Collaborative Online International Learning

By Penny McCullagh, Ph.D., KT Editor

Want a unique opportunity to engage your students with students around the world? Take a look at some of the courses being offered by the Department of Kinesiology, Sport Studies and Physical Education at the State University of New York at Brockport. Pamela Beach and Melanie Perreault, who are faculty in the department, use the Collaborative Online International Learning (COIL) model to provide a unique opportunity for students to work collaboratively online with students at an institution abroad.

They describe their program in a recently published article in Kinesiology Review (see reference below). In the article, they recognize that only a small percentage of college students are able to engage in study abroad programs and they are faced with many challenges to do so, including costs, inflexible course schedules, athletic seasons, and perhaps work obligations. They provide data that shows that “ethnic minority students...
received <5% of all degrees awarded in kinesiology in the United States in 2017” (p. 399). They also indicated that most foreign students studying kinesiology in the USA came from Canada, China, India and Mexico. Based on that data, they suggested that an allied health field such as kinesiology could have a global footprint if online programs were expanded. They also suggest that since both students and faculty have become more adept technologically, due to the increased use of video conferencing because of the pandemic, that now is an opportune time to build on cross-cultural experiences.

The COIL model focuses on cultivating “intercultural competence in students without leaving the classroom”. The program can also focus on collaboration with international nongovernment agencies. For example, health and wellness is among the sustainable development goals of the United Nations Department of Economic and Social Affairs (https://sdgs.un.org/goals). Kinesiology programs can easily identify with this goal. They go on to demonstrate how to develop a virtual exchange course and suggest the following steps:

- Finding a partner – It is important to find a partner that you can easily collaborate with.
- Joint planning – This can be difficult especially when planning across time zones and perhaps across different learning management systems.
- Implementation – Students should clearly understand the purpose of the COIL component of the course.

The idea is to increase cultural competence while also focusing on kinesiology related topics. I wanted to find out a little more about the SUNY Brockport program so I asked Pamela Beach and Melanie Perreault a few questions.

**You focus on using principles from COIL. Why do you think this is a good model and are there other models available that might provide guidance for faculty who would like to start an international program?**

It should be highlighted that the COIL model is strictly a virtual model allowing two or more courses from across the globe to collaboratively work together on a common project, or as much as an entire course. Typically, international programs focus upon international exchange, which provides a deeper and richer cultural experience. Although, COIL cannot provide that same level of experience, it exposes many students that would not otherwise have the opportunity to immerse themselves in another culture, which may lead to increased global awareness and a yearning for more cultural experiences, and possibly future international exchanges.

**How would you suggest to start on developing courses on a university campus?**

It’s usually individual faculty who set up a COIL course rather than an institution. Some institutions have a more formalized
COIL program with a COIL coordinator to help facilitate the process, but others, such as ours, started with a few interested faculty who sought out COIL partners through personal contacts or networking. Collectively, we formed an informal support group that is now a standing COIL committee currently lead by the Director for Global Education and Engagement.

The first step is to find faculty who are passionate about including intercultural competence in their courses. In my experience, this is the main driving force to ensure the success of any COIL program. Another key element is institutional support for resources and training to help faculty develop COIL courses. This can include funds to attend workshops and conferences as well as access to instructional designers and appropriate technology.

COIL should not be confused with study abroad or international exchange. There is no travel associated with COIL. Students work together virtually. SUNY does provide opportunities to find partners through COIL exchange, but it is possible to develop a partnership outside of the COIL network. You can develop a COIL course with a researcher from another country that you’ve collaborated with or contact your global education department for assistance with finding a partner. Partners do not need to be teaching the same course or even in the same discipline. If both faculty can find a common learning outcome or goal, a project that is mutually beneficial to students from both countries can be developed.

How can these international programs help increase awareness of diversity, equity, and inclusion? Can you perhaps give an example of an assignment you have used in a kinesiology course that demonstrates this?

COIL courses can increase awareness of EDI by promoting cultural sensitivity and understanding. Students not only learn to work with individuals from a different cultural background, but they also get to know their COIL partners on a personal level through exchange on cultural topics about everything from food to politics. This new awareness is often evident in student reflections of their COIL experience rather than the final product of the COIL project.

“This project was a great tool and learning experience, and it was great to learn about another culture other than my own. We got to share ideas on the project and different perspectives about how we go about our school work, or everyday life, and it was great to build social skills with people from other cultures.” – Student reflection

“It was special to make those type of connections that could benefit you in the long run. It also was nice to learn about their culture and backgrounds because it connects in a way because we are all in some ways similar to one another.” – Student reflection

Logistically, how does your program work? Do you get a certain number of students from each institution to join a course and they pay tuition at their home institution? Do these classes have smaller enrollments than typical classes and has that been of concern?

At our institution, students do not know that they are enrolling in a COIL course when they register, so enrollments are based on typical course caps. My COIL courses have ranged from 25-37 students, which is similar to my non-COIL courses. Students find out they are in a COIL course the first day of class, but in my experience, this does not typically result in any student dropping the course, so enrollments are generally good.

