

Photo Contest to Raise Awareness for Gerontology Program



“Gerontology spans all majors” in the Department of Health and Human Development, said Dawn Tarabochia, assistant professor in community health. Because MSU did not have a gerontology program and there was a need to address issues of aging, Tarabochia applied and received funding in 2012 from the Provost’s Office to create an online gerontology certificate program. The 15 credit program graduated the first students in spring 2016.

“Students take a total of five courses, which includes required and electives, as well as a practicum,” said Tarabochia.

Even though the coursework is online, fellow instructor Dan Koltz provides plenty of opportunities in his classes for active learning and service projects. He partners with Highgate Senior Living so students receive hands-on experiences in working with aging adults, and he looks for community events such as Alzheimer’s Walk for a Cure to get students involved in current issues. Practicum students are placed in an organization that works with older adults based on students’ interests and majors. While the majority of gerontology students are nutrition or community health majors, other majors include psychology, social work, nursing, family and consumer sciences and health and human performance. The gerontology certificate is open to all students in all majors at MSU.

To raise the profile and awareness of the certificate program, this fall Koltz helped organize the first annual photo contest open to all MSU students, faculty, and staff.

“Students have been challenged to submit a photo that tells a story through their experience with aging,” said Koltz.

Contestants can enter in one of two categories: black and white (student); color (student); and color photo (for MSU employees). The photo must have a one to five word description and be accompanied by a one paragraph history, background, or story of the picture. The deadline for submission is January 31, 2017. After judging, cash prizes will be awarded for first, second and third places in the student categories, (no prizes for MSU employees) with a reception for winners on February 23, 2017.

Tarabochia and Koltz hope the photo project and student stories will help inform class content and how that information is presented to students in the program. They also plan to share their research results on the photo contest at the Association for Gerontology in Higher Education Conference in Miami, Fla., in the spring.

For additional information on the photo contest, go

<http://www.montana.edu/hhd/nondegree/gerontology/photocontest.html>

Meet Our New HHD Faculty



Moving from California State University Long Beach where he was an assistant professor for three years, James (Jim) Becker arrived at Montana State University this fall as the new biomechanics faculty member. His teaching duties include teaching an undergraduate course on biomechanics and a graduate course on neuromechanics.

Originally from Massachusetts, Becker earned a bachelor's in geography with a minor in secondary science education from Middlebury College in Vermont. He spent summers hiking, backpacking and leading experiential outdoor education adventures with children, where he became interested in science education. After graduation, he taught high school science for six years and coached track and cross country.

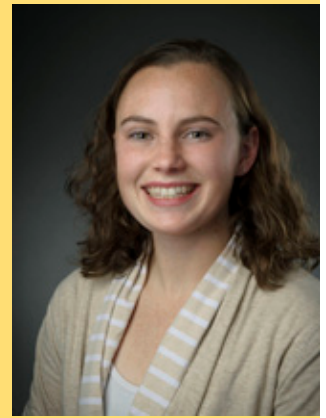
Because of his interest in coaching and the technical and sports medicine aspects of sports, he decided to pursue a masters in human physiology. However, before he was accepted into a master's program, he enrolled at Montana State University as a post bac student to pick up more credits in anatomy and physiology, taking classes from HHD professor Mary Miles and former biomechanics professor Mike Hahn. Hahn encouraged him to check out the University of Oregon because of its strong biomechanics and sports medicine program and its work with Olympic track and field athletes. Originally, Becker wanted to get a master's so he could coach, but he discovered that he really liked the research aspect.

In addition to his doctoral research, during his graduate study at Oregon he built a collaboration between physical therapists, orthopedic physicians and coaches, which provided sports science services and biomechanical evaluation for both competitive and recreational athletes. This work continued at California State University Long Beach, where he was a founding member of their Center for Sport Training and Research. The Center used an interdisciplinary approach with faculty and students from biomechanics, motor learning, exercise physiology, sports medicine, sport psychology and sport nutrition, working collaboratively to provide applied sports science services to both Long Beach State athletes and youth sports' clubs in the Long Beach community. At MSU he would like to duplicate a similar research center that could serve as outreach for the community. At MSU, he focuses on lower extremity biomechanics with emphasis on sports performance, sports medicine and injury prevention.

Becker recently received a College of Education, Health and Human Development seed grant to study load distribution of the foot and metatarsal stress fractures.

He and his wife Hilary, also an instructor in the Department of Health and Human Development, are enjoying Bozeman's community oriented lifestyle and appreciating the many opportunities for outdoor recreation.

