

## Table of Contents

### President's Column

AKA is for Leaders . . . . . 1

Always Striving for the Win at 3 WINS Fitness . . . . . 3

### Past-President's Column

Tremendous Gratitude . . . . . 5

Pollution May Be Costing Marathoners Their PRs . . . . . 7

AKA's Education Networks . . . . . 9

Recent Trends in Kinesiology Degrees Awarded . . . . . 11

Integrate Kinesiologists with Health Care  
Providers – Not a New Idea . . . . . 13

Understanding Foot-Strike is a First Step Toward  
Injury Prevention . . . . . 14

What Does Exercise Mean in Other Countries? . . . . . 16

New Zealand Wants Medals . . . . . 17

Plan to Attend the 19th Annual Leadership Workshop . . . . . 18

## PRESIDENT'S COLUMN

### AKA is for Leaders

*By Tim Brusseau, Ph.D.*



Tim Brusseau

I attended my first American Kinesiology Association (AKA) workshop in 2015 as a faculty member with aspirations for taking on a department leadership role. I learned quickly that the AKA annual meeting was a tremendous place to learn about leadership and the issues facing our discipline and departments. Perhaps more importantly, it was a place where many department leaders from around the country got together to discuss and sometime commiserate about

moving our units forward. A couple years later as I took on formal leadership in my unit, I began to regularly attend the AKA annual workshop and was a part of Cohort 2 of the Leadership Institute. I was fortunate to serve as a mentor to Leadership Institute Cohorts 3 and 4 and also served on the Board of Directors. Most recently, I chaired the membership committee for two years before joining the executive committee in 2024. AKA was and is a constant for me professionally and the lessons learned from meetings and colleagues have been instrumental in my development as a Department Chair. This was most evident during the COVID-19 Pandemic where we were all facing uncharted territory. I leaned heavily on AKA colleagues for their ideas and how they were handling certain issues. The AKA has also provided our unit with support over the years as we undertook regular strategic planning. Needless to say, the AKA has been an integral part of my professional career over the past decade, and

**19th Annual  
Leadership Workshop**

**January 29-31, 2026**  
**The Westin Buckhead Atlanta,  
Atlanta, GA**

I feel honored to be entrusted with serving as your President. My hope is that we will be able to build on the tremendous legacy of timely and innovative workshops and services. As I reflect on the 2025 AKA annual workshop, I am invigorated to take what was presented back to my unit as we work ensure faculty success. I am thankful for the great presentations on top-

ics around hiring and retaining faculty, innovative programs that are supporting faculty success, and ways we can manage challenging faculty. I was also excited to see the tremendous ideas that came from our leadership institute fellows and the ideas presented by President's Guskiewicz and Hutchinson. I extend my gratitude to Dr. Kim Graber for her excellent leadership and organization of the 2025 annual workshop and for her steadfast support of me not only this past year but for many years prior. It is my privilege to chair the planning committee for the 2026 annual workshop. We are excited to bring the meeting back to the eastern time zone for the first time



AKA Board of Directors at 2025 Leadership Workshop

since 2020. The workshop will be January 29-31, 2026, and will take place in Atlanta (Westin – Buckhead). We have a great planning committee (Liz Mullin, Brian Culp, Jared Russell, Damon Andrew, Andrea Mason, DeAnne Brooks, Yolisa Duley, Phil Post) who have brought enthusiasm and ideas forward. Our tentative theme will be related to the student experience and student success. We envision sessions on student retention, online learning, student experiences (e.g. study abroad), student mentorship, best practices for student advising, artificial intelligence, student mental health, etc. We will continue with our pre-workshop undergraduate and gradu-

ate network sessions and hope to have a session on strategic planning. We will also have a poster session where we hope to hear from all of you on the great work you are doing at your institutions to promote the students experience and student success. We hope that you will plan to attend and consider bringing multiple faculty from your institution. If you have other ideas or are interested in being considered to present under one of our thematic areas, please feel free to reach out to me directly ([tim.brusseau@utah.edu](mailto:tim.brusseau@utah.edu)). I look forward to a wonderful 2025 and hope to continue the great legacy of the AKA.



## Always Striving for the Win at 3 WINS Fitness

By Amy Rose, KT Staff Writer

Dr. Steven Loy, professor emeritus at CSU, Northridge, founded the group in 2011 to provide an opportunity for students to apply their education outside of the classroom and make a difference in their community to help people reach their physical fitness goals. “Our three wins are based on improving community health, empowering participants and enhancing student professional development,” said Loy. “We (Kinesiology Departments) haven’t taken seriously the role undergraduate and graduate students can play in the health of our country.” The free program, originally called 100 Citizens, started in a partnership with a park in the City of San Fernando. They offer three levels of fitness training: Let’s Get Moving, Active Lifestyle and Performance.



Steven Loy

The training sessions are offered to adult participants at the local parks and utilizes resources found in the park, such as benches and playground equipment. Instructors do supply some additional

equipment, such as resistance bands. Sessions are one hour long, three days a week and include cardio and resistance training.

Saul Guzman, a junior at CSUN, has been involved as an instructor for almost three years. “I wanted to use my kinesiology background to help people live better and longer lives,” he said. Dr. Loy’s influence made him more focused on serving people through public health. Guzman is now leading a training program to help participants prepare for and improve their fitness for the city sponsored, 3 WINS Fitness created, “San Fernando Mile,” a one-mile run/walk event held on the main thoroughfare through the heart of the city. “You can really see and feel the impact you have when working directly with people to help them meet their interests and goals,” Guzman said.