It is my privilege to serve as the 11th President of the American Kinesiology Association. I have been actively involved in AKA for eight years, five years as a board member and three as an Executive Committee member. When I think about my experience with AKA and the role the association plays in advancing leadership, two important things come to mind: the role of mentorship and collegial support. There are two mentors that played a significant role in advancing leadership for me: Waneen Spirduso and Gil Reeve. Waneen Spirduso was my mentor throughout my time as a student at The University of Texas and every day since then. Waneen, one of the original organizing members of AKA, always encouraged and supported my leadership pursuits and provided me with incredible mentoring, networking, and resources. She was committed to advancing our discipline, and AKA and advancing leadership was something she was very passionate about; her guidance along that path was invaluable. Gil Reeve fostered my love and commitment to AKA. Gil came to my university to conduct a strategic planning workshop as part of AKA member benefits. The workshop was amazing, insightful and facilitated a collaborative, unifying experience with the faculty. Since that time, Gil has mentored, encouraged, provided insightful guidance, and supported me. I am grateful to Waneen and Gil for their mentorship and for introducing me to such a wonderful association.

Collegial support is the other important role of the association and one that has played a significant role in advancing leadership for me. In my years of service, I have been inspired by many colleagues. AKA provides a unique ability for us to network at the annual workshop, during webinars, and at undergraduate and graduate discussion sessions. I have met many colleagues who have been supportive along my leadership journey and I am so grateful to AKA for this platform. During my three years of service on the Executive Committee, I have been inspired by many colleagues and had the privilege to serve with our three recent presidents: Nancy Williams, Al Smith, and Jeff Fairbrother. I greatly appreciate their thoughtful leadership and contributions to advancing the leadership in kinesiology and look forward to working with them in the upcoming years. As President-Elect, I had the opportunity to work closely with Jeff Fairbrother this past year on the Workshop Planning Committee and I was very impressed as he flawlessly transitioned us from an in-person to a virtual workshop. The workshop, Leadership for the Future: Vision, Values, and Practice, was exciting and filled with such a depth of information that is critical to today’s leaders. We had speakers and interactive sessions on inclusive excellence, perspectives and future of our discipline, innovative curricular changes to name a few and a Fireside Chat (available to stream on Facebook) with guests Dean Chodko-Zajiko (University of Illinois) and Vice Provost Melanie Hart (Texas Tech University).

As I move into my new role as President, I am extremely grateful to Kim Scott, our business manager. Kim is an invaluable member of our leadership team and I want to thank Kim for her contributions to AKA and her guidance and patience as she
welcomes a new president each year. I also want to thank Tom Templin, our Executive Director for his support. Tom has the positivity, wisdom and love of AKA that is infectious and I look forward to the upcoming year working with Tom. I am also very grateful to the creative, talented Executive Committee, Lanie Dornier, Lara Duke, Penny McCullagh, Jared Russell, and Al Smith for supporting me in this role. I want to welcome Matt Mahar as the incoming Secretary and Jared Russell in his move to President-Elect. What a great team to move our agenda forward. We are saying good-bye to Al Smith after several years of wonderful leadership but we all know, because of his love for AKA, he will be close by.

I am very excited about the upcoming year. The theme of the 2023 workshop is Social Justice and Equity. As an association, we have been committed to focusing on inclusive excellence as a recurring theme of workshops for the past two years. In 2023, we would like to put the spotlight on social justice and equity with a focus on building an equity-minded community as key for transformational change. A range of interesting topics from coalition building to sustainability of DEI initiatives to pedagogical practices are among a few of the topics that will be discussed by the Workshop Committee. I am pleased to announce a wonderful group of colleagues joining me on the Workshop Committee: Paul Carpenter (Cal State East Bay), Board Member Megan Frost (Michigan Technological University), Phil Post (New Mexico State University), Sarah Price (Florida Agricultural & Mechanical University), President-Elect Jared Russell (Auburn University), and Heather Van Mullem (Lewis & Clark University).

Goals for my term as president include focusing on the inclusiveness and diversity of the association, creating/cultivating relationships with other associations/organizations, continuing our efforts to ensure financial sustainability of the organization, and fostering the momentum of AKA's Leadership Institute. I look forward to the upcoming year and hope to meet many of you along the way!

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**CDC Now Links Physical Inactivity to COVID-19**

People who do little or no physical activity, or exercise, are more likely to get very sick from COVID-19 than those who are physically active. Being physically active (or exercising regularly) is important to being healthy. Get more information on physical activity and health, physical activity recommendations, how to become more active, and how to create activity-friendly communities:

- Physical Activity
- Physical Activity Guidelines for Americans, 2nd edition
- Move Your Way®
- Active People, Healthy Nation SM: Strategies to Increase Physical Activity
- National Center on Health, Physical Activity and Disability – Building Healthy Inclusive Communities


Thanks to Steve Elmer from Michigan Technology University for the alert.
Fit Cancer Program Offers Participants More Than Exercise

By Amy Rose, KT Staff Writer

The Fitness Therapy for Cancer (Fit Cancer) program at Colorado State University provides exercise instruction, motivation and moral support in a community-based supervised exercise program (CSEP) specifically designed for cancer patients and survivors. Under the guidance of Assistant Professor Heather Leach in CSU’s Department of Health and Exercise Science, the program was started in 2017 by master’s student Kelley Covington Wood for research on her graduate thesis. The program was very successful and has continued to support participants with a cancer diagnosis, while also giving CSU students an opportunity to continue their research and gain hands-on experience with this specific population.

