building next to Totman

Cost: \$100, all meals included

Preliminary Program:

- The History of the Department
- The Dr. Joe Hamill Lecture
- The Dr. Patty S. Freedson Lecture
- The Dr. Priscilla Clarkson Lecture
- The Dr. Gary Kamen Lecture
- Presentations from former and current grad students and trainees.
- Two poster sessions.

REGISTER

[Event Page Website](#)

Welcome Our New Associate Chair



Judi Bruno LaBranche Senior Lecturer II

Welcome New Faculty



Rich Casella
Lecturer



Dr. Melanna Cox
Assistant Professor



Dr. Josh Liddy,
Research Assistant Professor



Dr. Domenika Pindus
Assistant Professor

Welcome New Staff



BZ Catalano
Academic Advisor



Alice Frydryk
Academic Programs
Manager



Amy Johnson
Department Administrator

Faculty Honors

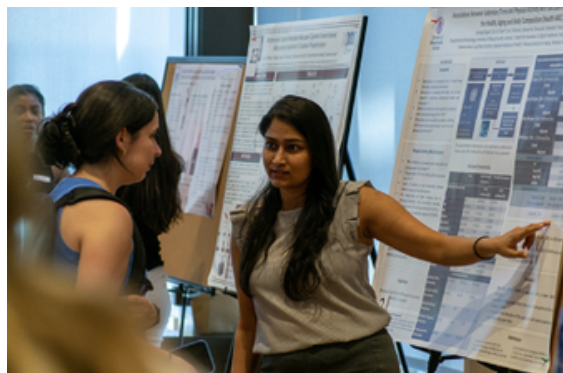


Eliza Frechette wins Distinguished Teaching Award!

Eliza Frechette, senior lecturer II in the Department of Kinesiology, was named a Distinguished Teaching Award (DTA) winner for the 2024-25 academic year. Congratulations, Eliza!

Read more [HERE](#).

Graduate Alumni Updates



Shivangi Bajpai '25PhD

Shivangi is a post-doctoral scholar in the Department of Neurology at UNC-Chapel Hill. Her research will be focused on the intersection between physical activity, cardiovascular and neuroepidemiology, under the supervision of Dr. Priya Palta.

Dissertation Title: "Assessing the Utility of Wearable Devices for Monitoring Health of Women and Women Caregivers for Dementia"

Ross Brancati '25PhD

Ross is currently working as a Human Systems Integration Engineer for Galvion.

Dissertation Title: "Unraveling Patellofemoral Pain: Subgroup Identification and Classification"





Erica Casto '25PhD

Erica is currently working with the Los Angeles Dodgers on the performance science team as an applied research scientist.

Dissertation Title: "Biomechanics, Muscle Activity, and Gait Complexity During Walking with Fatigue-Induced Knee Extensor Impairment"



Skylar Holmes '24PhD

Skylar is a post-doctoral scholar in Radiology at Stanford Medicine.

Dissertation Title: "Muscle Fatigue's Impact on Gait Mechanics and Neuromuscular Control in Individuals with Knee Osteoarthritis"



Lingsong Kong '25PhD

Ling attended UC-San Diego for a two-week intensive AI training until the end of August 2025 and is now at Stanford University for his postdoc research.

Dissertation Title: "Detecting Frailty Using Wearable Device Measured 24 Hour Movement Behaviors in Older Adults"



Damion Perry '25MS

Damion is a product line manager at PUMA.



Colleen Sands '25PhD

Colleen started as an Assistant Professor of Biology in the College of Health & Natural Sciences at Franklin Pierce University this Fall.