The program had expanded to sixteen parks at the height of the program, before



Provided by 3 WINS Fitness, CSU Northridge

the COVID pandemic halted in-person sessions. 3 WINS Fitness offered on-line sessions on their website and via live Zoom sessions to support the students and participants virtually through those three years. Joshua Carlos, a former CSUN kinesiology grad student with the program and now an Instructor at USC, used his technical skills to help develop the online presence to keep the program going. “It is pretty astounding to see the impact the program has had in the community and the support for the program,” he said.

In the San Fernando area, 3 WINS Fitness serves a large Hispanic population. Loy said this posed a cultural and language challenge for many students when the programs were getting established, but now it has become a large family of support for each other and the students. Non-Spanish speaking students work with participants learning key exercise terms in Spanish and more Spanish speaking students are seeing the value of applying their education and communication skills to benefit the community. Others in the community see the success 3 WINS participants have. They see them working out in the parks and being more healthy. “You come in and you are like a family.” said Carlos. “We make sure they know they are the priority.” The participants also take an interest in the students. They make sure the students are staying healthy, doing well in school and provide food and treats for them, said Carlos. Many of the CSUN student instructors are from the area or are also Hispanic. They are treated like children or grandchildren of the older participants.

Melody DeAro, a senior Exercise Science student at CSUN, has been an instructor for three and a half years. She’s found that her Spanish language skills have also been a big help to participants. One participant she was working with was having knee pain when he exercised, but was reluctant to have

surgery for the problem. DeAro recalls fondly how she was able to help him translate the doctor’s instructions and get the answers to his concerns. He came back to the program after his recovery and brought his granddaughter to meet DeAro and say thank you. “I grew up in San Fernando. It means a lot to see this in our community. You always want to give back to the people who raise you and I can say I did that,” she said.

All the while, Loy has been the guiding force not only to the program’s success, but to his CSUN students as well. His students value his advice and insight into professional opportunities in the kinesiology field. He instills in them the 3 WINS “mentality”. Carlos explained that he encourages students to always seek three wins in everything they do, “We all understand a win-win situation, but that third win is what makes the difference between being good and being great. It’s looking deeper into yourself. It gives you an opportunity to push yourself,” said Carlos. He believes that is what makes the program more impactful and those students more successful. Alumni of the program provide a network of previous students who have gone on to do extraordinary things in their chosen fields.

Loy is currently working as a consultant with the Los Angeles County Department of Public Health to once again expand the 3 WINS Fitness program into more parks



Provided by 3 WINS Fitness, CSU Northridge

across L.A. County through a Park Rx program. He is not only expanding the number of participants and opportunities for student instructors, but expanding the reach of kinesiology in public health by incorporating community colleges. Loy says, “Kinesiology will continue to move forward and make research advances regarding the value of physical activity. However, we must change and evolve our departments by having our students deliver impactful physical activity education programs for marginalized communities. Implementation of the physical guidelines for Americans that research has shown is necessary to improve the health of our communities and our country can be accomplished by all kinesiology departments. The program is replicable and sustainable.”



## PAST-PRESIDENT'S COLUMN

**Tremendous Gratitude***By Kim Graber, Ed.D., AKA President*

Kim Graber

It is difficult to believe that only a few short weeks ago we were in sunny Newport Beach for the 2025 Workshop of the American Kinesiology Association (AKA). The conference theme of faculty success was selected and designed to help kinesiology leaders acquire skills to facilitate the success of their faculty and to help them reflect on their institutional practices in light of the practices of other colleges and universities across the nation.

The pre-workshop offered a deans panel and oral presentations on topics related to graduate and undergraduate education. The combined pre-workshop culminating session helped participants better understand how artificial intelligence has changed and will continue to change the face of instruction in institutions of higher education for the foreseeable future. It is reassuring to know that an individual like Marcio Oliveira, the keynote speaker, is on the cutting-edge of the

ever-evolving AI revolution and is leading efforts to demonstrate how it can positively aid in the development of learners' knowledge acquisition. Although AI comes with risks such as cheating and plagiarism, creative instructors engage learners in dialogue about the appropriate use of AI and design assignments that teach students how to ethically use it when completing work while simultaneously gaining a deeper understanding of course content.

The full workshop began full force with our dynamic keynote speaker, Mary Abbajay, who helped participants consider their personal communication style in relation to successfully managing up, down, and across all levels. The key takeaway was that those who are the most successful managers have

learned to treat others the way others want to be treated. They understand that an extroverted leadership style might not work best with those who prefer an introverted style and vice versa. After Mary set



Mary Abbajay

the stage for facilitating faculty success, participants presented on topics related to hiring, recruitment, retention, and mentoring in an ever-changing landscape; helping faculty achieve high research and teaching success through a 4M theoretical perspective (micro, meso, macro, and mega); managing challenging people through the unique lens of the presenters; implementing faculty reviews and measuring faculty impact in different ways; examining the shifting policy context on DEI; promoting the success of staff by improving a sense of agency (special thanks to the staff members who presented); and examining how to positively influence faculty, staff, and administrator mental health and work life balance.

The Fireside session presided by Dave Perrin resulted in an engaging dialogue between Kevin Guskiewicz (President of Michigan State University) and Gayle Hutchinson (President Emerita California State University, Chico) who addressed the current geo-political climate in higher education including issues of promotion and tenure, institutional values, and free speech. The Leadership Institute Fellows presented on themes related to inclusive

mentoring, the first 365 days of a leadership position, student recruitment and retention, and faculty service expectations. In addition, the poster sessions were particularly lively as were the socials and coffee breaks. The workshop concluded with the awards dinner where former AKA presidents Alan Smith and Penny McCullagh were honored with the Distinguished Leadership Award.