The eight-week program features weekly exercise sessions led by well-trained instructors as cancer exercise specialists. The program also provides participants with equipment needed for their sessions, such as resistance bands, fitness trackers and a program workbook with exercises and educational resources. The sessions consist of groups of four to seven people, all of which have had a diagnosis of cancer, but are often in different stages of treatment, recovery or remission. Each participant must apply to the program and undergo an assessment of their current health and physical abilities, as well as a health history. This gives the instructors information they can use to tailor the program to the each client’s specific needs. In addition to exercising, the sessions also include time to create cohesion in the group through discussion time to seek advice from others, share experiences and build friendships.

During the pandemic, the program shifted to virtual sessions, but has been able to still continue with their weekly live sessions. “We have tried to replicate the face-to-face experience as much as possible”, said Leach. “It has been so successful it would be hard to go back to just face-to-face”. Over the last two years they have expanded to include participants from 13 states and two countries. Participants usually find the program through medical referrals, support groups and word of mouth. Irene Kessler, a 35-year survivor of breast cancer, was recruited by her great-niece who is a CSU student instructor with the program. Kessler said she has always enjoyed walking and outdoor activity, but found the group commitment to be helpful with sticking to exercise, especially during the pandemic.
“I definitely benefited in every way,” said Kessler. “Just knowing that every Friday someone was going to be there made me look forward to it.” Participants also like the real-time feedback from instructors and the group support for encouragement and advice. “No one knows better what you are going through than someone who has gone through it too,” said Kessler.

Mary Crisafio, Fit Cancer Program Director and CSU doctoral student, hopes to create more programs and is focusing her research on activity maintenance after an exercise program is completed. The participants are currently limited to just one eight-week session. “We know how beneficial it is and can provide overall improved quality of life,” said Crisafio. Fit Cancer follows up with participants 3, 6, and 12 months after finishing the initial session to see who is keeping up with their physical activity or how many have dropped off and why. Cirsafio says she can’t imagine working with any other cohort. “They have such tenacity to overcome adversity and a positive outlook on life. They want to help make advances for the next people. This translates well to what I want to do in the research field.”

To support participants in continuing their activity, they are allowed to keep all of the equipment provided by the program and have access to recorded sessions on YouTube to follow along with.

Fit Cancer provides hands-on experience and educational opportunities for every level of student in the Health and Exercise Science Department that is interested in working with the program. Undergrads use the program for their practicum requirement, graduate students and doctoral students are provided with opportunities for research studies, as well. “I always say the reason our program is so successful is the dedication of the students,” Leach said. “They are beyond passionate about using exercise as medicine.”

The findings of the original research project for the program, “Novel Applications of Recommendation Standards to Evaluate a Cancer-Specific Community-Based Exercise Program” by Wood, Leach, et al, was recently published in the Translational Journal of the American College of Sports Medicine. Leach hopes the Fit Cancer program will continue to thrive and provide many more opportunities for student research to improve the quality of life and treatment of those effected by cancer and its unique challenges.

In the field of Kinesiology, a central focus of research is the role of exercise in enhancing the quality of life from a variety of perspectives. Before the current pandemic, most individuals in the workforce were required to commute to their place of business. This certainly has changed during the last two years, but many of us hope that we will return to our workplaces so we have the opportunity to interact face to face with our colleagues.

In recent years, researchers have examined the relationship between walking and cycling as transportation modes. We know that these modes of transport differ across countries. If you have traveled throughout Europe, you will see high levels of walking, cycling and public transportation as a means to get to work or even for daily chores, like shopping. I visited Münster, Germany for the European Congress of Sport and Exercise Psychology in 2019 and it exemplified the importance of bicycles for transport to work, school, sporting events and leisure. It is said that in the city there is an average of two bicycles per person. I had the pleasure of living in Davis, California in the late 70’s, and it was a model city for cycling. Lots of people, even at that time, had their road bike for exercising, and their street bike with a basket for getting around town and grocery shopping. A house party would have many bicycles parked in the driveway, and a basket on the back to bring your pot luck contributions and your beverages. We also know that these forms of transport bow down to the avid desire to drive in many cities in North America.

My current department Chair, Paul Carpenter bikes to work every day and he did that through the dead of winter when he lived in Illinois! I asked him how he got started on this.

