

movement



BRAIN POWER

Michigan Kinesiology experts are working to help reduce concussions (pg. 18), slow mild cognitive impairment (pg. 22), and improve mental health (pg. 30)

**NEXT GEN
RESEARCHERS**

PAGE
10

**MLB IN THE
CLASSROOM**

PAGE
28

**CAMPING FOR
A CAUSE**

PAGE
36

Letter from the Dean

Earlier this year, we began a brand research project to help our school better articulate who we are, what we stand for, and the stories we want to tell. Nearly 1800 of you participated in our surveys, interviews, and focus groups. We learned a lot, including that the word “kinesiology” is mystifying to some people. That’s not really surprising—we know it’s complex. Our field contains multitudes: science *and* business, cell *and* person, everyday citizens *and* sport professionals, individuals *and* communities. It’s hard to encompass all that in just one word.



I see it as an opportunity.

As a leader and change-maker, we can educate the world about our field, our school, and our programs. We can highlight the diverse interests of our faculty and students. And we can show how our complex field is solving complex problems through stellar research, education, and experiential learning.

This issue of *Movement* is a great representation of the breadth and depth of kinesiology. For example, brain *and* body. We’re working on reducing brain trauma through multidisciplinary concussion research (pg. 18), slowing mild cognitive impairment in aging populations through physical activity (pg. 22), and exploring the effects of exercise and sleep on the mental health of college students (pg. 30).

I hope you enjoy the variety of articles in this issue. Our students, faculty, and alumni are doing amazing work, at both the micro *and* macro levels.

Go Blue!

A handwritten signature in black ink that reads "Lori Ploutz-Snyder". The signature is fluid and cursive.

Lori Ploutz-Snyder, Ph.D.

Professor and Dean
School of Kinesiology

P.S. Please join us at our Homecoming and Parent & Family Weekend Open House on Friday, October 4. You’ll see the brand-new Kraus fly-through video, celebrate our alumni award winners, and reconnect with your fellow Wolverines. It’s going to be a good time!



contents

- | | | | |
|----|---|----|---|
| 2 | From the Dean | 22 | Memory Jogger
<i>Can exercise improve mild cognitive impairment?</i> |
| 4 | By the Numbers | 24 | Breaking New Ground
<i>Homecoming 2018</i> |
| 5 | A Work in Progress
<i>Kraus Building construction photos</i> | 26 | Alumni Updates |
| 6 | Brand Man
<i>Jon Paley, Class of 1995</i> | 27 | Faculty & Staff Updates +
Upcoming Events |
| 8 | Walking Tall
<i>Bipedalism and biomechanics</i> | 28 | ¡Pleibol!
<i>Students work with MLB to build Latinx fan base</i> |
| 10 | Generation Next
<i>PhD student research breaks new ground</i> | 30 | Running Low
<i>The impact of exercise and sleep on depression</i> |
| 13 | Exercise Is Medicine
<i>Student group helps build a healthier campus</i> | 32 | World Tour
<i>Students travel to Thailand and United Kingdom</i> |
| 14 | Within Arm's Reach
<i>Preserving shoulder function in breast cancer patients</i> | 34 | Building Bridges
<i>Iris Mustich, Class of 2016</i> |
| 16 | The school's 2018-19 diversity, equity, and inclusion initiatives | 36 | Happy Campers
<i>Students help kids with serious health issues at North Star Reach</i> |
| 18 | Head Start
<i>University launches Michigan Concussion Center</i> | 38 | Destination: Success
<i>Tracking the career paths of new alumni</i> |
| 20 | #GetSocial
<i>Digital marketing strategy in the classroom</i> | | |

© 2019 Regents of the University of Michigan

The Regents of the University of Michigan

Jordan B. Acker, Michael J. Behm, Mark J. Bernstein, Paul W. Brown, Shauna Ryder Diggs, Denise Ilitch, Ron Weiser, Katherine E. White, Mark S. Schlissel, *ex officio*.

Nondiscrimination Policy Statement

The University of Michigan, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action. The University of Michigan is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, national origin, age, marital status, sex, sexual orientation, gender identity, gender expression, disability, religion, height, weight, or veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to the Senior Director for Institutional Equity, and Title IX/Section 504/ADA Coordinator, Office for Institutional Equity, 2072 Administrative Services Building, Ann Arbor, Michigan 48109-1432, 734-763-0235, TTY 734-647-1388, institutional.equity@umich.edu. For other University of Michigan information call 734-764-1817.

MOVEMENT MAGAZINE

is published three times a year (two digital editions, one print edition) by the University of Michigan School of Kinesiology. Visit us online at kines.umich.edu/movement.

Dean

Dr. Lori Ploutz-Snyder

Associate Deans

Dr. Ketra Armstrong

Dr. Greg Cartee

Dr. Tom Templin

Editor and Director of Marketing & Communications

Emily Mathews

Writers

Dr. Ketra Armstrong, Laura Bailey, Amy Crawford, Jean Hunt, Lois Maharg, Emily Mathews, Jenn McKee, Samantha Tinor

Design

Linette Lao, Invisible Engines

Cover

rudall30 / iStock

Printer

University Lithoprinters

Let Us Know What You Think

Contact emathews@umich.edu or Editor, *Movement Magazine* U-M School of Kinesiology 1402 Washington Heights Ann Arbor, MI 48109-2013

Connect with
Michigan Kinesiology
kines.umich.edu



[/umkines](http://umkines)

BY THE NUMBERS*

1

NEW UNDERGRADUATE PROGRAM

APPLIED EXERCISE SCIENCE
REPLACED HEALTH & FITNESS THIS YEAR

AES HAD A **74%** INCREASE IN APPLICATIONS AND AN **80%** INCREASE IN ENROLLMENT COMPARED TO HF

1,941

STUDENTS TAUGHT FOR A TOTAL OF 19,276 CREDIT HOURS

\$9,269,597

IN RESEARCH EXPENDITURES

140

FACULTY PUBLICATIONS

10,491

SOCIAL MEDIA MENTIONS AND

1,096

NEWS MENTIONS OF FACULTY RESEARCH
(source: Altmetric)

\$888,710

IN SCHOLARSHIP SUPPORT AWARDED TO STUDENTS

68%

UNDERGRADUATE YIELD RATE: THE MAJORITY OF STUDENTS WHO ARE ADMITTED ACTUALLY ENROLL!

\$15,573

IN GOGLOBAL SUPPORT AWARDED TO STUDENTS

188 STUDENTS PARTICIPATED IN EDUCATION ABROAD PROGRAMS**

A DIVERSE GRADUATE PROGRAM:

1/3

ARE UNDERREPRESENTED MINORITIES

STUDENTS HAILING FROM

42

 STATES AND

20

 COUNTRIES

*Numbers reflect 2018-19 data in comparison to 2017-18 data

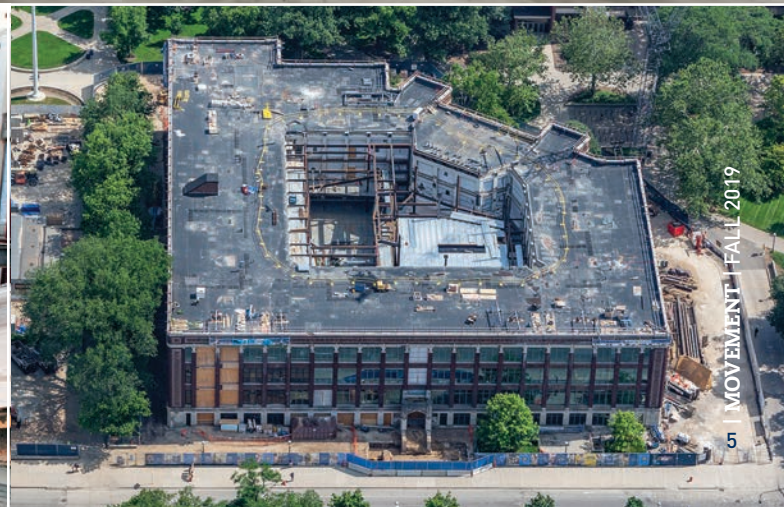
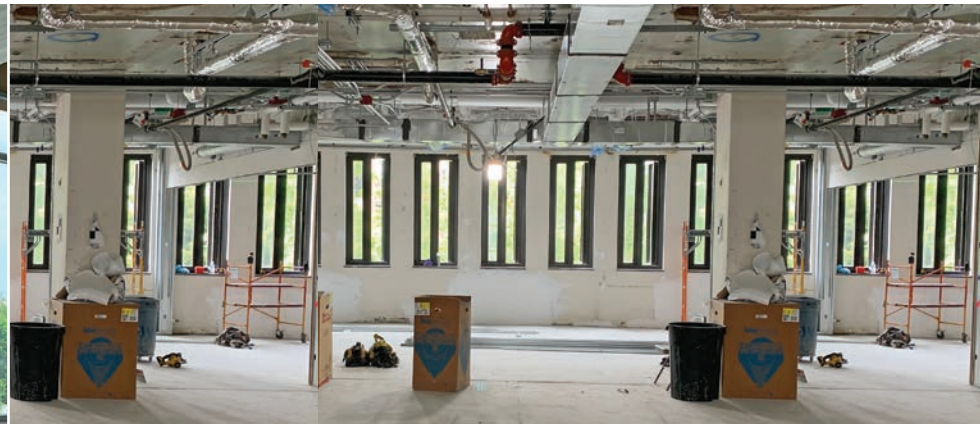
**Pending final count from the Provost's Office



A WORK IN PROGRESS KRAUS BUILDING CONSTRUCTION

After five years of dreaming and planning, construction began on the E. H. Kraus Building, the site of our school's future home, last August. Demolition work continued through May and renovation began shortly after. Our late fall 2020 move-in still feels forever away, but we can see progress every time we walk through the Diag. These photos capture the Kraus construction highlights over the last year. Track the progress of our new building through monthly updates at kines.umich.edu/newbuilding/ ■

Top: April 2019: New banners for the Kraus construction fencing, facing the Diag. Photo: Emily Mathews/Michigan Kinesiology. Below, left to right: July 2019: Pretty nice view, huh? Photo: Lori Helvey/Michigan Kinesiology. July 2019: The future graduate student space. Photo: Lori Helvey/Michigan Kinesiology. Bottom row, left to right: May 2019: New steel being erected in the Commons. Photo: U-M Architecture, Engineering and Construction. July 2019: Summertime aerial photo. Photo: U-M Architecture, Engineering and Construction.