It is with tremendous gratitude to Tom Templin (Executive Director), Kim and Jamie Scott (business managers), Penny McCullagh (Editor of *Kinesiology Today*), the Executive Committee, board members, committee chairs and members, sponsors, and all members of the AKA that I conclude my term as president. Serving an organization in a leadership capacity is an honor, a privilege, and something that I never took for granted. You placed your faith in me, and I hope that I didn't disappoint. You are in very capable hands with Tim Brusseau as President and Damon Andrew as President-Elect, and I look forward to assisting them in the coming year as Past President. The organization is fiscally healthy and considered a national leader for cultivating future leaders and engaging current leaders in critical discussions. Thank you for this moment in time. There is much to be grateful for and much success to celebrate.



Fireside chat at 2025 AKA Workshop

### **Nomination Deadlines for AKA Student Awards**

AKA National Scholar Awards are awarded in four categories: Undergraduate Scholar, Master's Scholar, Doctoral Scholar and Graduate Student Writing. [Nominations are due Feb 28 2025.](#)

Undergraduate Student Impact Awards honors student group from member departments who have made meaningful contributions in the field of Kinesiology. [The deadline for submitting nomination forms is March 31, 2025.](#)

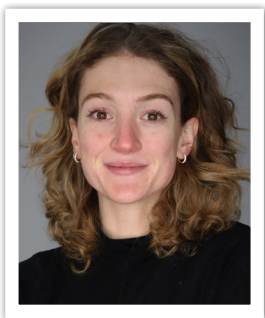
## Pollution May Be Costing Marathoners Their PRs

By Patrick Wade, Staff Writer

**N**utrition, hydration, elevation, heat, wind, surface conditions – these are the things that marathoners typically figure into their time calculations on race day and the months of training leading up to it. But air pollution? A study out of the Brown University School of Public Health suggests that you should add it to the formula.

Researchers found that even small increases of one microgram per cubic meter of fine particulate matter in the air slowed marathon finish times by about half a minute on average – not a huge amount for a race that takes at least a couple hours for even the most elite runners, but more than enough to dash a PR or ruin a qualifying time. Each additional microgram per cubic

meter exacerbates the slowing of finish times. Fine particulate matter is considered to be airborne particles smaller than 2.5 microns in diameter, referred to as PM<sub>2.5</sub>.



Elvira Fleury

The study was led by Elvira Fleury while enrolled as a master's student at Brown with her mentor, Professor Joseph Braun. She is now pursuing a Ph.D. at Harvard's T.H. Chan School of Public Health.

"Our study highlights that air pollution affects everyone, even the most healthy among us," Braun said. "We show that even in incredibly healthy people — for example, Boston Marathon runners, including elite athletes — air pollution is having an adverse effect on their health. This is consistent with hundreds of prior studies showing that exposure to air pollution adversely affects the circulatory, respiratory, and immune systems to increase the risk of heart disease, stroke, premature mortality, and cancer."

Fleury and Braun are both marathoners and environmental health researchers, so the crossover interest in running and air pollution came naturally. Previous studies had examined the association, Fleury said, but most only looked at the effects on a subset of runners, such as elite or collegiate athletes. Others used pollution data from monitoring stations that may be far from the actual marathon courses.

Fleury's study looked at more than 2.5 million finish times from major marathons in nine U.S. cities spanning 2003 to 2019 – that's 140 individual events. The researchers used a "spatiotemporal machine learning model" that coordinates several data points to reconstruct daily air pollution levels at given locations – in this case, at the start, finish and every mile along the courses. This helped them get past the problem of monitoring station data of varying reliability. Fleury said this could be especially advantageous for courses in rural or suburban areas with limited monitoring.

"For example, for Grandma's Marathon, the nearest PM<sub>2.5</sub> monitors are in Duluth, Minnesota, which is at the finish line of the straight point-to-point course, and the nearest monitor collected sampled every third day from 2000 to 2011," Fleury said. "As such, without using a PM<sub>2.5</sub> model, it would not have been easy to conduct a study spanning nearly two decades of finish times from nine distinct events."

If you were curious – the Los Angeles Marathon had the highest median air pollution measurements on race days at just over 12 micrograms per cubic meter. The



Twin Cities Marathon had the lowest at about 4.65 micrograms per cubic meter.

As those measurements crept up, marathon times slowed. On average, the men ran 32 seconds slower for each additional microgram, and the women were 25 seconds slower. A standard deviation increase in pollution corresponded to approximately 2-minute slower finish times on average.

Most surprising to Fleury was that median-and-faster runners appear to be more affected by pollution in the air as compared to slower runners. There are a few potential explanations for that, she said. For one thing, a two-hour marathoner is ventilating twice as much air as an average marathoner, which would mean twice as much pollution swirling in the elite athletes' lungs. Another speculation is that slower runners may be more affected by other factors, like illness, injury or walking through aid stations, which would make it more difficult to detect how much they are affected by air pollution.

But let's not forget that race day is only part of a marathoner's battle. Most spend several months training in the lead-up to the big event. And Fleury noted that there is evidence to suggest that training in air pollution is associated with worse race-day performance.

She cites a 2023 study from Cusick et al. that found 5K times among male col-

legiate athletes were slower when those athletes were exposed to higher levels of particulate matter and ozone in the three weeks prior to a race. The study examined 334 athletes at 46 universities across the U.S. The difference in times was around 12 seconds between athletes at the higher and lower ends of the pollution spectrum – a significant difference for elite runners in competition.

The authors of that study noted wildfires had impacted or even led to cancellations of collegiate and professional running events around the time of publication. The starting gun of the Los Angeles Marathon is scheduled for March 16, 2025. That's just about two months after the deadly Palisades fire that destroyed or damaged thousands of structures and poured smoke over the city for weeks – presumably while many marathon entrants were training below the plumes.