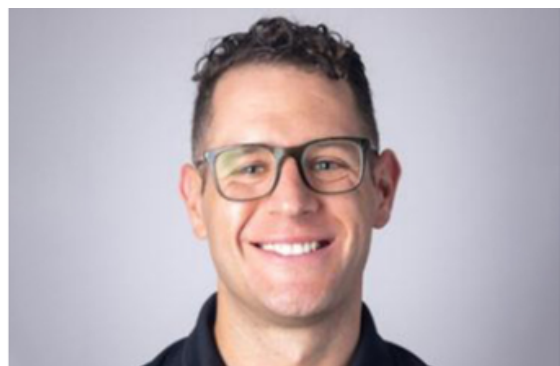
Dissertation Title: "Quantifying Dog-Facilitated Youth Physical Activity"



Ann-Marie Sylvia '25PhD

Ann-Marie is a lecturer in the UMass Amherst Department of Biostatistics and Epidemiology where she is teaching in the Public Health Sciences program and conducting small-scale research.

Dissertation Title: "Examining the Role of Physical Activity in Equine-Assisted Adapted Riding for Neurodivergent Children and Adolescents (The PANDA-3 Study)"



Samuel Zeff '23PhD

Sam is a Senior Biomechanist for the LA Clippers and an Assistant Professor of Kinesiology in the College of Health and Human Services at California State University, Long Beach.

Dissertation title: "Head Stabilization and Cortical Activation in Contact Sport Athletes during Walking under Different Visual Task Constraints"

Faculty News & Notes



Wouter Hoogkamer Interviewed by *The Athletic*

Associate Professor and running expert Wouter Hoogkamer recently discussed what it would take for Faith Kipyegon to become the first female sub four-minute miler. [Read the full article here.](#)



Kinesiology Faculty Educate Young Learners at Pre-College @ UMass Program.

Kinesiology faculty members Judi LaBranche and Tom St. Laurent are featured in this story about teaching pre-college courses to high schoolers in this innovative UMass summer program. [Read more](#)

Movement Mentors

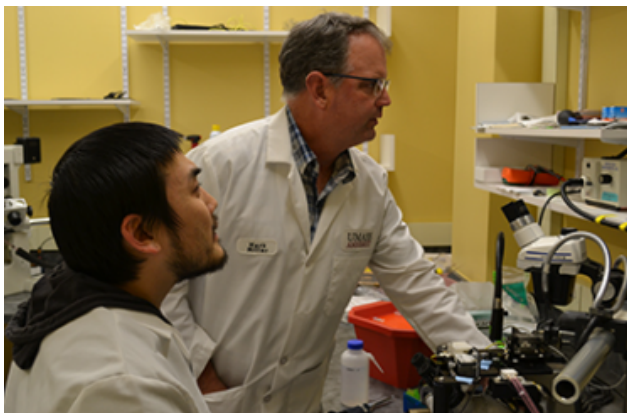
Assistant Professor Christine St. Laurent's Movement Mentors received an honorable mention for the video they put together for the AKA Student Impact Award. [Check out the video here!](#)

Learn more about Dr. St. Laurent's current [Movement Mentors Research Team](#).



Anatomy & Physiology Gets a New Lab Space

Lorie Woodson, Kinesiology lecturer and instructor in Anatomy and Physiology, is excited about the new A&P labs in Goessmann. The Totman A&P lab had become outdated, and the decision was made to move the labs for Anatomy and Physiology to Goessmann. Check out the photos of the new lab space.



Research Findings from the Muscle Biology Lab

Associate Professor Mark Miller and his Muscle Biology Lab are reporting their latest findings on cellular and molecular contractile function in aged human skeletal muscle in the *American Journal of Physiology–Cell Physiology*. [Read the research article here.](#)

Research Awards & Recognitions



Ned Debold Receives Grant to Support Advances in Molecular Motor Research

Professor Ned Debold has received a five-year, \$2 million grant from the National Institutes of Health (NIH) to advance his research on how myosin molecules—molecular motors crucial for muscle contraction—work together to drive different processes within cells. [Read more](#)