BRAND MAN

JON PALEY, CLASS OF 1995 BY JENN MCKEE

While growing up in Scarsdale, New York, Jon Paley (SM '95) had an interest that likely set him apart from the other kids.

"I was always a big sports business fan," said Paley. "... At a young age, I was very into tracking things like the cola wars, which obviously had a huge sports presence, as did the beer wars. I loved watching brands that went head to head."

Yes, Paley grew up playing and watching all kinds of sports, too, but the business surrounding the games and their athletes fascinated him most.

So it's hardly a surprise that after studying Sport Management at U-M, Paley launched a career in advertising. After working for a few different ad agencies in New York, Paley founded, in 2010, a company called The Vault, which now boasts a long list of marquee clients: ESPN, Under Armour, the NFL, Chevrolet, Land's End, Dr. Pepper, Taco Bell, Staples, and more.

Where did the company's name come from?

"The Vault comes from a place of trust," said Paley. "And it sounds cool."

The Vault's commercial spots nearly always have a tie-in to sports, and every once in a while, they'll feature some pretty famous U-M alumni.

"I love working with people that went to Michigan," said Paley. "Jalen [Rose] and Desmond [Howard] happen to both be fantastic guys and very talented on set."

Paley came to Michigan because, as he puts it, because "it's the perfect school if you're a sports fan, and it's also a terrific school generally." These days, Paley gives guest lectures for Sport Management classes—during which he invites students to be part of creative competitions—and serves on the school's Sport Management Advisory Board.

"... [U-M School of Kinesiology] students are a pleasure to work with and learn from, and a pleasure to teach and mentor." — JON PALEY

"I have a strong admiration for the University of Michigan, as well as for the School of Kinesiology," said Paley. "They're doing incredible things. And I also think students are a pleasure to work with and learn from, and a pleasure to teach and mentor. They offer a terrific perspective."

Paley's been in the ad game for many years now, of course, so he's had a front row seat for the seismic industry changes brought on by smartphones and the internet. But this has hardly been a point of stress for Paley.

"The internet has always been a passion of mine," said Paley. "I was always very into it, even in the early stages, and I still am. It helped that every company I worked for during that transition was at the forefront of the business. I was really fortunate to learn from really talented people who were trailblazers in that sense."

Paley counts among his favorite Vault projects a campaign BMW waged

against one of its main competitors, Tesla, wherein the ads emphasized how long customers would have to wait for a Tesla when they could buy a high-performance BMW plug-in hybrid right away.

"We did an amazing campaign, I thought," said Paley. "... We took [Tesla] on head-on."

And in 2018, the Vault's "This is Hockey" spots for the NHL earned the company a PRO Award for Best Corporate Social Responsibility campaign.

But the online world's breathlessly crowded and quicksilver marketplace doesn't allow Paley much time to celebrate his considerable achievements.

"The challenge in the industry right now is creating amazing content and always getting faster and more efficient," said Paley. "But the whole creative process excites me, from beginning to end. ... I really do love it." ■



*Jon gives feedback to Sport Management students after an in-class group presentation.
Photo: Emily Mathews/Michigan Kinesiology.*



WALKING TALL

BIPEDALISM & BIOMECHANICS

BY LINDA MAHARG

As an academic omnivore, Dr. Brian Umberger worked his way through several fields of study before developing a passion for biomechanics.

His self-described “long and winding road” led him to the School of Kinesiology in 2018. Now as a professor of Movement Science, he’s pursuing research in several areas while helping students conduct research of their own.

“In very broad terms, I study how and why we walk the way we do,” said Umberger. One area of study enables him to assist in the development of prosthetic devices. Another interest is historical.

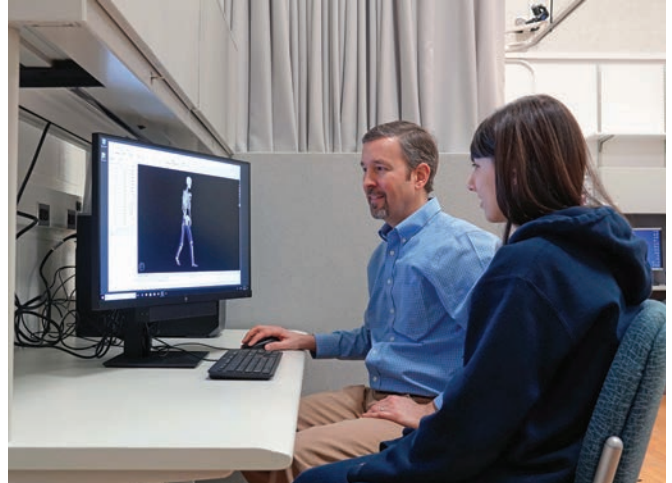
“A major element of my program is focused on the evolution of bipedalism, understanding how and why we came to be the way we are,” Umberger said. “We’re the only mammals that walk upright on two straight legs. So human bipedalism, which emerged about six or seven million years ago, is actually used to define what became the human lineage. . . . The evolution of bipedalism is believed to have played a major role in humans becoming one of the most successful species on the earth.”

The topic is of interest to the public, he said, as evidenced by popular displays on the evolution of humans in natural history museums. Umberger’s research contributes to understanding how anatomical changes in our early human ancestors led to us becoming efficient, bipedal walkers who spread out over most of the globe.

The evolution of bipedalism is believed to have played a major role in humans becoming one of the most successful species on the earth.

The applied aspect of his work centers on development of lower limb prosthetics to help restore mobility and independence in people with amputations resulting from traumatic injuries, cancer, congenital defects, and diabetes. This work is collaborative. Engineers who design advanced prosthetic limbs work together with Umberger, who contributes his expertise on the biomechanics of how people walk, and a physical therapist or prosthetist, who works with the patient.

Left: Kirsty Pargeter/Adobe Stock.



Brian Umberger and student Alex Denton. Photo: Emily Mathews/Michigan Kinesiology.

“Together we’re able to make much greater progress than any one of us could alone,” Umberger said. “This is a good example of team science, how you bring together people with different expertise and can then tackle much bigger problems.” On the horizon is collaborative research in another area: gait problems that typically arise as people age and targeted interventions to restore mobility.

Umberger’s work also involves computational modeling and computer simulation, in which students with related skills can participate. “We’ve developed mathematical models of the human musculoskeletal system and we can use those to simulate how people walk. That allows us to predict what’s happening inside the body,” he said, when actual measurements can’t be taken. “That also allows us to do predictive work, such as predicting the optimal design for a prosthetic limb.”

Alongside teaching a full load of courses, Umberger supervises students conducting research. While graduate students typically establish their own research questions, he said, some undergraduates also want research experience.

“They might assist with one of our ongoing projects in the Locomotion Research Lab if we have subjects coming in for data collection,” Umberger said. “Or they might assist one of the graduate students with their dissertation research. I’ve also had . . . undergraduate honors students who’ve done their own independent research projects.” ■

Doctoral students in the School of Kinesiology are researching a wide variety of complex issues, including HBCU athletic marketing, running cadence, treadmill workstations, and walkable environments.

nextgen

PHD STUDENT RESEARCH BREAKS NEW GROUND

BY JEAN HUNT, LAURA BAILEY, AND SAMANTHA TINOR

Kristal McGregor, a Sport Management PhD student, knows that Historically Black Colleges and Universities' (HBCU) athletic programs typically lack the fan base that other NCAA Division I schools enjoy. She wants to help change that.

McGregor is an HBCU alum herself (Hampton University BS '11, MS '15). As a track and field student-athlete, she set two school records. After graduating from Hampton, she coached its student-athletes.

"I'm passionate about HBCUs because I attended one, and I saw that attendance rates at football and basketball games were just terrible. That hurt, so I wanted to make a difference," she said.

No small task, as HBCUs are not nearly as well-funded as most schools are. While researching more than 60 HBCUs, McGregor found that fewer than ten have an athletic marketing department, and they are often staffed by one person.

Another factor is determining how to market HBCU athletics. For her dissertation, titled "An Ethnographic Exploration of the Culture of Sport Consumption at a Historically Black College/University: Elucidations of Blackness," she compared fan cultures at predominantly white institutions and HBCUs, and believes that African Americans, more than anything else, enjoy a sense of belonging and togetherness.



"If we're able to market the cultural aspects that are unique to the HBCU sport consumption experience, there is a possibility that it might get the attention of the Black community," McGregor said.

Dr. Ketra Armstrong, director of the Center for Race & Ethnicity in Sport (C-RAES), has guided McGregor during her research.

Kristal McGregor. Photo: Emily Mathews/Michigan Kinesiology.

Contrary to long-standing popular belief, running at a prescribed, one-size-fits-all “optimal” cadence doesn’t play as big a role in speed and efficiency as once thought.

Since running coach Jack Daniels noted that the step rate for runners in the 1984 Olympics was about 180 per minute, it became widely touted as a means to reduce injury or improve speed, says **Geoff Burns**, an elite marathoner and Kinesiology PhD student.