That's an extreme example. Fleury said, in most cases, air pollution is something to keep in mind but not something that you should overthink.

"Training for a marathon takes a long time and a lot of effort," she said. "If you've been training for four months, I'd say run the race and enjoy the results of your hard work, as long as the air quality isn't unhealthy. Just like you would adjust your expectations on

a hot race day, it's worth considering air pollution when evaluating your performance. You may not set a PR or break a record on a day with high pollution, and that's okay!"

---

Fleury, E.S., Bittker, G.S., Just, A.C., and Braun, J.M. (2024). Running on Fumes: An Analysis of Fine Particulate Matter's Impact on Finish Times in Nine Major US Marathons, 2003–2019. *Sports Medicine*. Retrieved from <https://link.springer.com/article/10.1007/s40279-024-02160-8>

Cusick, M., Rowland, S.T., and DeFelice, N. (2023) Impact of air pollution on running performance. *Science Reports*. Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC9892497/>



## AKA's Education Networks

### Graduate Network

By Elizabeth Mullin, Ph.D.

The AKA Graduate Education Network (GEN) provides a platform for graduate program directors and faculty to connect with peers and access valuable resources in kinesiology graduate education. This year's GEN Pre-Workshop was a dynamic and enriching event aligned with this mission. It featured a diverse lineup of academic leaders and experts exploring the theme: *"Recruiting, Retaining, and Mentoring Graduate Students of Today."* The workshop began with a dean's panel, where Jeffrey Fairbrother (Auburn University), Damon Andrew (Florida State University), Al Smith (Utah State University), and Lara Duke (University of the Fraser Valley) discussed how institutional priorities and mechanisms—such as budget models—impact graduate programs and students.

Following the panel, attendees participated in roundtable sessions covering a range of strategies to enhance graduate education. Kimberly Fasczewski and Jennifer Kurtz (Appalachian State University) shared insights on "Flipping" graduate

student orientation to foster a sense of belonging. Channing Ford, Gina Moses, and Mica Mecham (Jacksonville State University) examined best practices for graduate enrollment pathways. Claude Hutto (Morehouse College) highlighted strategic approaches to recruiting, retaining, and mentoring graduate students, emphasizing the role of partnerships in student success. Larissa True and Christopher Aiken (New Mexico State University) addressed key challenges in graduate education and shared strategies for building a thriving, student-centered Ph.D. program.

The energy in the room was palpable as participants actively engaged in meaningful discussions throughout the roundtable sessions. This pre-workshop remains an essential opportunity for faculty, program directors, and administrators to exchange ideas and strategies for creating a supportive and successful graduate education environment.

This year the committee consisted of Tiffanye Vargas (CSU Long Beach), Danielle Wadsworth (Auburn), Steve Elmer (St. Catherine University), Melissa Mache (CSU Chico) and Pete Chomentowski (Northern

Illinois). If you have ideas for next year's workshop please contact network chair Liz Mullin at [emullin@springfieldcollege.edu](mailto:emullin@springfieldcollege.edu)

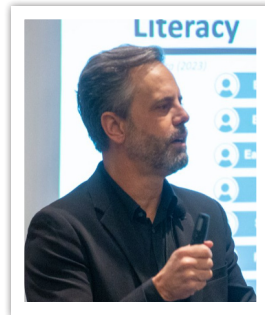
### Undergraduate Network

By Brandon Alderman, Ph.D.

The AKA Undergraduate Education Network supports undergraduate kinesiology programs by fostering opportunities for learning, collaboration, and the advancement of best practices in undergraduate education. This year's pre-conference workshop in Newport Beach continued the tradition with an engaging lineup of presentations and discussions focused on innovative teaching strategies, student engagement, and the integration of emerging technologies. Dr. Melissa Bopp (Pennsylvania State University) opened with a presentation of the sometimes-conflicting perspectives of students and faculty regarding online education. Dr. Melissa Gross (University of Michigan) asked the question, "What if teaching was more team-based?" and shared insights on how faculty can leverage institutional resources to create innovative pedagogy—using anatomy as a case study.

Advancements in technology were a key theme throughout the workshop. Dr. Cody Bremner (Southern Utah University) showcased the potential benefits and challenges of integrating virtual reality into a functional kinesiology course and Dr. Pete Bodary (University of Michigan) discussed the potential of generative AI (GenAI) to enhance student learning and faculty efficiency, emphasizing the evolving role of AI in higher education. In addition to technology-driven innovation, the workshop also highlighted strategies for fostering student engagement and improving assessment practices. Dr. Amerigo Rossi (New York Institute of Technology) shared the development of an experiential learning program aimed at enhancing student engagement through hands-on opportunities. Dr. Jennifer Kurtz and Dr. Kym Fasczewski (Appalachian State University) gave a fascinating presentation on

the implementation of specifications grading as an innovative assessment approach, aligning learning outcomes with mastery-based education. This year, members of the Undergraduate and Graduate Education Networks joined together for a presentation by Dr. Marcio A. Oliveira (University of Maryland) titled “*Navigating the AI Revolution: Leadership Strategies for Academic Excellence*.” Dr. Oliveira’s session explored the role of academic leaders in integrating



Marcio A. Oliveria

AI into higher education, addressing ethical considerations, strategic planning, and the opportunities and challenges we are likely to face with the increasing influence of AI. His insights provided

attendees with a foundational understanding of the impact of AI, and strategies to consider as we navigate forward.