Boyer and Kent to Examine the Energy Costs of Walking and Aging



Multi-Principal Investigators Katherine Boyer and Jane Kent have been awarded a new \$3.3M, 5-year grant from the National Institute on Aging titled “Neuromechanical Bases for the Increased Energy Cost of Walking in Aging.” In older age a higher energy cost of walking is proposed as a risk factor for developing slowed gait speed and reduced mobility. Despite the well documented problem of a higher energy cost with age, the mechanisms for this increase are not yet understood, nor consequently have versatile and effective interventions to mitigate this problem been fully developed. The goal of this study is to determine the causes of the greater energy cost of walking typically observed in adults >65 years of age. Along with postdoctoral fellow Jacob Thomas, PhD, doctoral student Zoe Smith, clinician Stuart Chipkin, MD, and biostatistician Carol Bigelow, they will be quantifying in young and older adults: gait characteristics and oxygen consumption during walking; and MRIs and the bioenergetics of the calf, thigh, and gluteus muscles during muscle contractions in the magnetic resonance scanner. This interdisciplinary work will take place in the Center for Human Health and Performance and the Human Magnetic Resonance Center in the Life Sciences Laboratories building. [Read more here.](#)

Student Awards & Honors

Graduate Student Awards:

- American Kinesiology Association Writing Award – **Christopher Lee** (For the publication: Lee C, Woods PC, Paluch AE, Miller MS. Effects of age on human skeletal muscle: a systematic review and meta-analysis of myosin heavy chain isoform protein expression, fiber size, and distribution. Am J Physiol Cell Physiol. 2024 Dec 1;327(6):C1400–C1415. doi: 10.1152/ajpcell.00347.2024. Epub 2024 Oct 7. PMID: 39374077; PMCID: PMC11684863)
- American Kinesiology Association Doctoral Award – **Montgomery Bertschy**
- Priscilla M. Clarkson Graduate Scholarship – **Lingsong Kong**
- Priscilla M. Clarkson Graduate Scholarship – **Luke Arieta**
- American Kinesiology Association Masters Award – **Sikha Pudasaini**

Kinesiology chair Richard van Emmerik (left) and faculty member Tom St. Laurent (right) with undergraduate student award winners



Undergraduate Student Awards:

- American Kinesiology Association Scholar – **Elena Schell**
- Timothy K. Moynahan Award – **Shlok Parekh**
- Eric Sinacori Memorial Scholarship – **Alexander Valencia**
- Eric Sinacori Memorial Scholarship – **Rylee Shunney**
- Frank N. Rife Kinesiology Opportunity Scholarship – **Ryan Dailida**
- Patty Freedson Health & Wellness Scholarship – **Jennifer Chou**
- Patty Freedson Health & Wellness Scholarship – **Jenna Kenney**
- Patty Freedson Health & Wellness Scholarship – **Shyla Senn**
- John “Jack” R. Schroeder Fund – **Sophia Woods**
- Esther Wallace Scholarship – **Samara Mehta**
- Rouzier Family Pre-Health Professional Scholarship – **Matias Sanchez**
- Rouzier Family Pre-Health Professional Scholarship – **Janet Lam**

Alumni Profile: Aurora Foster '15 MS'19



Aurora Foster '15, '19MS

Aurora was nominated by Dr. Mark Miller and Judi LaBranche. We reached out to Aurora with a few questions, which she was gracious enough to answer.

Q. Can you share what year you graduated, and what you currently do for work?

A. I graduated with my BS in kinesiology in 2015 and MS in kinesiology in 2019. Currently I am a physician associate (PA) working in OB/GYN. I get to see patients in the office and assist with many different surgeries.

Read more here!

Stay in Touch with the Department

Do you have any exciting information to share about your accomplishments since graduating from the Kinesiology Department? Please share them with us! Contact Academic Advisor BZ Catalano at elizabethcat@umass.edu to be featured in our next newsletter.

Stay up to date on what's going on currently in the UMass KIN department by following us on Instagram [@umasskin](https://www.instagram.com/umasskin).

Want to support current UMass Amherst KIN undergrads? Join [Connect UMass](#).



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