The Department of Health and Human Development welcomed Hilary Becker to MSU as a part-time non-tenure track instructor in health and human performance. Becker brings a wealth of teaching experience, having taught anatomy and human physiology at several



universities over the past few years. At MSU, Becker teaches health, anatomy and physiology, and tissue injury and repair for undergraduates in the health and human development classes. Additionally, she coordinates and places students in internships in the Bozeman community or other communities in-state and out-of-state.

From Vergennes, Vermont, Becker chose the University of Oregon for its one-of-a-kind bachelor's degree in human physiology. She also received a master's in human physiology from Oregon, where she had a graduate teaching fellowship to teach human anatomy labs, cadaver dissection courses, and coordinate the undergraduate teaching assistant program for those courses.

She moved to Long Beach, Calif., when her husband Jim Becker, assistant professor of biomechanics at MSU, accepted a professorship with California State University Long Beach. During the three years they were in Long Beach, Hilary taught anatomy and physiology at American University of Health Sciences in Long Beach, at California State University Long Beach and at Long Beach Community College.

She also worked for a private company that supplies human tissue to private companies and public universities for teaching and research. Becker describes herself as a "human dissector" because her job was to prepare, process and ship human tissue, veins, and other anatomy structures. She also prepared cadavers for research and continuing education.

Becker and her husband Jim were happy to move to Montana where they enjoy the change of seasons and the variety of outdoor recreation so close to home.

Meet Our New Education Faculty



Sarah Pennington joined the Department of Education as an assistant professor of curriculum and instruction-- K-8 reading and language arts. Pennington's teaching responsibilities include emergent literacy, literacy across the content area and K-8 language arts methods courses.

After growing up in Virginia, Pennington attended a private college in Kentucky, Berea College, where she earned a bachelor's in English. Founded in pre-Civil War times, Berea College has always been an integrated co-ed college that has never charged tuition, said Pennington.

From Kentucky, this "mountain girl" moved to the University of South Florida in Tampa, where she received a master's in gifted education and a Ph.D. in curriculum and instruction, specializing in literacy studies and educational psychology.

She taught middle school and high school for 10 years in Florida and also worked with K-8 schools to integrate curriculum.

Pennington's research focuses on adolescents' motivation to read and examining how things teachers do in the classroom influences their students' reading. Since she wants to be able to "talk to kids intelligently about books," she reads and listens to a lot of young adult books. Other research interests include looking at teachers' confidence in teaching reading and collaborating on a longitudinal study with the University of South Florida colleagues, working with underprivileged children to determine their confidence in reading.

She and her husband own a self-publishing business which her husband runs. They create teaching materials for math and science and design units that can be used to teach children's novels. In her spare time, Pennington reads, reads, reads, and likes to kayak. While she lived in Florida, she was a fire dancer (like Cirque de Soleil) and performed with a group at events.

HHD Professor Part of One Medicine Grant

Nutrition and exercise science professor Mary Miles is part of the \$1.5 million "One Medicine" grant that is looking into developing new treatments for inflammatory and infectious disorders in humans and animals. Working with Seth Walk, assistant professor in microbiology and immunology, and Carl Yeoman, assistant professor in animal and range sciences, Miles is investigating the influence of gut microbiomes on inflammation in animals and humans.

Testing human subjects, Miles and her lab group, headed by second year graduate students Stephanie Wilson and Jessica Burgess, are measuring a number of inflammation variables, including a high fat meal challenge. Basically, 20 to 30 subjects are fed a high fat meal to see if microbiomes in the gut differ between people with high inflammation and those with lower inflammation. In two test groups, participants are checked at rest before a high fat meal to see if inflammation levels in their blood are low or high. After the meal, the team checks to see if levels have changed. They are finding that in individuals with already high inflammation, the level continues to be high after the meal. In individuals with low inflammation, after a high fat meal, the inflammation increases.

As a follow up, Miles, Walk and Yeoman will conduct an analysis to see how microbiomes from low and high inflammation participants differ. They will also transplant them into germ-free, sterile mice to see if the inflammation transfers with the microbiome.

"If inflammation does transfer," said Miles, "then we can look at strategies in diet and exercise to lower both inflammation and the diseases such as Type 2 diabetes and atherosclerosis that are driven by inflammation."

One Medicine is one of the Montana Research Initiative grants awarded from \$15 million set up by the 2015 legislature to serve as seed money to advance research that contributes to Montana's economy. MSU received \$9 million of the grant funding. The principal investigator for One Medicine is Jovanka Voyich-Kane, associate professor in the Department of Microbiology and Immunology at MSU.