The Undergraduate Education Network, consisting of Brandon Alderman (Rutgers University), Shaine Henert (Northern Illinois University), Jeff Cherubini (Manhattan College), Melissa Bopp (Penn State), and Andrew Parks (Louisiana Tech University), would like to thank the presenters and attendees for their contributions to this year’s workshop. We welcome ideas for webinar presentations throughout the year and invite submissions for next year’s pre-conference workshop. Please contact the network chair, Brandon Alderman, at [alderman@rutgers.edu](mailto:alderman@rutgers.edu).

Share Kinesiology Today (KT) with your faculty, administrators, students and their parents and staff to help them learn more about this fun and fascinating field of study. Contact KT Editor with ideas at [kintodayaka@gmail.com](mailto:kintodayaka@gmail.com)

## Recent Trends in Kinesiology Degrees Awarded

By Duane Knudson, Ph.D., & Penny McCullagh, Ph.D., KT Editor

A recent article published in *Advances in Physiology Education* (Nuzzo, 2024) updated recent trends (2002-2022) in kinesiology degrees awarded from his previous article (Nuzzo, 2020) using National Center for Education Statistics (NCES). The article is worth a read as it confirms a continuation of growth of enrollments and graduation in kinesiology programs (Hoffman, 2010; Wojciechowska, 2010), as well as highlights demographic changes and illustrates one use of Classification of Instructional Program (CIP) codes.

What are CIP Codes? “The Classification of Instructional Programs (CIP) provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity. CIP was originally developed by the U.S. Department of Education’s National Center for Education Statistics (NCES) in 1980, with revisions occurring in 1985, 1990, 2000, 2010 and 2020. “ <https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=56>

The vast majority of institutions of higher education receive Title IV funding and are required to report numbers of graduates by academic discipline according to CIP

codes (<https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=56>). CIP codes are updated every decade and are organized into 2-, 4-, and 6-digit levels. Kinesiology degrees are represented in numerous CIP codes (Knudson, 2016), most often in 2-digit codes aligned with college structures like “EDUCATION” (Code 13), “BIOLOGICAL AND BIOMEDICAL SCIENCES” (Code 26), “PARKS, RECREATION, LEISURE, AND FITNESS STUDIES” (Code 31), and “HEALTH PROFESSIONS AND RELATED PROGRAMS” (Code 51).

Nuzzo (2010, 2024) extracted NCES data using two 6-digit CIP codes to study graduation trends of kinesiology programs (26.0908 “Exercise Physiology and Kinesiology” & 31.0505 “Kinesiology and Exercise Science”). Data from these codes showed several encouraging trends. First, confirming large increases in graduates from 2002-2017, a three-year plateau, and recent increase. This represents good recovery from the COVID-19 era, with increases in bachelor’s, master’s, and doctoral kinesiology graduates. Bachelor’s graduates increased 8.7% from 2016/2017 to 2012/2022 (28,587 graduates). Much of these increases were

a result of higher numbers of female graduates with bachelors (59%), master’s (52%), and doctorates (52%) in 2021-2022. There Nuzzo noted the lack of data on graduation destination or employment in kinesiology for the United States. The good news is that the number of kinesiology graduates continues to remain strong. The California State University System alone graduated 4,248 majors in 2023-2024 (3<sup>rd</sup> ranked major).

Unstated weaknesses of this article include not acknowledging the other kinesiology-related CIP codes and the inaccurate focus on exercise physiology, confounding the more accurate interpretation of the number of graduates of many kinesiology degrees. Nuzzo incorrectly reports the code 26.0908 as Exercise Physiology like his previous article on exercise science using 2010 codes (Nuzzo, 2020), when by the time of this previous publication the CIP 2020 changed this code to “Exercise Physiology and Kinesiology.” He also leaves off the description of this code in his recent article (p. 924) the CIP cross-links: “See also: [31.0505 Kinesiology and](#)



[Exercise Science, 51.0913\) Athletic Training/Trainer.](#)” This 26.0908 CIP code was developed to match kinesiology programs simultaneously overemphasizing exercise physiology courses (Ives & Knudson, 2007) and delimiting focus on clinical exercise and prescription. This more easily aligned with new integrated physiology department names and location in biological and natural science colleges.

The similarity of the descriptions of the CIP 26.0908 and 31.05050 codes is obvious (see Nuzzo, 2024 p. 924). Students seeking professional graduate education or certification in cardiac rehabilitation from particular CIP code may not be advantaged over another CIP code. Efforts to elevate physiological or medical subdisciplines over kinesiology may not better serve our students or elevate our discipline. CIP codes began as a government reporting tool. They have, however been used by academic institutions in other ways influencing funding, programs, and academic credentials (Knudson, 2016).

Kinesiology academic leaders should be familiar with CIP codes to best serve their departments, faculty, staff, and students. Leaders and kinesiology faculty can take pride in the growth of our programs, numbers of graduates and their abilities to work in many careers (e.g., academic/scientist, athletic training, cardiac rehab, coaching, occupational therapy, physical education, physical therapy, sport management, sports analytics, sports scientist, and strength & conditioning (See Templin, Graber & McCullagh, in press). None of these careers rely exclusively on one sub-discipline. Kinesiology faculty and leaders should consider the visibility and health of the discipline in the programs, terms, and codes used.