“My commuting by bike to work started as a graduate student while at UCLA after I crashed my motorcycle which was my form of transport, but couldn’t afford the cost of repair. I discovered it was much more efficient to cycle than use public transport or drive. My commute was along the network of bike paths and bike lanes that exist in LA much to many people’s surprise. The physical and psychological benefits were an added bonus to being able to get school in good time. I continued the commuting on moving back to the UK for my first faculty position that included a stint commuting across London on a folding bike. Moving to Illinois upped the ante as the commute was longer than I had ever done before (30 miles each way) and the weather at times extreme. In the summer with the heat index the temperature could be over 100F and in the winter my coldest commute was -38F with the wind chill. Relocating to the Bay Area and its great climate, varied terrain, and extensive network of bike paths, trails and lanes and a strong biking culture has been fantastic. Commuting by bike is a boon to my mental well-being and physical health and has also been great in leveraging the value of physical activity as a kinesiologist.”
Paul has done many ultra-cycling events. One of his most recent was to climb on his bike the same as the height of Mount Everest. [https://www.csueastbay.edu/news-center/2021/04/kinesiology-chair-to-climb-height-of-mount-everest.html](https://www.csueastbay.edu/news-center/2021/04/kinesiology-chair-to-climb-height-of-mount-everest.html)

So, does cycling to work increase longevity? A recent Google poll suggested that a lot of people were interested in this topic. [https://www.cyclingweekly.com/fitness/cyclists-live-longer-asked-google-weve-got-answer-389628](https://www.cyclingweekly.com/fitness/cyclists-live-longer-asked-google-weve-got-answer-389628). In this recent link, a number of articles were referenced but one that had a particularly large sample, conducted by Celis-Morales and colleagues, may provide some light on this question. Their data included 263,450 participants from England, Scotland, and Wales over a three-year period. Their primary outcome measures were death from any cause, cardiovascular disease, and cancer. They had a host of other variables considered in their data including: sex, age, deprivation index, ethnicity, smoking status, body mass index, leisure time, occupational and other physical activity, sedentary behavior, and dietary intake.

The researchers assessed whether individuals commuted by walking, cycling, mixed including active and non-active methods, as well as non-active methods (e.g., car or public transport). The data suggested that commuting by bike was associated with lower risk of cardiovascular disease and cancer and walking were related to lower incidences of cardiovascular disease. The authors suggested that advocating for active commuting, could help reduce risk of death.


### 2022 American Kinesiology Association Award Winners

This year AKA presented three awards at the virtual workshop. Further details on these award winners will appear in the Spring issue of KT. Congratulations to our winners.

**AKA Inclusive Excellence Award**

Indiana University- Purdue University Indianapolis (IUPUI) - Department of Kinesiology, Mark Urtel, Chair

**AKA Jerry R. Thomas Leadership Awards**

Sarah Price - Florida A&M  Master’s Institution
Thomas Templin - University of Michigan  Doctoral Institution
Digital Messaging Can Help You Reach Activity Goals

By Patrick Wade, KT Staff Writer

A lot of us wish we were more active, and there is no shortage of data to suggest that Americans need to spend more time up and moving around – but before we even take that first step, we have to find some kind of motivation to do it. Perhaps few people are more familiar with what drives us to be active than David Conroy, professor of Kinesiology and Human Development & Family Studies at Pennsylvania State University. He has been researching the topic of motivation since his graduate school days.

Along with his team of researchers from Penn State’s College of Health and Human Development and the College of Engineering, Conroy is learning more about what role wearable fitness trackers may play in getting people active and how to best leverage that technology to maximize its effect. This specific line of inquiry began for Conroy around the time that the original iPhone was released — that was a mere 15 years ago, he reminds us.

“The marketplaces for physical activity apps were exploding and, at some point, my students and I got curious about whether developers were implementing evidence-based behavior change techniques in these apps,” Conroy said. They found that the app developers were not being particularly creative in how they reached out to their users. “We wrote a couple of papers showing that a fairly restricted range of techniques had been implemented, and that sparked me to think about new ways that we could capitalize on these devices that so many people carried with them throughout the day,” Conroy said.

Fast forward a few years, and now wrist-worn fitness trackers — like FitBits and Apple Watches, just to name a couple — are becoming more affordable and popular tools for users to tap into their health data. “Wearable technology is only going to become more prevalent and more powerful in the years ahead,” Conroy said. “There is a rapidly growing evidence base showing that these trackers are effective for supporting behavior change. The question now is how can they be most effective – both in terms of how the technology is designed and how it is combined with other possible intervention components.”

Recently, Conroy and his colleagues took a closer look at the digital messaging features that accompany wearable technology and fitness apps – in other words, the notifications that appear on your smartphone or watch throughout the day encouraging you to get up and move. Their question focused on whether there are certain parameters that are more motivating to the user. Could the frequency of that messaging, or the content, or the day of the week affect whether those notifications are more or less successful in actually getting a person to be more active?
To find out, Conroy’s team recruited 45 people between the ages of 18 and 29 years old. The researchers focused on a younger group of people because they are at a critical junction in their lives – young adults are exploring independence for the first time and developing their adult identity. Previous research has shown that promoting physical activity for this age group can have lasting effects through adulthood. The researchers also selected people who were less active but otherwise healthy.

Participants wore fitness trackers for at least 10 hours a day for six months while a mobile app custom designed for the study delivered messages to the users. The notifications were delivered at random times of the day (but not during a daily Do Not Disturb period designated by the participants), and at random intervals. The researchers drew the messages from three broad content categories which they called “move more,” “sit less,” and “inspirational quotes.” Half of the messages had a photo accompanying it.