Grant Studies Feasibility of Computerized Cognitive Behavioral Therapy



Mark Schure, assistant professor in community health, received a \$139,101 INBRE grant to study the feasibility of using an interactive computer program to address mental health issues in rural Montana. Along with co-PI Sandy Bailey, professor in family and consumer sciences, Schure received funding for one year to better understand mental health needs and resources available in rural communities and to discern if an interactive computerized cognitive behavior therapy program might be a feasible option for persons in such communities. He is collaborating with MSU's Center for Mental Health Research and Recovery and with Bill Bryan of One Montana.

Working with MSU county Extension agents and other community members to recruit participants, the team has been conducting focus groups throughout many of Montana's small communities.

"We're trying to see what the mental health needs in rural communities are and if a computerized mental health program will be accepted," said Schure. "We also want to find out how people talk about mental health. A lot of people just don't talk about it because of its stigmatization."

Schure is demonstrating a new computerized cognitive behavior therapy program called Thrive, developed by Dr. John Greist and under propriety of Waypoint Health Innovations. The company's website states that Thrive "is an online program for depression that distills best practices from cognitive behavior therapy (CBT) and delivers them through a rich, structured and guided digital curriculum." During the focus groups, Schure and his colleagues demonstrate the components of the program and collect feedback on people's impressions, too see how it might be tailored to rural Montana and promoted to the community, and how to recruit participants for part two of the study.

Schure said the computerized program is tailored for all adults and can give people tools for life, not just those with depression.

"The program can teach people how to improve communication, develop more realistic thought processes and introduce hobbies and activities to improve well-being," he said.

Some of the issues the program faces are areas of Montana without broad band, stigmatization, and lack of computer skills in older adults.

The team hopes to pilot the Thrive program starting next year with the goal of analyzing the effectiveness of the program. The overall aim of cognitive behavior therapy is to help people "act and think the way they want to feel."

Ann Ellsworth, professor of reading and language arts, received the Montana Outstanding Reading Teacher award for 2016 from the Montana State Reading Council at their annual conference in the fall. Ellsworth said it was "very humbling" to receive the award, which usually goes to a classroom teacher.



Phi U Honorary Society Wins First Place in National Competition



MSU's oldest honorary society, Phi Upsilon Omicron (Phi U), was awarded first place for their professional project in a national competition for 2016. The project focused on raising awareness of the number and needs of homeless youth in Bozeman Public Schools. Through showing the movie "American Winter," a movie about the hardships families faced in the recent recession, and collecting 850 donated items and \$216 in cash, members of Phi U felt their project had a definite impact on students and community members who did not realize that 5% of students in Bozeman are homeless.

Sandy Osborne, family and consumer sciences faculty and Phi U advisor, said the members submitted written ideas for the professional project and spread them out on a table. Then they voted on the projects, and the top three were discussed and voted on again for the final project idea.

Sierra Smith, this year's president, said they formed committees for marketing, budgeting, volunteering, and outreach.

"We hung posters around campus and in residence halls, placed an ad in the "Exponent," and we sat at a table in the Union Market area of the SUB to reach out to students," said Smith, a community health major.

Smith and fellow Phi U member, Jessica Perrault, also stood outside Walmart with empty shopping carts collecting for donations. They were amazed at the generosity and caring spirit of the Bozeman community.

As one woman was leaving the store, she pulled out some change from her pocket and told Smith and Perrault that was all the money she had left from her shopping trip and she hoped it would make a difference.

"It was a very humbling moment for me that I will remember always," said Smith.

In September, Lindsay Stickel, vice-president and family and consumer science education major from Terry, Mont., traveled with Osborne to the national conclave in Oklahoma City to receive the first place award for "Creating Warmth for our Youth Legacy by Fostering the Light of the Home Tradition."

"It was empowering to see women in their seventies, eighties, and even nineties attending conclave because of their pride and passion for family and consumer sciences and related fields," said Stickel. "It was inspiring to reflect on how those women went to college in a time in which women attending universities was still not commonly accepted, and family and consumer sciences and related fields were included in the limited majors they could study."

Founded in 1917 at MSU, Phi U will be celebrating its 100th anniversary on campus on July 27-28, 2017, with an open house and tours of Herrick Hall, the campus and more. Working with the MSU Alumni Foundation, over 800 Phi U alumni have been invited to attend the celebration. Nationally, Phi U has over 98,000 members in 54 collegiate chapters in four regions, as well as 19 alumni chapters and the new electronic chapter.



Sandy Osborne (left) and Lindsay Stickel (center) received first place award at the national convention.