---

Hoffman, S. (2010). Are we witnessing a kinesiology bubble? *Kinesiology Today*, 3(2), 9, 17. [https://www.humankinetics.com/acucustom/sitename/Documents/DocumentItem/June2010\\_vol3\\_no2.pdf](https://www.humankinetics.com/acucustom/sitename/Documents/DocumentItem/June2010_vol3_no2.pdf)

Ives, J.C., & Knudson, D. (2007). Improving professional practice in exercise science: The need for greater disciplinary balance. *Sports Medicine*, 37, 103-115. <https://doi.org/10.2165/00007256-200737020-00002>

Knudson, D. (2016). A classification of instructional program (CIP) primer for kinesiology leaders. *Kinesiology Review*, 5, 215-220. <https://doi.org/10.1123/kr.2016-0018>

Nuzzo, J.L. (2020). Growth of exercise science in the United States since 2002: A secondary data analysis. *Quest*, 72, 358-372. <https://doi.org/10.1080/00336297.2020.1736106>

Nuzzo, J.L. (2024). Exercise physiology degrees in the United States: An update on secular trends. *Advances in Physiology Education*, 48, 923-929. <https://doi.org/10.1152/advan.00143.2024>

Templin, T., Graber, K., & McCullagh, P. (in press) *Careers in Sport, Fitness, and Exercise: A Guide to Kinesiology Professions, Second Edition*. Human Kinetics.

Wojciechowska, I. (2010, Aug. 10). A quickly growing major. *Inside Higher Ed*, <https://www.insidehighered.com/news/2010/08/11/quickly-growing-major>

# Integrate Kinesiologists with Health Care Providers – Not a New Idea

By Penny McCullagh, Ph.D., KT Editor

Nearly twenty years ago, Michelle Fortier and her colleagues in Canada wrote an article suggesting that integrating physical activity counselors into family medical practice was a good idea (Fortier, et. Al, 2006). At that time Canada had focused on creating multidisciplinary teams to improve quality of care for patients, but had not focused on prevention of disease. They proposed that physical activity counselors (individuals trained in kinesiology with understanding of exercise protocols and behavior change strategies) should be included in health care teams. Not only did they suggest such an approach, they researched whether such an approach would be effective. They published a number of papers that showed that having multiple sessions with a kinesiologist

helped increase patient confidence and motivation as well as increasing physical activity levels. They also indicated that data from their experiment helped contribute to kinesiology becoming a regulated profession in Ontario.

To learn more about kinesiology as a profession in Ontario, Canada, you can read an article I wrote for Kinesiology Today (McCullagh, 2016). If you live in Ontario, you must be registered with the College of Kinesiologists of Ontario to practice and use the term “kinesiologist”. Other provinces in Canada are considering such a designation. If our goal in kinesiology is to help people become more active across the lifespan, it would serve us well if individuals trained in exercise prescription were aligned with the medical field.

---

Fortier, M., Morgan, T., Tomasone, J., & Jain, R. (2024). Integration of Exercise Professionals to Help Patients Adopt and Maintain Healthy Movement Behavior, What Are We Waiting For? *Canadian Family Physician October 2024; 70 (10) 611-613; DOI: <https://doi.org/10.46747/cfp.7010611>*

Fortier, M., Tulloch H., & Hogg, W. (2006). A Good Fit: Integrating Physical Activity Counselors Into Family Practice. *Canadian Family Physician, 52, 942-949.*

McCullagh, P (2016) Are You a Kinesiologist? *Kinesiology Today, 10(4), 13-14.* <https://www.forever.com/app/users/business-manager/files/18fc068e-3e20-4c6e-9f29-03e5ce1decf1/68dg0np8txud42sp7l8etel1f>

## Understanding Foot-Strike is a First Step Toward Injury Prevention

By Patrick Wade, KT Staff Writer

Most runners don't know how their feet strike the ground, and that could be making it harder to get the right pair of shoes and stay healthy.

That's according to a study out of the University of Florida, where researchers found that only about 43% of runners could accurately report their own foot-strike pattern. The rest either thought they knew and were wrong, or they just did not know at all.

Foot-strike pattern is an indicator of running mechanics, and also influences what kind of shoes people tend to purchase. A runner who understands their own can take steps to reduce the chance of injury, said Dr. Heather Vincent, the vice chair of research in Florida's College of Medicine and also the director of the UF Health

Sports Performance Center. She was the lead author on the study, published in December in *Frontiers in Sports and Active Living*.

"Foot strike is simply a piece of the whole kinetic chain

approach that we look at when we assess runners," Vincent said. "It is by far not the most important thing, but it is a simple thing that we can cue and help people understand that when you hit the ground in an uncontrolled manner – whether it's the heel, the midfoot or the forefoot – that could result in unintentional stresses that build up over time and cause nagging aches and pains, which then relates to injury."

She said the clients that came through the Sports Performance Center and the Running Medicine Clinic (the latter was directed by her husband, Dr. Kevin Vincent) triggered the question. They wanted to know more about the interface between shoe wear, sensing the ground and how to take on safe mechanics of running.

"We were able to collect information on the habitual shoes that they were running in the past six months," Vincent said. "Had they had any running related injuries, and were they bony or soft tissue? How well could they feel that they could sense the ground? And so very simple capture questions that any practitioner could use in the workplace."

They also asked, "What type of foot strike do you think you have?" That's where



they found that most people simply didn't understand their own mechanics.

"That itself was really revealing to understand that there was a whole segment of people that had no idea how they were interacting with the ground, which can potentially be a problem if you're trying to teach safe mechanics and injury prevention over the long term," Vincent said.

And it's not so much that people can or should change their foot strike once they understand it, Vincent said. But knowing how you are striking the ground is the first step toward mitigating injury.

"I really don't care how people hit the ground, as long as it's controlled," Vincent



Heather Vincent



said. “We have those runners who do quite well and are operating at elite levels, and they hit with the heel and they don’t get injured or they can manage it well because they’re doing other things right.”

The researchers collected data over six years from more than 700 runners, about half of whom were training competitively. Among the runners who claimed to know that they were rearfoot strikers, only about 34% were correct. People who said they didn’t know what their foot-strike pattern was had the highest prevalence of injury.