To find out what determines cadence, and how much it matters, Burns had the top 20 elite male and female runners record their cadence during the 100K International Association of Ultrarunners World Championship in 2016. While the average number of steps per minute was 182, the number of steps per minute per mile varied enormously by individual.

“Some ran at 160 steps per minutes and others ran at 210 steps per minute, and it wasn’t related at all to how good they were or how fast they were,” Burns said. “Height influenced it a little bit, but even people who were the same height had an enormous amount of variability.”

The main takeaway for runners is that cadence is highly individual, and your body knows what’s optimal, said Burns.

The research appears in an article in *Journal of Applied Physiology* titled “Step frequency patterns of elite ultra-marathon runners during a 100-km road race.” Burns is a member of the Michigan Performance Research Lab, part of U-M’s Exercise and Sport Science Initiative (ESSI), directed by Dr. Ron Zernicke.

Geoff Burns. Photo: Emily Mathews/Michigan Kinesiology.



Are treadmill workstations really the exercise-while-you-work solution for desk-bound professionals? In a recent study by Kinesiology PhD student **Zhanjia Zhang**, the answer is “it depends.”

If you’ve ever tried to recall a recently learned phone number while using one, you know it can be tough. That’s because working memory isn’t as efficient for someone using a treadmill workstation as it is while sitting or standing. But other types of thinking, such as switching tasks and checking immediate impulses—called inhibition—are the same whether sitting or standing.

Zhang and other researchers, including Dr. Weiyun Chen, director of the Physical Activity & Health Laboratory, assessed response time and accuracy of three components of executive function

during sitting, standing and walking at two different speeds. The results showed that only working memory was slightly negatively impacted when walking, but inhibition and task shifting didn’t vary across the workstations.

“We think treadmill work desks are a feasible solution to promote employee health by reducing sedentariness during the work day,” Zhang said. “We’re not saying that employees should use a treadmill desk all of the time, but that employees should choose the right type of task so walking won’t impair efficiency.”

The article, “The effects of using an active workstation on executive function in Chinese college students,” appears in the journal *PLOS One*.

Zhanjia Zhang. Photo: Emily Mathews/Michigan Kinesiology.





Natural and built environments, and rural and urban settings, all go a long way in determining a person’s physical activity, mobility, and quality of life. Coming from Michigan’s rural Upper Peninsula, Kinesiology and Epidemiology PhD student **Erica Twardzik** noted the differences.

Twardzik says that the UP, while it lives up to its reputation for natural beauty, offers limited opportunities for active transit.

In Ann Arbor she rarely uses her car to get around campus, opting to walk everywhere instead. “I think that transition, from a rural area to an urban setting, helped me understand the impact environmental context has on behavior,” she said.

Twardzik and her co-authors recently published an article in the *Journal of Epidemiology and Community Health* titled “Walk Score and objectively measured physical activity within a national cohort.” Walk Score is a private company that can provide a walkability score to any address in the US.

A Walk Score captures a location’s pedestrian-friendliness by evaluating factors, such as its proximity to amenities like parks, restaurants, or schools. “We found that walkability was positively associated with the amount of daily physical activity people engaged in,” Twardzik said. “This relationship did not differ by sex, race, or age within a national sample of adults in the US.”

She will continue to examine the neighborhood environment as it relates to stroke survivors’ mobility as a member of the Environment and Policy Lab, directed by Dr. Natalie Colabianchi. ■

Erica Twardzik. Photo: Emily Mathews/Michigan Kinesiology.

New Major: Applied Exercise Science



Last October, the Michigan Association of State Universities (MASU) approved our new major, Applied Exercise Science (formerly known as Health and Fitness). The new AES curriculum will better meet student and industry needs. One exciting change: AES students will now be able to choose between two tracks, clinical and management, to specialize their degree.

We’ve already seen increased interest in this recalibrated major. This year, AES had a 74% increase in applications and an 80% increase in enrollment compared to HF last year.

Benefits

- Interdisciplinary curriculum
- Small student-to-faculty ratio
- Clinical and internship opportunities
- Flexibility to tailor the program to your interests and career goals

Career Opportunities

- Pre- and post-rehabilitation
- Community and workplace wellness
- Sport performance
- Business management, operations, and marketing
- Physical activity promotion and research



EXERCISE IS MEDICINE

STUDENT GROUP HELPS BUILD A HEALTHIER CAMPUS

BY LOIS MAHARG

Movement Science major Harmony Groves didn't need persuading to join the Exercise Is Medicine (EIM) campaign on the U-M campus. In her transition from high school to college, she saw the difference exercise made in her mood and health and wanted to spread the word.

"It's really easy for people to rely on pharmaceuticals . . . when they have any sort of health condition," Groves said. "Arguably the most effective thing they could be doing for the vast majority of conditions is to simply exercise. It's natural, it's personalizable, it's your body's way of making your body better."

An initiative of the American Medical Association and the American College of Sports Medicine, the EIM campaign is aimed at integrating exercise into the US health care system. EIM on Campus at U-M is part of that national effort, said Groves, the incoming president of this student organization of about 100 members. Promoting exercise is especially important on college campuses, she said.

"It's hard to fit exercise into a college schedule," said Groves, who went from being a three-sport athlete in high school to having a far lower commitment to exercise when she first got to college. "There's just always something you can be doing for school if you want to excel," she said. "It's hard to kind of put that on the back burner and prioritize exercise."

The first goal of EIM on Campus is to encourage physical activity and provide students with the knowledge and skills they need to establish healthy habits.

"We feel the best and most effective way to get students active is to hold group events," Groves said. For example, this fall the group will participate again in the St. Jude Walk/Run to end childhood cancer. Participants raise funds and then join the group for the walk/run. Last year EIM on Campus

held a fund-raising event at a local cycling studio. The group also conducts free yoga classes every month.

A second goal is to involve physicians and personal trainers at the university in a collaboration involving individualized exercise prescriptions. To that end, representatives from EIM on Campus have already spoken with professionals in the university health system and in recreational sports.

The ultimate goal, Groves said, is to have physicians say to patients something like this: "I prescribe for you this type, intensity, and frequency of exercise. . . . Go to the closest recreational facility and ask for a personal trainer. Show them this prescription and they'll find the best personal trainer for you based on your prescription."

This year EIM on Campus at U-M earned a gold level certification, the highest certification awarded by the American College of Sports Medicine.

The gold level certification tells people a lot about the climate at U-M, Groves said. "There's an opportunity for students, if they choose to come here, to reach out to our group and be a part of something that is really promoting this healthy lifestyle for college students." ■

*Left to right: Student Harmony Groves (left) and team fundraising for the St. Jude Walk/Run to help end childhood cancer; At a collaboration event with the Kidney Disease Screening and Awareness Program; At one of the Exercise Is Medicine free monthly yoga events (Harmony is second from right).
Graphic: sacura14/Adobe Stock.*



within arm's reach

Preserving shoulder function in breast cancer patients

BY LAURA BAILEY

After a prophylactic double mastectomy in 2015, Tina Harrison discovered that she did, indeed, have breast cancer—it just hadn't been detected.

Harrison, of Pinckney, Mich., correctly predicted the cancer—it ran in her family—but she didn't anticipate her ongoing pain and loss of shoulder function after reconstructive surgery.

Harrison isn't alone, said Dr. David Lipps, assistant professor of Movement Science and director of the Musculoskeletal Biomechanics and Imaging Laboratory. His lab works to understand the best treatment options for women undergoing breast reconstruction after mastectomy.

To that end, Lipps and his team examined three different types of reconstructive surgeries to determine how each influenced long-term shoulder function in breast cancer survivors.

Photo: deagrez/Adobe Stock.

The study, recently published in the journal *Breast Cancer Research and Treatment*, confirms that patients who undergo reconstructive surgeries after radiation therapy using a large back muscle, called the latissimus dorsi, have the greatest losses in shoulder stability and function.

In this procedure, called a latissimus dorsi flap reconstruction, the surgeon cuts the back muscle and pulls it into the chest to restore the breast mound and create a flap for the implant.

Women who undergo radiation often require this type of reconstruction because radiation therapy causes scar tissue to develop within the skin and pectoral muscles, so it's necessary to incorporate the back muscle during surgery, Lipps said.

“Our finding that the latissimus dorsi (back muscle) flap reconstruction objectively decreases shoulder strength is important because this will need to be communicated to

women ahead of time and may affect the choice they make for procedures,” said Adeyiza Momoh, surgeon on the research team and associate professor of plastic surgery at Michigan Medicine.

In the long-term, the findings may lead to fewer breast reconstructions that use both the back and pectoral muscles. As a next step, biomechanical changes in the shoulder should be correlated to a patient’s actual experience or perception of function, to better understand clinical significance, Momoh said.

The other two methods produced equally good results for future shoulder function. The second method involves using pectoral muscles to rebuild the breast mound by inserting tissue expanders beneath the muscle to make room for a future implant. It accounts for more than 60 percent of all reconstructions.

The third method recreates the breast without an implant by transferring abdominal tissue to the chest. Like the implant-only method, it also retained shoulder function and stability. This method is called deep inferior epigastric perforator flap reconstruction, or DIEP flap reconstruction.

During the testing sessions in Lipps’ lab, Harrison slipped her arm into a cast attached to a robotic device that measures

“My hope is really to enhance the availability of rehabilitation and, hopefully, our lab can develop new screening tools to enhance these rehabilitation programs.”

— DAVID LIPPS

how stiff her shoulder is following treatment. The study examined 14 patients who had the immediate implants without radiation, and 10 each who had the lat flap reconstruction and the DIEP reconstruction.

Harrison underwent saline implants and fat grafting, and now, heavy lifting and raising her arms over the shoulder both cause pain. She says physical therapy has helped immensely. She recently had another surgery and expects to undergo another round of occupational and physical therapy.