HHD Professor Studies Interactive Technology and Its Perceived Influence on Young Adults



Walk across campus on any given day and you will see students checking their phones. Walk through any building and you will see students sitting at tables staring at computers or tablets. According to Mitch Vaterlaus, assistant professor of family and consumer sciences, “young adults between the ages of 18 to 25 spend more time with media and technology daily than any other activity.” They can spend up to 11 to 12 hours a day with technology and frequently use social media to facilitate social interaction.

Vaterlaus has published extensively in journals about the perceived influence of interactive technology (e.g., social media, texting, video chat, email) on young adult behaviors. Two recent articles focused on young adults’ perceptions of interactive technology and health behaviors (i.e., diet and exercise). Using data collected through eight focus groups and four individual interviews, Vaterlaus and a graduate students, Emily Patten from the University of Nebraska Kearney and Cesia Roche from Kansas State University, identified emerging themes: social media can be both a barrier and a motivator for exercise; social media can help expand food choices through creating access to a variety of recipes and provide a venue for showcasing food they prepare and eat; but it can also distract them from making healthy food choices.

In another health related social media study, Vaterlaus explored time spent with interactive technology and the relationship to body mass index (BMI). Prior to this study, there were no studies that examined the association between BMI and interactive technologies.

The study examined 802 young adults who reported height, weight and weekly time spent with interactive technology.

“Young adults with higher BMIs reported spending more time using interactive technology,” said Vaterlaus.

Vaterlaus received a seed grant from the College of Education, Health and Human Development to expand his research in examining the influence of technology on college students’ diet and exercise through the first year of college.

Technology is changing so fast with the development of new technology, noted Vaterlaus, so this is an emerging and rapidly evolving area of research.

Also collaborating on this project was Jimmy Young, assistant professor at California State University San Marcos.

HHD Counseling Students Run for Life

Members of Chi Sigma Iota, the MSU counseling honorary society, participated in Run for Your Life, a Bozeman community event to raise awareness of suicide intervention and prevention in Montana and support the local 24 hour crisis and suicide hotline. Chi Sigma Iota president, Emily Hilliard from Havre, Mont., said 18 members, including family and friends, joined the running event and dressed up as characters from the movie “Inside Out.”

Faculty advisor, Cristen Wathen, said Montana currently is number one in the nation for suicides and as counselors-in-training, students chose to support the event, which raised over \$40,000.



MSU/EHHD Host International Education Conference

The first International Conference on Learning, Teaching, and Student Success (ICLTSS) was held on the campus of MSU in November with over 150 educators and other stakeholders from 15 countries attending. According to Interim Dean Alison Harmon, in addition to the College of EHHD being a sponsor, many faculty from the college participated in the event either as attendees or presenters. The three-day conference brought together academic researchers, faculty in higher education, school administrators, educators and students to share research and best practices to bridge organizational and communication gaps between K-12 and higher education and student success. Several keynote speakers spoke on topics such as creating a school climate where every student graduates, how emotion and sleep affect learning and the brain, and adaptive mindset for student success.



The conference is part of the mission of Thomas Lechner, an MSU alumnus whose Bozeman-based non-profit [21st Century Academic Forum](#) works to bring together researchers and educators to help shape educational policy and practices and prepare students for the workforce and the broader world. Lechner said the theme of the Bozeman conference was “we’re all in this together.”

After spending most of his adult life teaching overseas, Lechner returned to Montana and founded the non-profit organization three years ago. He began having conversations with Kregg Aytes, Dean of the Jake Jabs College of Business and Entrepreneurship, and Dean Harmon about focusing on student success by connecting K-12 education and higher education.

“ICLTSS had a visible impact on attendees,” said Harmon. “Incredible speakers and presenters from many corners of world came together to share research, success strategies, and offer excellent insights into current practices in teaching, learning, and student success,” said Harmon.

She also noted that to have Montana State host the ICLTSS conference was a great honor and opportunity to showcase the work of MSU faculty for local and international scholars, to share resources, and to learn from each other.

21st Century Academic Forum also hosted conferences in 2016 in other locations, including the University of California Berkeley, Harvard University, and Dubai, United Arab Emirates.



Megan Peterson with mentor Kalli Decker

Erin Steorts explains her research to attendees.



Five EHHD students, who are McNair Scholars, shared their research in a poster presentation in early December. Students and their mentors were Amy Fiel, family and consumer sciences (Mitch Vaterlaus), Jamie Ritter, health and human performance (Mary Miles), Megan Peterson, family and consumer sciences (Kalli Decker) Wade Robinson, health and human performance (Rob Wilson) and Erin Steorts, elementary education (Fenqjen Luo).