Collectively, the participants received more than 23,000 notifications over the study period. The researchers used the data they collected about how users interacted with those messages — along with their physical activity data from the fitness tracker — to model the expected effects of different combinations and timing of notifications. “To put it another way, the models enable our system to forecast the effects of different micro-interventions to help the system decide if it would likely be useful to send a message,” Conroy said. “This approach helps us to avoid sending messages that are unlikely to be effective.”

The system can also be adjusted as it collects more data about a specific person’s physical activity and how that person might be reacting to those notifications. “So the system both selects and delivers interventions, and learns from the successes and failures of those interventions to improve future selection and delivery,” Conroy said.

They key takeaway from the study, Conroy said, was that his team was able to develop a method for using dynamic models to inform when and how to send notifications to a person to have the best chance of actually getting that person more active. Up until now, it was up to the user’s preferences or developers’ intuition to determine the timing, frequency and content of that digital messaging. Engineering design had a strong influence in the study, and Conroy said it was important to address the question using that cross-disciplinary approach.

“Physical activity is an extremely complex behavior and promoting physical activity has proven to be extraordinarily challenging,” Conroy said. “Complex problems often require complex solutions – not complex for the end user, but sophisticated in design and execution.” The approach also takes a person-specific approach. Instead of focusing on solutions that are designed to help the average person, the method here addresses the problem on an individual level. “People are complicated animals living in rich and diverse environments that evolve over time,” Conroy said. “The average person is a myth and we need to push to a person-specific science of behavior change if we want to make progress on these intractable problems.”

How KIN Can Community Outreach

By Penny McCullagh, Ph.D., KT Editor

I n Kinesiology we know the benefits of physical activity for both physical and mental health. In fact much of what we do is trying to inform the rest of society about these benefits. While there is certainly a lot of empirical evidence about the values of physical activity there is also evidence that physical activity is especially important to help reduce the risk of severe COVID-19 outcomes. (See the Spring 2021 issue of Kinesiology Today)

I would like to highlight what one kinesiology department is doing to help their campus and community learn more factual information about COVID-19. At the recent workshop of the American Kinesiology Association (www.americankinesiology.org), Dr. Steve Elmer of the Department of Kinesiology and Integrative Kinesiology (KIP) at Michigan Technological University (MTU) presented a session on keeping Michigan’s rural upper peninsula residents informed during the COVID-19 pandemic. I was fascinated by what their relatively small department (less than 100 students) is doing to help keep their community informed.

During the pandemic the U.S. Surgeon General called for all Americans including educators, researchers, and universities to help slow the response of misinformation about the virus. (https://www.ncbi.nlm.nih.gov/books/NBK572169/) As we are well aware, there is a lot of misinformation out there. The KIP department at MTU took the message to heart and took a three-step approach to provide evidence-based information to their university and the community. In his presentation, Elmer does recognize that their rural university in upper Michigan was in a unique position to take the lead on such an initiative. Their small university has no medical school or public health department and on their campus. Their department is recognized as having valuable resources, courses, and student interest in health-related topics, especially those related to physical activity.

Their first step was to create a monthly COVID-19 Town Hall meeting that started in the Fall of 2020. The entire series is available on the university website at: https://www.mtu.edu/health-research/covid19townhall/. The series includes topics ranging from keeping active during the pandemic, to impact of the pandemic on the environment, to global perspective as well as the role of public health in protecting the community. I was able to join in for the January 27th meeting and learned how the researchers on campus are measuring wastewater to detect the occurrence of the virus and can even isolate this to specific dorm rooms on campus. Fascinating information and I am not sure why we have not heard of this in the news. You can find out more at the CDC website.

MTU makes this series available on Zoom, through Facebook and also through local radio and television stations. All of the recordings are posted to the Town Hall website and YouTube Channel.

Their second step was to enhance information about in-house resources directed at maintaining physical and mental health. Their bi-monthly KIP newsletter does a COVID-19 briefing (https://www.mtu.edu/kip/covid-19-outreach-and-resources/#main). The newsletter is produced by a team of students and includes case trends, a research study of the week from the CDC MMWR, physical activity tips, how to find accurate information, and other useful resources. The students encourage readers to be wary of many social media outlets and only trust information from websites that end in .gov, .org, or .edu.
Finally, they are reaching out to the academic community by publishing information they are gathering and sharing information with sources such as Advances in Physiology Education. [https://pubmed.ncbi.nlm.nih.gov/34936507/](https://pubmed.ncbi.nlm.nih.gov/34936507/)

I wanted to find out a little more information about what MTU is doing, so I asked Dr. Steve Elmer, associate professor in the department, a few questions. He indicated that Kelly Kram who is on the faculty and Issac Wedig a graduate student are also leaders of the project.

I find the outreach you are doing fascinating and you have demonstrated how Kinesiology departments can be leaders in providing evidence-based research to your campus and community. How do your faculty find the time to take on this extra work, considering they have major teaching obligations that have shifted dramatically in the last two years, and research obligations?