“Everyone knows a breast cancer survivor,” Lipps said. “My mom was a breast cancer survivor, and people are probably aware of the quality of life issues survivors face. My hope is really to enhance the availability of rehabilitation and, hopefully, our lab can develop new screening tools to enhance these rehabilitation programs.”

Other co-authors include: Joshua Leonardis and Brian Diefenbach, U-M Kinesiology; Daniel Lyons and Thomas Olinger, U-M Department of Surgery, Section of Plastic Surgery; Aviram Giladi, Curtis National Hand Center, MedStar Union Memorial Hospital, Baltimore.

The work is supported by the Susan G. Komen for the Cure, Plastic Surgery Foundation and U-M Rogel Cancer Center. ■

Tina Harrison, Josh Leonardis, and David Lipps. Photo: Michigan News.



School of Kinesiology DEI Highlights 2018-19

BY DR. KETRA ARMSTRONG, DIRECTOR OF DIVERSITY, EQUITY, & INCLUSION



The strategic thrusts of our DEI efforts in Kinesiology are to: (a) increase the diversity of Kinesiology stakeholders, notably among Kinesiology students, (b) facilitate dialogue in Kinesiology among faculty, staff, and students to enhance the knowledge and understanding of issues and matters related to diversity, equity, and inclusion, and (c) establish a welcoming climate and supportive culture for Kinesiology faculty, staff, and students to thrive. DEI initiatives offered in Kinesiology this past year were:

Diverse Student Recruitment

Kinesiology faculty, staff, and students participated in campus visitation events for undergraduate and graduate students, as well as various demographically diverse recruitment fairs/events to meet with students and share with them opportunities for undergraduate and graduate education in our Kinesiology. Our recruitment efforts include participating in special events such as: (a) Midnight

Golf College Major Fair (targeted to African American high school students), (b) Wolverine Express (in partnership with the Center for Education and Outreach) involving travel to selected high schools in the Ypsilanti, River Rouge, and metro Detroit areas, and (c) an active alliance and engagement with a number of Minority Serving Institutions such as Historically Black Colleges and Universities (HBCUs) and Hispanic Serving Institutions (HSIs). We are creating relationships that will undoubtedly increase the diversity of our undergraduate and graduate student populations. Our collective efforts at the graduate level have resulted in a noteworthy number of applications and enrollment of underrepresented students.

It's Official: Kinesiology Diversity and Inclusion Network

To engage and empower our students to be advocates and champions of diversity

and inclusion, we continued to support the Kinesiology Diversity and Inclusion Network (KDIN). KDIN is comprised of a demographically diverse group of undergraduate and graduate students from various Kinesiology program areas. This past year KDIN became an officially recognized U-M student association. This official designation of KDIN legitimizes our student association and will hopefully: (a) contribute to a growth in membership, and (b) allow us to increase our visibility within the School, U-M Campus, and where appropriate, respective communities.

Kinesiology Kickback & Kinesiology Game Night

We hosted end-of-the semester activities with food, fun, and games to create community among our students and provide them with a space and opportunity to decompress from the semester and recharge for final exams.

Dialogues on Diversity

We offered a Dialogues on Diversity event in which we shared the results of Kinesiology students' responses to the U-M Climate Survey. We had an open discussion with our students about ways to improve the climate and culture in Kinesiology for all students.



2018 Bridge Program participants.



Clockwise from left: Lunar New Year Celebration; Kinesiology Diversity and Inclusion Network (KDIN) Meet & Greet; Faculty and Staff Unconscious Bias Workshop.

Graduate Research Showcase

To celebrate ideological and disciplinary diversity within Kinesiology, we held our annual Graduate Research Showcase featuring the research/scholarly activity of our graduate students. A record number of 22 graduate students shared their scholarship via oral and poster presentations, and the event was well-attended to capacity (by Kinesiology faculty, staff, students, parents, and community friends).

Kinesiology Bridge Program

We continued to offer a Bridge Program designed to connect and engage students from populations and educational settings that are underrepresented in graduate education, and to facilitate their transition to and success at U-M. The program featured presentations, social activities, campus tours, and team-building activities. We had a record number of 23 diverse participants in our Bridge Program (comprised of first generation students, students from Minority Serving Institutions, students for whom English is not their native language, veterans, students with children, students with a unique/challenging academic profile, etc.)

Lunar New Year Celebration Event

We offered an event on the Chinese New Year featuring Asian cuisine and a video celebration of the Lunar New Year. The event was well attended by a diverse group of Kinesiology students, faculty, and staff and included an open dialogue about the significance of culture and the importance of multicultural support for faculty, staff, and students within Kinesiology.

Lunch & Learn: Cultural Competence Training

To continue to support our faculty's and staff's ability to be stewards of diversity, equity, and inclusion, we offered a workshop on "Unconscious Bias in Everyday Life." It was well-attended and generated an engaging discussion.

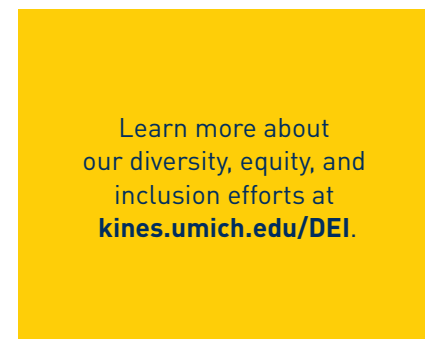
Movie Night: Black and Blue

Our Movie Night for students, faculty, and staff featured the documentary *Black and Blue: The Story of Gerald Ford and Willis Ward and the 1934 Michigan-Georgia Tech Game*, highlighting the compelling story of race, friendship, sport, and politics. The event concluded with a critical discussion about the role of sport

in promoting social justice and the local implications (on the U-M campus, in Ann Arbor, and in the Detroit metropolitan area).

MLK Symposium: The Power of Race: Unravelling the Illusion (Implications for Kinesiology)

Building on U-M's MLK Day Theme of "Unravel," Kinesiology presented the documentary *Race: The Power of an Illusion* and had a lively conversation about the power, perceptions, and implications of race in general, and noted the implications for Kinesiology in particular. The screening of the film was followed by a discussion among the audience (which consisted of Kinesiology faculty, staff, and students as well as U-M and community members). The event concluded with a reception. ■



HEAD START

UNIVERSITY LAUNCHES MICHIGAN CONCUSSION CENTER

BY AMY CRAWFORD

Players and fans alike have long known that sports participation involves a certain level of risk—especially contact sports like football, where blows to the head were long considered a natural part of the game. But over the past decade, a growing body of research has revealed just how serious concussions, like those sometimes suffered by a player on the receiving end of a tackle, can be. Researchers are now looking at the relationship between head impacts, long-term brain damage, and ultimately dementia, a condition known as chronic traumatic encephalopathy, or CTE.

Students Allyssa Memmini and Griffin Feinberg with Steve Broglio, professor of Athletic Training. Photo: Scott Soderberg/Michigan Photography.



“I don’t think we’re talking the end of sports, but I would say, sports have to evolve,” says Dr. Steven Broglio, professor of Athletic Training and director of the new Michigan Concussion Center, created in fall 2018 with \$5.6 million in initial funding from the University of Michigan Biosciences Initiative. The center, which will have its own dedicated space in the new School of Kinesiology building when it opens in fall 2020, represents a major step toward constructing a body of knowledge about how to prevent, identify, and manage concussions.

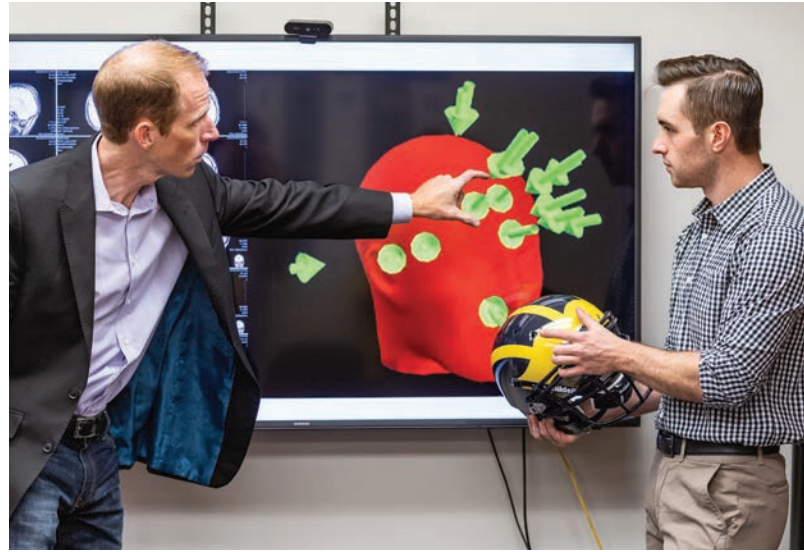
“In the last years in particular, we’ve learned a huge amount about concussion identification, assessment, and management,” says Broglio, who has been studying concussion for two decades and is also director of the NeuroTrauma Research Laboratory, a member of the U-M Injury Center, and a certified athletic trainer. “Because of that, medical care around concussion in a sporting environment is the best it’s ever been—and it will continue to improve.”

Recent research, including by Broglio’s lab, is changing how athletes, athletic trainers, physicians, and others in sports understand concussions. One ongoing project, co-led by Broglio, is a nationwide evaluation of 50,000 athletes and military cadets—whose sports range from football to ice hockey to golf—to understand the natural history of concussion. The study will answer fundamental questions about recovery from the acute injury, whether recovery is different in contact and non-contact sports, and whether male and female athletes, or athletes with pre-existing learning disabilities, recover at different rates.

“We’re still looking at the acute phase,” Broglio says, “but the next phase will track those individuals after they’ve graduated, to look at the long-term effects of sports participation or military service with or without concussion.”