About 70 percent of non-rearfoot strikers actually knew they were non-rearfoot strikers, and this group had the lowest prevalence of injuries.

Another thing Vincent’s team noticed had to do with the shoes that each group was wearing.

“If you look at the people who were really accurate from that perspective, they were all wearing shoes that tended to be a little flatter,” Vincent said. “So less of a drop, a little bit lighter, and the stack height was a little bit lower.”

She does not suspect that it’s a causal relationship, but it is nonetheless an interesting correlation, and now her team is trying to identify those patterns of shoe wear that relate to accurate foot-strike detection. Especially since the people in the other category – those who inaccurately detected

their foot strike and tended to wear thicker, heavier shoes – also were more likely to have developed a running-related injury in the previous six months compared to the people who chose flatter shoes.

For the people who spend a lot of time thinking about what shoes to buy, or reading reviews, or reviewing the marketing, consider this: Vincent says the most important considerations about shoes has very little to do with the shoe itself.

“It’s having a strong foot,” she said. “When you strip everything away, human beings were meant to locomote, move, jog, trot, run without shoes. I’m not necessarily condoning that everybody go out running barefoot. But what I am saying is even when you’re thinking about starting to run, or if you’re a runner now and haven’t thought about it before, really consider making your foot stronger so it doesn’t matter really what shoe you put on your foot. You’re much better able to control those muscles that should be strengthened.”

That being said, flatter shoes with less cushioning tend to help strengthen the foot and let it do its natural thing, Vincent said.

“When we think about when the foot hits the ground, the metatarsals or foot rays should splay, and the arch of the foot, it’s going to bend, flex, allow that foot to dissipate forces and then rebound and propel that person forward,” Vincent said. “If you let the shoe do it, through cushioning, through

carbon plating, all those other things, now the foot is not doing the work.”

Vincent said that other studies suggest that shoes with more cushioning tend to have higher impact loading rates. Cushiony shoes make you feel better during a run because they are soft and bouncy, but the pain could set in days or even weeks later if the mechanics aren’t controlled.

Her overall advice to runners or trainers is twofold. First, go minimalistic when you are around the house – barefoot if you can. That allows the foot to be in a natural anatomical position and get stronger.

Second, when you are running, think about shoes with a lower stack and a wider toe box that allows room for the foot to splay and flex as you strike the ground.

Just make sure any changes are done over time to help your body adapt.

“Consider a shoe that gets you into a more anatomic position,” Vincent said. “There are several models out there that do that. If you rotate shoes, rotate in the same class or classification. I wouldn’t favor jumping from a minimalist shoe to a maximalist or vice versa.”

---

Vincent, H.K., Coffey, K., Villasuso, A., Vincent, K.R., Shariffar, S., Pezzullo, L., & Nixon, R.M. (2024). Accuracy of self-reported foot strike pattern detection among endurance runners. *Frontiers in Sport and Active Living*. Retrieved from <https://www.frontiersin.org/journals/sports-and-active-living/articles/10.3389/fspor.2024.1491486/full>

## What Does Exercise Mean in Other Countries?

By Penny McCullagh, Ph.D., KT Editor

A recent article in the New York Times (Minsberg, 2025) titled “Lesson About Exercise From Around the World” brought up some interesting ideas about how different countries view and do exercise. She suggests that in the US, exercise is treated like a separate thing that people do in their lives. They schedule a time, oftentimes drive to the gym and pay to engage in activity. Despite the apparent importance of fitness, data suggests that not that many American adults get sufficient physical activity.

She draws on examples from other countries that provide examples of how exercise is woven into everyday life.

Finland – “Walk whenever you can, even when it’s freezing”. In this country walking is a preferred mode of transportation and you see people outdoors throughout the cold winters.

Japan – “Embrace short bouts of exercise”. In Japan an exercise routine known as radio-taiso is broadcast daily and individuals across the country engage in a 3-minute calisthenic routine. You can see people in all walks of life, performing the exercises daily.



Photo credit: Lan Yao

United Kingdom – “A workout can be a community event”. About twenty years ago, a runner started a 5-K run on the weekend. It was popular and got repeated. Eventually these park runs spread to 23 other countries and include runners and walkers of all abilities. The event is free and many get together for coffee after their exercise.

Brazil – “Make fitness feel like a party”. In Brazil there is so much activity on the

beaches (swimming, surfing, volleyball, skating, soccer, etc.) that it is reported that it may be difficult to walk in a straight line. Apparently, Brazilians like group activities.

Perhaps we can learn some lessons from these different cultures on how to make physical activity part of everyday lives for more people.

Minsberg, T. (2025). Lesson About Exercise From Around the World. *New York Times*, Jan 21.

## New Zealand Wants Medals

By Penny McCullagh, Ph.D. KT Editor

New Zealand recently announced that they have invested over \$160 million in high-performance sports to gear up for the 2028 Olympics in Los Angeles. Holly Thorpe (2024), a professor of Sociology and Gender at the University of Waikato in New Zealand says that this boost in funding comes at a time when government spending is highly limited. But New Zealand, she reports, does not stand at the top of funding. Australia will spend an extra \$300 million and the United Kingdom announced they will spend \$664 million for the next games.

Thorpe reports that funding will increase for 36 sports, but 23 will have shrinking budgets and some will lose their funding entirely. The sports that did well in Paris, will receive an advantage. Sport organizations made arguments to High Performance Sport New Zealand based on a host of criteria

including past performance, future possibilities and programs that demonstrate pathways to success for young athletes. Not all are in favor of these newly developed standards and Thorpe cites some research that indicates that this winning at all costs approach could have detrimental effects on the health of athletes and that coaches may not be prepared to deal with the outcomes. Other question whether such high funding should be provided for sport at all.