It has truly been a team effort. Our faculty and students have worked together to find creative ways to contribute to the COVID-19 response for the campus and broader community. We have leveraged our teaching and research to further promote and engage in pandemic related outreach. For example, a graduate student class project of creating a COVID-19 video that included a plug for engaging in healthy living behaviors was picked up by a local healthcare system and is now running as a TV commercial and movie theater preview across our rural region ([https://www.youtube.com/watch?v=Uc4vi-vDAG8](https://www.youtube.com/watch?v=Uc4vi-vDAG8)). In addition, graduate students who have had to pause their human subject research have adapted by incorporating larger public health components into their research.

Have you gained any financial resources from the university or community to help maintain the new programs?

These outreach efforts have been supported through the Department of Kinesiology and Integrative Physiology and the Health Research Institute on campus. We also have received community sponsorship from several local businesses including our healthcare systems. Collectively, these resources helped position us to secure a community health improvement grant from the Michigan Health Endowment Fund.

What has been the most challenging and what has been the most rewarding part of this work?

There have certainly been many challenges. Importantly, all of our students and faculty are passionate about improving health and now is the time when we need to practice what we preach, stand tall, and serve as a bright shining light to guide through the storm. We are very proud of our students and faculty for how they have leveraged their expertise to help the campus and broader community. A silver lining has been the new collaborations and partnerships that we have developed with local clinicians, public health officials, and other community.
experts. These stronger academic-clinical-community partnerships will help us to better address larger health issues as we build forward from the pandemic.

Do you have any other thoughts you would like to share?

As a training exercise to help inspire and unite our graduate students during the pandemic we tasked them with reading the book – “Leading at the Edge” which describes the remarkable perseverance and survival of Ernest Shackleton’s failed Antarctica expedition. This example demonstrates the importance of strong leadership in times of adversity and uncertainty. We also highlighted examples of how renowned physiologists, Walter Cannon and AV Hill, made important scientific and humanitarian contributions during World War I and World War II, respectively. Collectively, these exercises enabled students to draw some parallels to the current pandemic and move forward with their coursework, research, and outreach.

I was very impressed with the presentation from MTU at the recent AKA workshop as well as the many other talks and roundtables that occurred. For those who registered for the workshop - you will receive notification when the videos from the workshop become available.

We Exercise Less Than Two Hundred Years Ago

My mother would have been 100 years old this Spring. My great-great grandparents would have been born about 100 years before that. They did not get to the gym, they did not have exercise equipment, and they do not wear activity trackers. Yet some recent non-traditional data suggest they may have been more active as a population than we are.

Research from Daniel Lieberman’s evolutionary biology lab at Harvard University re-examined body temperature data over the last two centuries to conclude that we are exercising about 30 minutes less exercise today than 200 years ago! They were spurred on by a previous publication that had documented the drop in body temperature. They used the measure of resting body temperature to estimate resting metabolic rates which can approximate levels of physical activity. While they recognized that other factors may influence resting metabolic rates, they suggest this data provides evidence about the decline of physical activity in humans.

For more on Lieberman’s perspective on exercise go back and read the commentary by Paddy Ekkekakis on “Is Exercise Natural” in the Spring 2021 issues of Kinesiology Today. -PMc

Body Image in Figure Skating Weighs On Athletes

By Patrick Wade, KT Staff Writer

If sport is a reflection of society, then nowhere is that more prominently on display than the Olympics. Skill, determination, teamwork, and perseverance generally are the popular narratives in the media as the 2022 Winter Olympics gear up to take place during the month of February. Historically, though, social issues have taken the podium as well, and this season’s games are likely to be no different.

From Black athletes raising their fists in support of civil rights to venerated U.S. gymnast Simone Biles dropping out of several events to focus on mental health, the Olympics has long been a venue for bringing awareness to issues that have a social impact reaching far beyond the games themselves. An early focus of the 2022 Winter Olympics in China puts a spotlight on issues of gender in figure skating, as Timothy DeLuc is set to be the first openly non-binary athlete in the history of the Winter Olympics.

Research shows that figure skating has long been imbued with gendered culture – particularly as it relates to female body ideals and how women are expected to look and act. For several years, that topic has been a research focus of Dana Voelker, associate professor in the College of Physical Activity and Sport Sciences at West Virginia University, and her colleague Justine Reel, professor in the College of Health and Human Services at the University of North Carolina Wilmington. And that culture can have a big impact on the athletes themselves.

“For me, body image is a cornerstone of health, wellness and performance,” Voelker said. “How we experience our bodies, the way we think, the way we feel, perceive and treat our bodies is a very integral part of our development and our human experience. I’ve seen how early experiences that disrupt that development, that undermine body image – those consequences can last a lifetime.” Voelker has firsthand experience.

“I was a very prideful young competitive figure skater turned ice hockey player,” she said. “Like a lot of other youthful participants, I experienced a lot of the benefits from my sport participation, but I also saw how the sport wasn’t reaching its potential as a positive, quality, health-promoting experience for all children that I believe it can and should be.” Some of the questions to which Voelker is interested in finding answers are why gender and body image carry such weight in competitive figure skating, and the extent to which it affects the athletes. She said that what they have found is troubling.