Broglio is also investigating biomarkers, chemicals that can be detected in the bloodstreams of people with brain injuries. Identifying these could allow for a more rapid and accurate diagnosis on the sideline or battlefield, allowing medical providers to determine immediately if an athlete or soldier can continue their activity.

Crafting safety guidelines is a job not only for physicians and scientists, but also for legal scholars and those who specialize in the business of sport, Broglio says. Affiliated faculty and researchers at the new center represent 13 units across U-M, including the Medical School, College of Engineering and Law School. “The ‘concussion solution’ is not going to be just an engineering solution,” Broglio says. “It’s not just a blood biomarker solution. It’s going to be this multifaceted approach, all these things together.”



Professor Steve Broglio and student Griffin Feinberg. Photo: Scott Soderberg/ Michigan Photography.

Partnerships external to U-M will also play a role, says Carrie Morton, the new center’s deputy director. “At the heart of all of this, concussion affects everyone in society,” she says. “It doesn’t discriminate, and there’s certainly a potential for industry, whether it’s healthcare providers or equipment manufacturers, to get involved in prevention and treatment.”

In addition to her interest in public-private partnerships, Morton also has a personal stake in concussion research—her sons, now 11 and 14, have both suffered concussions while participating in sports.

“One was in sailing, and one in flag football,” she says. “Both sports where you would not think there was a risk. It shows that you can’t isolate concussion to a certain activity. It could happen anywhere. So I’m excited to be here and to help share the latest information with others, in terms of care and treatment and risks.”

While many parents, players, and even fans have agonized about the risks and ethics of participating in and enjoying contact sports given new knowledge about concussion, Broglio says that ultimately the center’s effort is about helping people enjoy sports, whether as amateur or collegiate athletes, professionals, or fans.

“While we’re really interested in developing research and implementing that research into clinical care,” he says, “we also want to disseminate our findings to the public in a way that helps people maximize whatever it is they choose to do in life.” ■

#GetSocial

Digital marketing
strategy in the classroom

BY AMY CRAWFORD



When Ron Wade first joined the Detroit Tigers' marketing department in 2005, one of his responsibilities was to pull tear sheets of the team's print ads and compile them in a notebook.

"But then within a few years, print ads had gone completely away," Wade says with a laugh. "Facebook came along, and then Twitter came along, and eventually Instagram. Social media started as the last thing you think about—'We'll do our full campaign and then we'll add some social later.' By 2016, that focus completely flipped."

It was heady time to be in sports marketing. Wade would work his way up to the team's director of marketing in 2009, and until he stepped down to teach full time as a clinical assistant professor of Sport Management at the School of Kinesiology, he oversaw a squadron that tweeted, hashtagged and churned out digital advertising, keeping the baseball team's legions of fans excited throughout the season—and even into the post-season, when they got lucky.

"In 2012, we had a long post-season run and I had to plan one strategy in case we won the World Series, and another if we didn't," Wade says. "Unfortunately, we didn't. But one of the lessons we had learned from the 2006 postseason run was that when the city gets excited about something they take your brand and do what they want with it. We learned that we have to work to get all of our fans on message."

Wade brought his hard-won lessons to the classroom last year, offering his students real world opportunities to tackle some of the biggest challenges for sports teams—like, for example, getting basketball fans in their seats before tip-off so television cameras don't show empty bleachers. That was an issue that had stumped the Detroit Pistons—so Wade asked the team's representatives to put it to his fall sport marketing class.

"People were at the arena, but they were milling about in social areas, not in the seating bowl," Wade explains. "Our students came up with some really good ideas as to how to get fans into the seats earlier—drawings where you have to be in your seat in order to win, or presenting freebies at the seats about ten minutes before game time. A couple of students had ideas that were so good that one of the Pistons' business reps asked to interview them for an internship. I said 'Unfortunately, they already have jobs!'"



Ron Wade, clinical assistant professor of Sport Management. Photo: Austin Thomason/Michigan Photography.

"Michigan students are so smart. I was so impressed by their level of preparation, their knowledge of the field already." — RON WADE

In fact, many of the seniors Wade taught last year graduated with jobs already lined up, including positions with household names like the Miami Dolphins and Los Angeles Dodgers.

"Michigan students are so smart," Wade enthuses. "I was so impressed by their level of preparation, their knowledge of the field already."

Of course, Michigan students are generally aware of the advantages their education confers. But Wade, with the better part of two decades in the business, knows that most also graduate with another privilege—one which they might, like many 22-year-olds just entering the job market, be tempted to discount.

"That's why I always tell them, 'Your youth is actually an advantage,'" Wade says. "No, you don't have the experience, and yes, you are going to have to work your way up, to prove your worth. But, you have one thing that the teams don't have and they're going to be desperate for: They want to sell to *you*." ■



Memory Jogger

Can exercise improve mild cognitive impairment?

BY LOIS MAHARG

Dick and Norma Sarns, founders of the Ann Arbor health care equipment company NuStep, LLC, recently approached the School of Kinesiology with a question: “How can we get together on a study?”

Dick Sarns, seated by his wife, repeated the question in the NuStep office building. “They came back to us with this opportunity,” Sarns said, “and we were quite impressed with it and decided to support it.”

The new opportunity is a six-month study of the effects of moderate intensity exercise and cognitive-motor training on individuals with mild cognitive impairment, or MCI, proposed by Dr. Jacob Haus, associate professor of Movement Science, and Dr. Michael Vesia, assistant professor of Movement Science. Most prior research consists of retrospective analyses of lifestyle factors in individuals with MCI. From these analyses, Haus said, researchers have made inferences about the relationship of exercise to age-related

cognitive impairment, suggesting that exercise and other lifestyle changes can slow cognitive decline and possibly prevent it if initiated early enough.

“What’s new about what we’re proposing is we want to actually change the lifestyles of people that are currently sedentary,” Haus said. “We want to make them active and challenge them in ways unique to our intervention that will improve their metabolism, improve their cardiovascular function, and then see what effect that has on cognitive outcomes.”

The Sarns’s relationship with the School of Kinesiology goes back some 40 years, Dick Sarns said. It began with employee participation in a diagnostic testing program and continued with assistance from Kinesiology on a company wellness program, a running track, and gardens on the premises of Sarns, Inc., a cardiovascular medical device company the Sarns founded in 1960.

Graphic: Freepik

“We had students and faculty from Kinesiology come out to our company,” Dick Sarns said. “So we had that ongoing relationship.”

The Sarns have long promoted exercise as effective in the rehabilitation of people with physical injuries and in the reduction of physical dysfunction accompanying diseases such as multiple sclerosis. When the couple became interested in the effects of exercise on the brain and cognition, they reached out to the School of Kinesiology again.

Worldwide, the incidence of MCI and dementia is increasing rapidly. People with MCI are often prescribed drugs, which may not be very effective.

Haus and Vesia take a different approach.

“Coming from the School of Kinesiology, we like to look at things from a holistic perspective,” Vesia said. “It’s really important, when we’re looking at something like Alzheimer’s or any other neurological disorder, that we don’t just look at it from a microscopic perspective. We look at the cellular level but then move up and look at muscles and body fat and then we move up to the brain. . . . By looking at all these different levels what we can acquire is a better understanding of how these different mechanisms interact with one another.” The likely result is a more informed picture of what’s going on and multifaceted treatments, he added.

The six-month study funded by the Sarns will involve 30 currently inactive individuals with MCI doing moderate intensity exercise with cognitive-motor training three times a week for up to 45 minutes. As they exercise, participants will also be responding to visual cues, such as “move your left hand” and “follow a certain pattern of movement,” Vesia said.

“There’s a lot of evidence that when you’re engaging the brain in a more complex task—having [people] coordinate,



Dick and Norma Sarns with the T5XR. Photo: NuStep.

“It’s really important, when we’re looking at something like Alzheimer’s or any other neurological disorder, that we don’t just look at it from a microscopic perspective.” — MICHAEL VESIA

for example, the movement of their hands and their feet with some type of visual stimuli—you start activating different circuits of the brain involved in learning, which allows you to adjust to new challenges,” Vesia said. “We’re priming the brain circuits that are involved in these cognitive-type tasks.” It is this coupling of physical movement with mental engagement in the exercise task that Haus and Vesia predict will keep some participants from experiencing the cognitive decline that usually follows a diagnosis of MCI. Some aspects of cognition may even improve.

When data from the post-tests are in, Haus and Vesia will look again at the initial characteristics identified in baseline testing to see if they can be predictive as to individuals who will respond to exercise vs. those who will not.

The study will benefit society in several ways, Haus said. It has the potential to provide additional treatment options for delaying cognitive decline; improve quality of life in individuals who undergo the intervention; decrease caregiver and family burden; and ultimately reduce health care costs. ■



Left to right: Michael Vesia, assistant professor of Movement Science; Jacob Haus, associate professor of Movement Science.



BREAKING NEW GROUND HOMECOMING 2018

BY JEAN HUNT

Guests attending the 2018 Kinesiology Homecoming event, held for the first time on the Diag next to the Kraus Building, honored outstanding alumni and celebrated Kraus renovations with a groundbreaking ceremony.

In her welcoming remarks, Dean Lori Ploutz-Snyder observed that 2018 marked the tenth anniversary of the Division of Kinesiology becoming the School of Kinesiology. She noted that when faculty, staff, students, and labs move into Kraus, it will be the first time ever that the entire school will be under one roof.

Five outstanding individuals were then presented with Alumni Achievement Awards.

Top: Groundbreaking participants Evie Chodock, Kinesiology Student Government president; Jerry May, former vice president for development; Provost Martin Philbert; donor Jeannine Galetti; Dean Lori Ploutz-Snyder; and Nick Shaw, alumnus and donor. Middle: New friends get to know each other. Bottom: Let's Go Blue! Photos: Austin Thomason/Michigan Photography.