For New Zealand, rowing, cycling, yachting and canoe are at the top of the list for support. Swimming, equestrian, and hockey will see reduced funding and other sports like surfing, badminton, e-sports and even football will not receive any funding. For some, the support for cycling is on concern due to many complaints about athlete well-being in that sport.

Thorpe goes on to suggest that there are many stories that show national pride and great stories that demonstrate extreme sportsmanship and demonstration of character that are not related to medals. There is also the concern that if certain sports do not appear in the Olympics for one's country, then children won't see role models that spark interest in their participation.

Holly Thorpe has published numerous papers related to sociological and gender issues in sport and her article demonstrates many concerns.

---

Thorpe, H. (2024). When Medals Matter Most: High Performance Funding Risks a Return to the 'Win At All Costs' Model. *The Conversation*, Dec 18.



# Plan to Attend the 19th Annual Leadership Workshop

January 29-31, 2026 at The Westin Buckhead Atlanta. Atlanta GA

The 2026 AKA Annual Leadership Workshop will be held at [The Westin Buckhead Atlanta](#). On Peachtree Road and within walking distance of MARTA, The Westin Buckhead Atlanta has 368 newly renovated hotel rooms and hotel suites. Dine at the Palm Restaurant and Bar, or wind down with a craft cocktail in the MClub Lounge. Enjoy world-class shopping at Lenox Mall, the Shops Around Lenox, and Phipps Plaza. The Westin has a complimentary shuttle service available to take you anywhere within a 2.5-mile radius of the hotel. Whether you're heading to premier shopping destinations, local dining spots, or nearby attractions, they've got you covered.

The hotel is in close proximity to city attractions like the Georgia Aquarium, LEGO-LAND® Discovery Center, the World of Coca-Cola and the Atlanta Botanical Garden.

Getting there: Airport: Hartsfield-Jackson Atlanta International Airport (ATL). The Metropolitan Atlanta Rapid Transit Authority (MARTA) offers an inexpensive and convenient way to navigate the city. One-way fare is \$2.50. From the Airport, take the North-North Springs Line to Buckhead

Station (N7). Walk one (1) block North on Peachtree Road and the hotel is on the right.

The Westin Buckhead Atlanta offers in-room massages, a 24-hour WestinWORK-OUT® Fitness Studio with Peloton bikes, sauna and steam rooms, and many other hotel amenities. The standard room rate will be \$179. The negotiated room rates are available 3 days before and three days after the meeting should you decide to extend your stay. The deadline to make your hotel reservation is January 8, 2026.

2026 Workshop Program Planning Committee

- Tim Brusseau, Chair, University of Utah
- Damon Andrew, Florida State University
- DeAnne Brooks, University of North Carolina Greensboro
- Brian Culp, Kennesaw State University
- Yolisa Duley, University of Hawai'i at Hilo
- Andrea Mason, University of Wisconsin-Madison
- Liz Mullin, Springfield College



- Phil Post, New Mexico State University
- Jared Russell, Auburn University

If you want to get involved in helping with program contact Tim Brusseau [tim.brusseau@utah.edu](mailto:tim.brusseau@utah.edu)




## THANK YOU TO OUR GENEROUS SPONSORS!

<p><b>Founding Sponsor</b></p>  <p><b>HUMAN KINETICS</b></p>	<p><b>Lead Sponsor</b></p>  <p><b>Caduceus</b> International Publishing</p>	<p><b>Platinum Sponsors</b></p>  <p><b>AUBURN UNIVERSITY</b> School of Kinesiology</p>  <p><b>SCHOOL OF PUBLIC HEALTH KINESIOLOGY</b> Indiana University Bloomington</p>
---	--	--

### Gold Sponsors

 <p><b>COLLEGE OF EDUCATION, HEALTH &amp; HUMAN SCIENCES</b></p>	 <p><b>College of Health, Education and Social Transformation</b> Department of Kinesiology</p>	<p><b>YOUNGSTOWN STATE UNIVERSITY</b></p>  <p><b>Bitonte College of Health &amp; Human Services</b></p>
 <p><b>PennState</b> College of Health and Human Development Kinesiology</p>	 <p><b>RUTGERS-NEW BRUNSWICK</b> School of Arts and Sciences Department of Kinesiology and Health</p>	 <p><b>UNIVERSITY OF ILLINOIS</b> URBANA-CHAMPAIGN</p>
 <p><b>SCHOOL OF KINESIOLOGY</b> UNIVERSITY OF MICHIGAN</p>	 <p><b>TULANE</b> School of Professional Advancement Kinesiology</p>	 <p><b>KINESIOLOGY</b></p>  <p><b>PURDUE UNIVERSITY</b> Department of Health and Kinesiology</p>  <p><b>NIU KNPE</b></p>

### Silver Sponsors

 <p><b>HEALTH</b> UNIVERSITY OF UTAH</p>	 <p><b>SAN DIEGO STATE UNIVERSITY</b></p>	 <p><b>TEXAS A&amp;M UNIVERSITY</b> Kinesiology &amp; Sport Management</p>	 <p><b>Utah State University</b> DEPARTMENT OF KINESIOLOGY AND HEALTH SCIENCE</p>	 <p><b>INDIANAPOLIS KINESIOLOGY</b></p>
 <p><b>Michigan Technological University</b></p>	 <p><b>kinesiology</b> UW-Madison</p>			

#### Kinesiology Today

*KT Editor: Penny McCullagh, Ph.D.*  
*Managing Editor & Writer: Amy Rose*  
*Staff Writer: Pat Wade*  
*Designer: Sean Roosevelt*