In one study, Voelker and Reel interviewed 15 female competitive skaters between the ages of 14 and 21 who had around 12 years of skating experience. Those skaters described the ideal figure skating body with terms like, “smaller,” “compact,” “not curvy,” and “the lighter the better.” The study states that the interviewees discussed the importance of maintaining a prepubescent physique. Additionally, being muscular and
appearing muscular were at odds with each other for women. While the female interviewees acknowledged the importance of strength for their performance, they also said that looking strong could interfere with the beauty and grace they were expected to present to audiences.

One skater said, “You want to be very strong, but not so much like a gymnast.” Another said, “If you’re too chunky, your legs look shorter, so … your elements look more forced and labored.” The researchers found those pressures came from a variety of sources. Some skaters became aware of the perceptions by watching older and more elite skaters. Others noted weight-focused comments that they had received from parents and coaches who monitored their weight and food consumption.

In a separate study, male skaters described feeling pressure to change their body weight, shape or size – though it was to a far lesser degree than women. Men said that they felt rewarded for being “skinny but muscular” and “not super buff” but “deceptively strong.” Men generally acknowledged that they had more flexibility in body appearance than the women did.

In one paper, Voelker and Reel share the story of Jenny Kirk, a national-level skater who ended her career because she wanted to improve her personal relationship with food and body image. Kirk is quoted as calling the sport “weight-obsessed,” and she wondered at times whether being thin was more important than the athletes’ health. Those pressures can translate to performance issues by interfering with motivation, confidence and attention to the sport – psychological processes that are known to be of vital importance to athletic performance, Voelker said. That is magnified in a sport like figure skating, where your presentation to audiences and a table of judges has another layer of significance.

“You start to engage in some of the mind games,” Voelker said. “Even though the difference of a pound or two pounds, they know cognitively that isn’t making a difference in their actual performance. But they’ll weigh themselves right before they compete. And now all of a sudden, mentally, it’s going to make a difference.” Now that the problem has been identified, the athletic community can do something about it, Voelker said. One of the solutions to date has been developing programming to help women adjust to those pressures. That’s maybe an important stopgap, Voelker said, “but we need to move beyond telling women in particular to cope better.” The focus must turn to system-level change, she said. The global appeal of the upcoming Olympic events could provide a good opportunity.

“Spectators play a really key role in helping to evolve sport based on what you choose to watch, and now it’s based on what you support through social media,” Voelker said. “I encourage folks to be critical consumers of what they’re watching. Ask how and why.” Coaches are in a tough spot because many of them were once athletes in the same sport, Voelker said. That can create an echo chamber that needs to be disrupted with outside perspectives and policy change. Without those changes, the sport will not help athletes reach their potential.

“By not attending to things like body image and healthy eating, we’re not getting any farther in terms of high performance,” Voelker said. “We’re undermining it.”


We Made It Through Another Year!

By Jeffery Fairbrother, Ph.D., Past-President

Well, we made it through another year! The end of AKA’s year has always been capped by a great annual workshop. I am happy to say that 2022 continued this tradition. We came together on the Hopin platform to interact with one another and learn during many interesting sessions. Judging by participation in the sessions, we had more than enough to sustain strong discussions. We had a great year for workshop sponsorships. The result was a workshop full of great programming and one that contributed to the financial stability of the association. We opened our workshop activities with the Dean’s Forum organized by Ellen Evans (University of Georgia). We heard from several thoughtful panelists on some important administrative topics. The other pre-workshop activities included Undergraduate and Graduate Education Network sessions. The Undergraduate Education Network organizing team was led by Heather Van Mullem (Lewis-Clark State College). Their session focused on topics related to the development of undergraduate directors. The Graduate Education Network team was led by Steve Petruzzello (University of Illinois). Their session focused on mental health and wellbeing. Both networks provide valuable support to our member units, and we greatly appreciate everyone who was involved in delivering such great content.

The workshop itself opened with Provost John Buckwalter’s (Boise State University) keynote in which he helped us understand how kinesiology units fit into the broader context of our institutions. That was a fitting start, and the importance of Provost Buckwalter’s message was reinforced by how many times subsequent speakers referred to his points. The keynote was followed by a lively panel discussion on the current state and future of kinesiology. Thanks to David Anderson (San Francisco State University) and Richard van Emmerik (University of Massachusetts Amherst) for organizing a session that I am sure attendees will remember for a long time. The panelists were all contributors to a special issue of *Kinesiology Review* commemorating the 40th anniversary of George Brooks’ Perspectives on the Academic Discipline of Physical Education: A Tribute to G. Lawrence Rarick (Volume 10, Issue 3, 2021). Following the panel, we enjoyed another Fireside Chat with guests Wojtek Chodzko-Zajko (University of Illinois) and Melanie Hart (Texas Tech University). Both have been involved with AKA over the years and it was great to hear their perspectives. We also continued a practice established in 2021 of having the Diversity, Equity, and Inclusion Committee organize a session.
This year, they focused on student voices and delivered a powerful message that prompted much discussion. I was moved by the students’ stories and by their strength. Hearing from students was an important touchpoint as they are at the center of so much of what we do. The workshop also included a great set of roundtable talks and a session on curricular innovation. I’d like to give a special mention to Mark Urtel (IUPUI) for representing the department that received the AKA Inclusive Excellence Award, and to Tom Templin (University of Michigan) and Sarah Price (Florida A&M University) who both received the Jerry R. Thomas Distinguished Leadership Award.