Early Career Achievement Awards

The Early Career Achievement Award honors recent alumni who are excelling in a field related to Kinesiology. The 2018 awardees were:

Dan Gaiman (SM '07). To prepare for his career, Dan completed internships with U-M Athletics, the MLB, and the NBA. He is currently the Vice President of Global Partnerships at BSE Global, which includes the Barclays Center, Brooklyn Nets, NYCB LIVE, and Webster Hall. Dan also volunteers at the Manhattan Sports Business Academy and our own Michigan Sport Business Conference and Sport Business Association.

Erin Pober (SM '08). Erin began her career at Palace Sports & Entertainment, followed by roles at IMG, Premier Partnerships, and the LA Clippers. She currently serves as the Director of Corporate Partnerships at Turner Sports. As a volunteer, Erin arranges the Los Angeles itineraries for visits by the Sport Business Association and Kinesiology Alumni Society. She has also served as a panelist for the Michigan Sport Business Conference.

Distinguished Service Award

The Distinguished Service Award is given to a living person (alum or not) whose generous volunteer service to the School of Kinesiology merits special recognition by the Kinesiology Alumni Society Board of Directors. The 2018 awardee was:

Noel Cimmino (SM '94). After leaving the School of Kinesiology, Noel obtained a law degree in 1997 from the University of Miami. He is currently an attorney and partner at Slusky, Walt & Steinberger, where he specializes in bankruptcy and debt resolution. Noel has volunteered much of his time and talent to the University of Michigan in the last decade, serving as a member of the Alumni Association's Leadership Council and as an alumni student recruiter for high schools in metro Detroit. The School of Kinesiology Alumni Society has also greatly benefitted from Noel's dedication and enthusiasm, first as a board member beginning in 2006 and then as president from 2015 to 2018.



The Homecoming tent next to Kraus. Photo: Austin Thomason/Michigan Photography.

Career Achievement Award

The Career Achievement Award recognizes alumni who have shown outstanding professional and personal achievement throughout their career in their chosen field and/or public service in any field. The 2018 awardees were:

Danny Koblin (SM '96). Danny pursued an MBA at the Northwestern University Kellogg School of Management. After turns as Senior Vice President of Consulting and then Corporate Development at Wasserman Media Group, Danny became the Chief Bid Officer for the LA 2024/ LA 2028 Olympic Bid. After a successful bid, Danny now serves as the Chief Brand Integration Officer for LA 2028, as well as COO of the United States Olympic and Paralympic Properties for LA 2028. He is also one of our students' favorite guest speakers.

Brian Movolson (SM '91). Brian currently serves as vice president of College Sales and Development at IMG, the world's largest independent producer and distributor of sports media. Before his time at IMG, Brian was the Director of Sports Marketing at EA Sports, where his main responsibilities included managing EA's relationship with ESPN, overseeing the EA Sports Challenge Series, as well as producing many of EA Sports' television programs. Brian has also served on our school's Sport Management Advisory Board. ■

Left: Alumni award-winners Noel Cimmino and Erin Prober, Dean Lori Ploutz-Snyder, Kinesiology Alumni Society President Heidi Haite, and alumni award-winners Brian Movolson, Danny Koblin, and Dan Gaiman. Right: Old friends catch up. Photos: Austin Thomason/Michigan Photography.



alumni

UPDATES



STAY IN TOUCH

What have you been up to?
Let us know at
bit.ly/kinesupdate
and you could be featured in
the next *Movement* magazine.



Dylan Bosch (SM '16) is now an account executive at Endeavor. He is part of the team that manages the VISA partnership/sponsorship of the International and US Olympic Committees.

Susan Carter Millner (MVS '99) is a clinical social worker with a private practice outside of Chicago specializing in adult mental health as well as families with children with special needs and/or medical issues. She and her husband Jason (Ross '99) have four children, Amelia (age 10) and triplets AJ, Elliott, and Sadie (age 6).

Alessandro Gasparro (SM '12) is now the director of social media for the LA Clippers.

Kathryn Quaglia (MVS '16) received her Doctor of Physical Therapy degree from the Massachusetts General Hospital Institute of Health Professions in January 2019. She's currently employed as a licensed physical therapist at Spaulding Rehabilitation Hospital in Boston, MA.

Nicholas Zoroya (PE '11) is now the regional coordinator for training and competition at Michigan Special Olympics. He oversees the organization's regional and state competitions.



JOIN THE COMMUNITY

The Kinesiology Online Community launched in June. It's a great way to reconnect with your fellow Kines alumni to chat, network, reminisce, give/get help, and so much more.

Visit community.alumni.umich.edu to log in and get started!

faculty & staff

UPDATES



Dr. Lindsey Lepley (PhD '14) joins us as an assistant professor of Athletic Training. She received her PhD in Kinesiology from our school and was most recently an assistant professor at the University of Connecticut. Dr. Lepley's research interests center around finding therapeutic approaches capable of combating the negative neuromuscular effects that occur after traumatic joint injury. She is currently researching the effects of ACL injury on neuromuscular function in a rodent model, and the ability of exercise to promote muscle and joint health.



Dr. Adam Lepley joins us as a clinical assistant professor of Applied Exercise Science, Athletic Training, and Movement Science. He received his PhD from the University of Toledo and was most recently an assistant professor in residence and the Athletic Training program director at the University of Connecticut. Dr. Lepley's research seeks to identify the origins of persistent neuromuscular dysfunction for the purpose of maintaining long-term joint health following acute injury.



Dr. Kara Palmer (PhD '19) joins us as a clinical assistant professor of Applied Exercise Science and Movement Science. She received her PhD from our school earlier this year; her dissertation was titled "An in-depth investigation of the effects of preschool motor environments." Dr. Palmer has already received multiple awards for both her teaching and research skills.

We welcomed the following staff to our team over the last year:

Jon Case, facilities assistant

Sandra Frolich, administrative assistant, Michigan Concussion Center

Kelli Kearly, Sport Management student career counselor

Carrie Morton, deputy director, Michigan Concussion Center

Drew Moser, marketing communications specialist

Molly Paberz, student services specialist

You're Invited! Save the Date for These Fun Fall Events

Homecoming and Parent & Family Weekend Open House
Friday, October 4, from 4:00-6:30pm
On the Diag, next to the Kraus Building

Borer Lectureship with Dr. Laurie Goodyear
Friday, October 18, from 2:30-5:00pm (reception to follow)
Brehm Tower, Oliphant-Marshall Auditorium (1st floor)
1000 Wall St., Ann Arbor

Visit kines.umich.edu/events
for more information as the dates get closer.



Students work with MLB to build Latinx fan base

BY AMY CRAWFORD

Nearly a third of professional baseball players are Latinx, including Major League stars like the Detroit Tigers' first baseman Miguel "Miggy" Cabrera. But while the Latinx community has contributed more than its fair share of heavy hitters to America's pastime, Latinx fan support tends to fall comparatively short: as few as 9 percent of fans—determined according to who watches games on TV—identify as Hispanic or Latinx. It's a disparity that represents a missed opportunity for Major League Baseball (MLB), which last year saw attendance at games drop to its lowest level in 15 years.

Baseball's Latinx fan challenges also represented an opportunity for students in Sport Management lecturer Dr. Adriana Phelan's class, SM 499: Strategy in Sport Organizations, the capstone course of the Sport Management program. During the winter 2019 term, they took on the challenge of proposing creative, innovative, data-informed, and culturally-sensitive strategies MLB could use to build and sustain engagement with the Latinx and Hispanic communities.

Baseball has long skewed whiter than other major league sports—about 60 percent of players are white, as are the vast majority of management and

every current majority-stake owner. And as one group of students noted in their report, the very phrase "America's Pastime" presents "a challenge to attracting fans outside of the country, especially during today's contentious political climate."

After hearing from guest speakers that included former outfielder Jose Cruz, Jr., now with the MLB Players Association, and Tyrone Brooks, the league's senior director for front office & field staff Diversity, the students came to understand that engaging Latinxs would require a cultural shift extending across the fan experience, from bilingual play-by-play announcements to more culturally-relevant ballpark concessions (peanuts and hotdogs won't cut it with a more diverse crowd).


"Part of the discussion surrounded increasing MLB's global footprint in the Hispanic community through international events such as the World Baseball Classic and the 2019 Mexico Series in Monterrey, Mexico," said Brooks, explaining that despite MLB's difficulties, "internationally the love of the game of baseball runs deep and has been passed down generationally." Diversifying the workforce beyond the field was also important, he said, noting "the vital importance of representation in all areas of the game."

Among the students' ideas, which they shared via group presentations accompanied by video pitches, were celebrating players' heritage with flag patches on their jerseys representing counties of origin, and engaging Latinx social media influencers. The language barrier would also have to be addressed—one group suggested partnering with the language learning company Duolingo to create a baseball-themed language learning program.

It was a rewarding experience, the students reported, and one that helped them to think about some of the major issues facing sports today, in an era when diversity, equity and inclusion are among the hottest topics. "It is fulfilling to know that all of our hard work in coming up with tangible solutions to one of the most pressing problems the MLB faces today will ultimately play a part in helping to improve one of the largest sports leagues in the world," said Justin Wu, a Sport Management junior.

Guest speaker Chris Young, Major League Baseball's vice president of operations, said he appreciated the students' passion. "It gives me great confidence that the future of baseball is bright," he said. "I sensed these students could be the next generation of leaders for our game!" ■

Above: learchitecto/Adobe Stock. Right: meanmachine77/iStock.



“...All of our hard work in coming up with tangible solutions to one of the most pressing problems the MLB faces today will ultimately play a part in helping to improve one of the largest sports leagues in the world.”

— Justin Wu, a Sport Management junior



RUNNING LOW

THE IMPACT OF EXERCISE AND SLEEP ON DEPRESSION

BY LAURA BAILEY

For some people, getting enough exercise and quality sleep can alleviate depressive symptoms almost as effectively as antidepressants alone, research has shown.

But a new University of Michigan study suggests that exercise and sleep impact depression differently in men and women.

Principal investigator Dr. Weiyun Chen, an associate professor of Applied Exercise Science, and first author Ana Cahuas, an LSA undergraduate student, looked at exercise and sleep patterns in more than 1,100 college students at Beijing University. Participants completed three questionnaires assessing depressive symptoms, physical activity habits, and sleep patterns.

For men, vigorous and moderate physical activity helped protect against depression, Chen said. However, for women, no level of physical activity significantly impacted depression. Although there's a dearth of female-focused research, this contradicts general conclusions that regular physical activity helps reduce depression.

This finding may have happened because so few women compared to men exercised at high intensity, Chen said. As a result, any protective effect of high-intensity exercise was not detectable in women when researchers analyzed the data by gender.

The researchers also examined seven sleep variables, and found sleep was significantly associated with depression levels in both genders. On average, students reported quality sleep, but 16 percent of males and 22 percent of females reported poor sleep quality.

Graphic: nadia_bormotova/iStock.

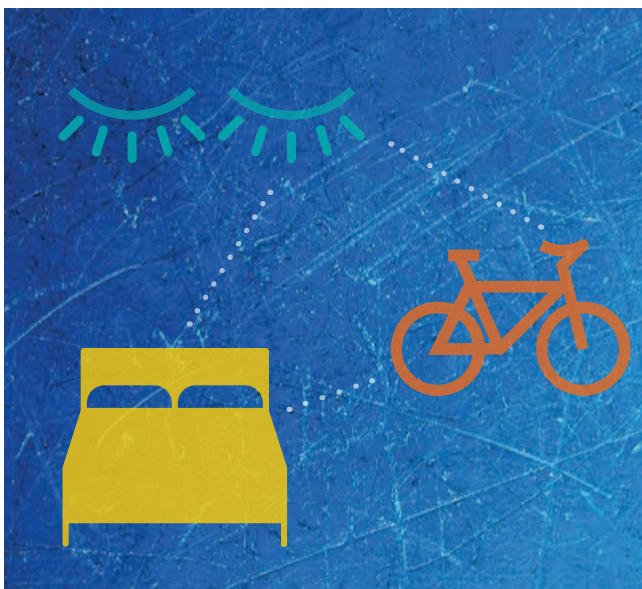
Overall, students in the study did not report feelings of depression, which surprised Chen, as Beijing University is a pressure-cooker environment similar to Ivy League schools in the U.S. However, more females (43 percent) than males (37 percent) reported depression.

“This is consistent with existing research that higher rates of depression are found among women, with approximately a 2:1 ratio of diagnosis, although suicide rates are 3 to 5 times higher among men,” Chen said.

For men, vigorous and moderate physical activity helped protect against depression, Chen said. However, for women, no level of physical activity significantly impacted depression. Although there’s a dearth of female-focused research, this contradicts general conclusions that regular physical activity helps reduce depression.

The connection between sleep, exercise, and mood might also help explain females’ higher rate of depression, Chen said.

Males in the study exercised more and at higher intensity than females, whose higher levels of depression may have decreased likelihood to exercise and negatively impacted sleep quality.



Weiyun Chen, associate professor of Applied Exercise Science.

Depression and mood disorders are a serious problem in adolescents, with up to 20 percent of teens diagnosed with a mental, emotional or behavioral disorder, said Cahuas, who was a student in U-M’s Undergraduate Research Opportunity Program (UROP) when she wrote the paper under Chen’s guidance.

Roughly 1 in 7 college students is diagnosed with depression—with suicide the second-leading cause of death among them. College students are at particular risk for depression because of heavy workloads, stress and sleep deprivation.

Major depression involves symptoms persisting for at least two weeks, and can occur multiple times throughout life. Persistent depressive disorder, or dysthymia, is depression that lasts at least two years, and fluctuates in severity. Studies show that only about half of people with depression receive treatment.

Participants were recruited from one university in China, so results cannot be generalized to all college students.

The study appeared online in the *Journal of American College Health*. ■

WORLD TOUR

Students travel to Thailand and United Kingdom

Our students had the chance to participate in two new education abroad experiences this summer. Their travel was made possible in part by the Bruce and Claudia Resnikoff GoGlobal Fund, Beverly Ulrich Global Initiatives Fund, and Carl and Joan Kreager Travel Award.

Thailand

A new three-week “Buddhism and Thai Culture” course introduced Kinesiology students to a wide range of the Buddhist ideas and practices that have developed within the diverse regions of South, Central, and East Asia, with an emphasis on Thai cultural tradition. Students learned about the philosophy and teachings of Siddhartha Gautama (The Buddha) and developed critical reasoning and reflection skills while considering a variety of ethical, philosophical, and religious issues.

Below: At a temple in Chiang Mai; Right from top to bottom: At a temple in Chiang Mai; At the elephant sanctuary.





United Kingdom

Led by Sport Management faculty members Kelli Donahue and Dr. Stefan Szymanski, students in the week-long “Managing Sport Business Culture in the United Kingdom” course traveled to London and Manchester to go behind the scenes of international sport organizations. They visited a dozen sport and entertainment governance and media agencies, as well as league, team, and stadium management organizations. Highlights included the Lawn Tennis Association, Manchester United, NFL UK, and Twitter UK.

Top: At Manchester United. Middle, left to right: At Lord's Cricket Ground; Red phone box photo opp; At Twitter UK. Bottom: Squeezing in some tennis time.



BUILDING BRIDGES

IRIS MUSTICH, CLASS OF 2016 BY JENN MCKEE



As is true for many of us, the seed for Iris Mustich's career was planted in her early life.

"I was always interested in health and science, because when I was growing up, I had a lot of health challenges, so I became very familiar with the healthcare system at a young age," said Mustich (MVS '16), who's now based in Kansas City, Missouri. "... And I did an independent study in high school with an athletic trainer, who taught me about motor control and sports injuries and recovery. It was fascinating to me."

Mustich wasn't drawn to the idea of medical school, but kinesiology seemed like the right path forward, so she started doing research.

"Michigan's program was highly ranked, and it seemed like there were lots of different opportunities, based on the school's strong connection to the athletic department," said Mustich. "... That's what really brought me to Michigan, which seemed pretty far away from [New Fairfield,] Connecticut. It wasn't a typical East Coast kind of choice. But when I visited Michigan's campus, I was impressed by the small community feel within the kinesiology department, despite being part of this very large university."

Once she arrived to campus, Mustich regularly demonstrated strong leadership outside of the classroom,



Left: Iris Mustich at a Ugandan HIV clinic during her undergraduate years. Above: Iris specializes in healthcare workflow design and implementation.

working as a kinesiology student ambassador, a resident advisor (and ResStaff Coordinator), a Project Healthy Schools ambassador, an engagement events coordinator for Dance Marathon, and a Michigan Medicine child life volunteer.

Yet a formative moment in Mustich's education happened off-campus, when she spent two months (between her sophomore and junior years) working in Uganda.

"I learned so much from that," said Mustich. "I worked in an HIV clinic there, ... and I was going out into the community and assessing needs for intervention, ... making sure mothers and children got the nutrition they needed. ... This was a really valuable part of my learning journey at Michigan. I worked with Dr. [Pete] Bodary to complete weekly journal reflections, and at the end, I related it back to my degree program at Michigan, which really helped me as I moved forward. And it's also why I got into public health. The School of Kinesiology really encouraged me to keep going and continue in that vein."

Mustich went on to earn a Master of Health Behavior & Health Education degree in 2018 from the U-M School of Public Health.

"A lot of people in my program had degrees in things like sociology," said Mustich, who now works as a physician track associate consultant for Cerner Corporation. "But when I was looking for positions, recruiters and employers liked that kinesiology was more medically based. ... It's the reason I ended up where I am. ... Physicians are really looking for people who can understand what they're talking about."

Mustich specializes in workflow design and implementation in the healthcare industry, working with physicians in hospitals (and other facilities) to streamline and maximize effectiveness. "It sounds more technical and engineer-y than it really is," said Mustich. "But really, I'm essentially a bridge between software developers and physicians, so that everyone gets what they need."

Mustich believes the lessons learned at U-M set her up for long-term success.

"Coming out of the program, I had this robust knowledge and skill set that I could leverage when entering the healthcare industry," said Mustich. "It really builds clout when you can talk at a high level with physicians and administrators in hospital systems. ... My education was a perfect fit for the role that I'm in now." ■

Iris finds the equator.





Campers and counselors during Sickle Cell/Hematology/Pain Management Camp. Photo: Leisa Thompson.

happy campers

STUDENTS HELP KIDS WITH SERIOUS HEALTH ISSUES AT NORTH STAR REACH

BY JENN MCKEE

After finishing her first year at U-M, Movement Science senior Toree Baldwin had planned to spend the summer months traveling and volunteering.

So when Baldwin learned about North Star Reach—a non-profit camp (located on 105 acres in nearby Pinckney, Michigan) for kids with serious health challenges and their families—she applied to volunteer for one week-long session, figuring it would be one of several things she'd do.

“Then I just ended up staying the whole summer, because I fell in love with the kids,” said Baldwin, who grew up in Virginia. “... It was such a phenomenal experience for me. ... And I've been back the last two summers, so it's been three years now.”