Despite the continued challenges we faced in 2021, AKA made great progress on several fronts, in addition to the successful workshop. I mentioned earlier the success we had in attracting sponsorships. This was due, in large part, to the Executive Committee recognizing the need to develop a range of strategies to attract such support. Another big accomplishment was the revision of the association bylaws and updating of 18 different operating codes for officers and committees. Part of this effort saw the separation of the Secretary-Treasurer office into two separate offices to better serve the association. It was a whirlwind year for me, and I am so grateful for the opportunity to serve the association. I thank everyone for their support. I want to give special thanks to Kim Scott and Tom Templin for guiding the day-to-day operations of the association and to the Executive Committee members who contributed to the accomplishments last year. Special recognition is warranted for Past President Al Smith who is leaving the Executive Committee. I have appreciated their contributions and enjoyed working with them. And, as always, I also thank everyone engaged with the AKA for their continued commitment to the association, the field of kinesiology, and all those we serve. I am looking forward to what we can accomplish this year under the leadership of our new president, Karen Francis.
National Biomechanics Day

By Paul DeVita, National Biomechanics Day Board Member

As the world awakens, we all emerge a bit differently than we were almost two years ago. National Biomechanics Day has also changed and now presents itself as both a Biomechanics STEM- and STEAM-based community engagement program and also a funding source supporting biomechanics students. After five successful years, NBD has become part of the Biomechanics firmament through the efforts of so many of you and of our colleagues around the world. NBD Thanks everyone for your energetic support.

NBD events changed from in-person funfests to various forms of virtual and online experiences in 2021. Some sites held combined virtual and live events with the in-lab group demonstrating Biomechanics to high schoolers zoomily viewing the event. Today we highlight from last year Auburn University’s series of Biomechanics lectures and Virginia Tech’s full slate of Biomechanics activities including Tik Tok dancing and gait Biomechanics at home. We admire so much the effort all groups made to producing fun, informative, and educational virtual experiences for the next generation of Biomechanists. We recently opened registration for NBD 2022 and we expect about half live and half virtual events this year. Of course, any NBD is a good NBD so full speed ahead!

We are most thrilled to report that NBD, through its parent organization, The Biomechanics Initiative, expanded its mission in 2021 with grant programs designed to aid Biomechanists in producing NBD events and attending conferences. We partnered with our own ASB in the Black Biomechanists Outreach Through NBD program, with ISB in the NBD Outreach For Women in Biomechanics, with the Brazilian Society of Biomechanics in the Brazilian Biomechanics Experience, and with The Australian & New Zealand Biomechanics Society and Books of Discovery in the Australian Transportation grant program. Through these programs and with the contributions from these groups, we distributed over $10,000 for creating new NBD events around the world. “Around the world,” included Nigeria, Australia, Brazil, New Zealand, and the U.S. It is really through our loyal sponsors that we are able to now support individual Biomechanics people and groups and we think, make a substantial contribution to our chosen science. We have four programs this year promoting biomechanics for women, blacks and LatinX groups and also promoting disability biomechanics. Please see the grant announcement page and apply soon (if still open). We hope to distribute up to $20,000 through partnerships with Bertec, Books of Discovery, and ASB this year. Funds can be used to support the NBD event and to attend a biomechanics conference such as NACOB 2022.

We also plan to hold our second NBD Sponsors’ Technology Forum, most likely in early March. Seven of our tech sponsors participated last year by demonstrating their products and ideas to many biomechanists through eight-minute informative presentations. Please watch for announcements.

We have introduced Biomechanics to well over 32,000 high school students since 2016 and we hope to double this number in 2022! Gotta think big, of course. We again thank all NBDers around the world and we look forward to working with you on new endeavors next year.

Paul DeVita, Lisa MacFadden, Felipe Carpes, and Adam Hawkey, NBD Board of Directors
2022 Winter Olympics Female Facts

I hope you were all able to enjoy some of the Winter Olympic competition. Here are some interesting highlights that featured women athletes.

• Watch for the oldest female winter Olympian. Claudia Pechstein is 49 years old and will be competing for the German speed skating team. She is the second athlete and only woman to compete in eight winter games. She holds nine Olympic medals. Good luck Claudia! Read more here.

• Brittany Bowes gave up her 500-meter spot in speedskating to teammate Erin Jackson after she slipped in the trials. Jackson has demonstrated her expertise by being the fastest 500-meter skater during the World Cup Series, but would not make the team unless someone else gave up their spot. Bowes qualified for the 1000 and 1500-meter events. She has been a friend and mentor for the younger Jackson for years but in interviews she revealed that she was doing this for the team and Jackson should be there. Now that is a demonstration of sportspersonship. Read more here.

• This year there were mixed teams. We saw some in the summer games, now watch these events in the winter games:
  - Mixed team snowboard cross
  - Freestyle skiing – mixed team ariels
  - Team ski jumping
  - Mixed short-track speed skating relays

• I hope you got to watch the women. The winter Olympics had a higher percentage of women competing, with more than 45% of the athletes being female.