Lauryn Fairchild, an Applied Exercise Science junior from Clare, Michigan, who also volunteers at NSR, said, “One thing that almost everyone I've met at camp has told me is that they get more out of the camp experience than the actual campers, because there is something about NSR, the directors, the staff, and volunteers that creates what we call ‘camp magic.’”

North Star Reach, the brainchild of founder/CEO Doug Armstrong (a nurse and former clinical research director at

U-M's Transplant Center), is only in its fourth year of operation, but it's already provided a free summer camp experience to more than a thousand kids who would likely never otherwise get to go. (U-M owns the property, and NSR has signed a 30-year lease, at the cost of \$1 per year.)

Throughout the summer, six week-long sessions bring together kids with similar health struggles, so there's a week devoted to kids with transplants, blood disorders, heart ailments, epilepsy, teens with a range of conditions, and siblings of kids with serious health issues. (NSR also offers long weekend family camps in the spring and fall.) Doctors and nurses volunteer as medical staff to provide necessary care (and also engage with the kids in a fun, non-clinical setting), but Baldwin and Fairchild are among those who help run activities and act as camp counselors.

What makes the two Kinesiology students a good fit?

“Certainly their positive attitude, and their willingness to grow, take risks, be silly, and put themselves out there,” said Armstrong. “... I tell people it's like that Army slogan, ‘It's the toughest job you'll ever love.’ The staff is up at 6 each morning, and the kids are up at 7, and after the kids go to bed, the staff

is up until 11 or 12 at staff meetings, so we're ready for the next day. You do that six or seven days in a row, when you're outside in the hot sun all day, caring for the kids' needs and making sure they're having a great experience—it's exhausting. But what I've experienced is that it's also emotionally rejuvenating. We all walk taller after camp. You feel good."

In many cases, camp at NSR marks the first time that the kids have spent time away from their parents, and while that's invaluable for instilling in them a sense of independence and agency, it can also be a challenging transition for all involved.

"It's a huge growth step for the parents and the child," said Armstrong. "... But that freedom then really translates in so many ways when they go home—once you unlock that door. ... I have parents who will call me after camp and say, 'What did you do to my child?'"

Campers often value the experience so much that they come back—and according to Baldwin, those returning campers often help ease the transition for newbies.

"I had a homesick camper, and these two returning campers, two 10-year-old boys, sought him out and sat down on each side of him like a sandwich at lunch," said Baldwin. "And then they let him win at gaga ball, and he started to feel better. I mean, I'd had training about stuff like this, but [these two kids] just got it."

Acting silly and energetic and singing a lot are a big component of Baldwin and Fairchild's volunteer work at NSR, but there are tougher moments, too.

"During epilepsy [week], all of the volunteers were a bit nervous of the seizures the campers might have, but the doctors and nurses ... did such a good job at training us for what to



Laurnyn with a camper during Transplant Camp. Photo: Leisa Thompson.

expect ... so when one did happen, people weren't too scared or surprised," said Fairchild.

"Some questions [campers] will ask—you don't know the answer," said Baldwin. "One camper was going to have surgery the next week, and she's nine years old. That's so heavy. And all I could really say to her was, 'You're an awesome kid, and I'm so glad you're here,' and facilitate that conversation, and just sit there and listen."

Meaningful connections to campers is clearly an integral part of "camp magic," since Baldwin's already looking to carve out the space and time needed to keep coming back to NSR.

"This year, I'll be finishing clinical rotations [for intraoperative neuromonitoring] and taking my last couple of classes and starting the job hunt," said Baldwin. "And I'll be looking for a job that will let me take a week off for camp. ... It may not be a vacation for everybody, but for me, it's something that fills me. It exhausts me, but it fills me." ■

Laurnyn Fairchild and Toree Baldwin at North Star Reach; North Star Reach counselors. Photos: Leisa Thompson.



Destination: Success

TRACKING THE CAREER OUTCOMES OF RECENT GRADUATES

We're proud of the myriad ways Michigan Kinesiology students have pursued their interests after they graduate. Their successes reflect our excellent curriculum, experiential learning opportunities, and robust academic and career advising.

The Kinesiology Career Development Center measures student outcomes by tracking students' first destinations after graduation. We're pleased to showcase the school's Class of 2018 First Destination Reports by degree and major.

Curious to see where students work after graduation or the graduate schools they've matriculated into? Visit myumi.ch/mnn0o to see the specifics for each program.

Hire a Kines Student!

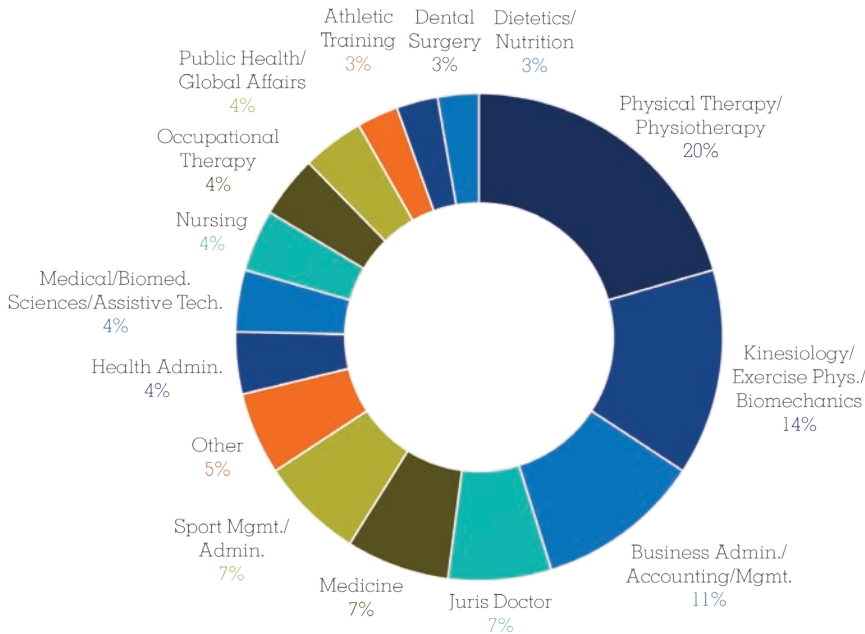
We're calling on you to let us know when your company is looking for talent.

Post a job, internship, or shadowing experience on KINNECTIONS (kines.umich.edu/employers), our student job board. Get students excited about your opportunity by hosting an employer information session, attending a career fair, or scheduling on-campus interviews.

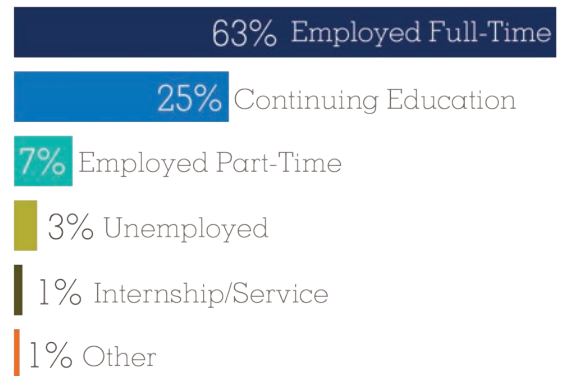
Email KinesCareers@umich.edu for more information.

Class of 2018 Snapshot

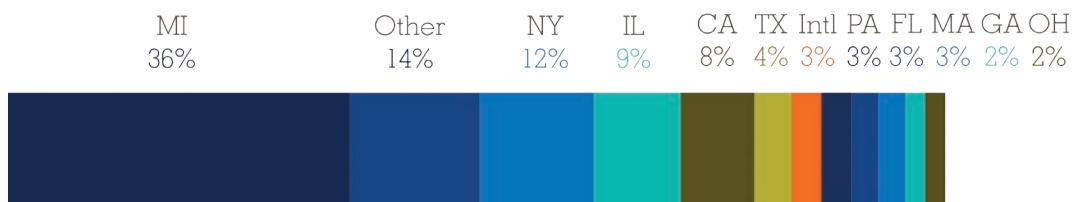
Continuing Education Program



First Destination Plans



First Destination Location



WE NEED YOUR SUPPORT!

- ★ Help us design state-of-the-art learning, research, and collaborative spaces.
- ★ Help us create cutting-edge facilities for the world's future leaders.
- ★ Help us build a school that will last for generations to come.

Please consider making a gift today.



Detach and include with your mailed payment...or skip the postage and go online!

STEP ONE: CHOOSE YOUR GIFT

One-time gift:

- \$500
- \$250
- \$100
- \$ _____

OR

Monthly gift:

Charged on the 10th of each month

- \$100 per month
- \$ _____ per month

STEP TWO: CHOOSE YOUR AREA TO SUPPORT*

- School of Kinesiology Building Fund (330348*)
- Other: _____

*If no fund is selected, your gift will be used where it is needed most (fund 330348).

Gifts to endowment funds will be administered as a permanent endowment under Michigan law and University policies.

Thank you for your support!

STEP THREE: CHOOSE YOUR PAYMENT METHOD

- Online at bit.ly/SOKBFund**
- Credit card:** Amex Discover VISA MasterCard

Acct. # _____

Exp. Date _____

Signature (required) _____

- Check** (payable to the University of Michigan)
- Phone** (888-518-7888)

Name(s) _____

Address _____

City _____ State _____ ZIP _____

Telephone (_____) _____

ME: 18823

Email _____

Please send me more information about:

- New Building Support
- Faculty Support
- Planned Giving/Bequests
- Other: _____

MAIL TO:

**U-M School of Kinesiology
Office of Development**
1402 Washington Heights
Ann Arbor, MI 48109-2013



Welcome home.

**Michigan Kinesiology Homecoming +
Parent & Family Weekend Open House**

Friday, October 4 • 4:00-6:30pm

On the Diag, next to the Kraus building

Kraus fly-through video premiere

Alumni awards • snacks • school swag