Welcome to the Health and Kinesiology Winter 2019 newsletter. As I write, the normal traffic around Lambert has quieted down as students focus the efforts towards success on Final Exams. There are many serious faces in the lobby study area as students prepare for the last academic challenges of 2018.

Among the many highlights in the current newsletter, you will read about our newest faculty members, an impressive group of hard working professionals dedicated to advancing our discovery, learning and engagement missions. You will learn about our 1st Annual HK Celebration Week - where we celebrated our outstanding students and brought our disciplines to life in the Lambert lobby. Finally, we need your helping in identifying worthy recipients of our HK Distinctive Service Award. This HK award was started in conjunction with our Department’s 100th Anniversary a few years ago to ensure we recognize the outstanding contributions so many of you have made.

Please consider sending us a note with updates, accomplishments, comments, or anything else you would like to share with us at HK@purdue.edu. And as always, please visit us in historic Lambert Gymnasium and Fieldhouse the next time you are in West Lafayette. To find the latest in what is happening in Health and Kinesiology, visit us on the Internet at www.purdue.edu/hhs/hk. Thank you for your continued support of HK and Purdue.

Tim
Academic Distinguished Scholar Awards

Football
Jacob Herr Jr. - Movement & Sport Sciences
Markus Bailey - Movement & Sport Sciences
Derrick Barnes - Kinesiology
Antonio Blackmon - Movement & Sport Sciences

Women's Track & Field/Cross Country
Anna Dolce Sr. - Movement & Sport Sciences
Jenna Halderman Jr. - Applied Exercise & Health
Micaela Hazlewood Sr. - Movement & Sport Sciences/Psychological Sciences
Reagan Lear Sr. - Movement & Sport Sciences

Wrestling
Ben Thornton Sr. - Movement & Sport Sciences

2019 Health & Kinesiology Department Distinctive Service Award Nominations

Do you know a Purdue Health & Kinesiology Alumni that has made a difference? We are taking nominations for the 2019 HK Distinctive Service Award. These awards honor Purdue faculty, staff, and alumni for their influential contributions in fields represented by Health & Kinesiology. Please email your candidate’s name and their story to Ann Hazelgrove, HK Department Secretary at ahazelg@purdue.edu.

HK Graduate Students

Spring 2018 Graduates:
Carter Bulington, MS Recreation & Sport Management
Riley Hicks, MS Recreation & Sport Management
Ryanne Paige, MS Athletic Training Education Administration
Caroline Popp, MS Recreation & Sport Management
Kaitlin Posey, MS Athletic Training Education Administration
Tyler Sandmann, MS Recreation & Sport Management
Austin Shelton, MS Recreation & Sport Management
Traci Smith, MS Exercise Physiology

Summer 2018 Graduates:
Ron Garner, PhD Exercise Physiology
Zachary Hettinger, MS Exercise Physiology
Christopher Kargl, MS Exercise Physiology
Jonathan Spencer, MS Sport and Exercise Psychology
The 500 Festival named Natalie Murdock of Fishers as the 2018 500 Festival Queen Scholar Saturday morning.

The announcement was made at the annual 500 Festival Breakfast at the Brickyard, presented by Midwestern Engineers, Inc.

Murdock is a sophomore at Purdue University majoring in Public Health with a concentration in Social and Behavioral Sciences and a Certificate in Entrepreneurship and Innovation.

She is one of 33 young women who were selected for the 2018 500 Festival Princess Program. The 33 princesses serve as ambassadors for the 500 Festival.

As 500 Festival Queen Scholar, Murdock is the recipient of an additional $1,553 educational scholarship from Fifth Third Bank. In addition, she will wear the one-of-a-kind 500 Festival Queen’s crown at 500 Festival events and the Indianapolis 500, and will make a variety of appearances throughout the week and participate in the Indianapolis 500 pre-race and Victory Circle celebrations.

She will continue to represent the 500 Festival at various functions throughout the year.

Murdock is a graduate of University High School of Indiana and is the daughter of Anthony and Latrece Murdock.

The 2018 500 Festival Princesses represent 14 Indiana colleges and universities and 21 cities and towns across the state. With a cumulative grade point average of 3.72, this year’s 500 Festival Princesses were selected from hundreds of applicants based on communication skills, academic performance and community involvement.

Attending the 2019 American College of Sports Medicine (ACSM) in Orlando?

Network with current and former Boilermakers as well as colleagues across the Big Ten schools at the Big Ten Kinesiology Student and Alumni Reception on Wednesday May 29, 2019 from 600-730p in the Rosen Centre Hotel, Room TBD. Final room assignment will be available on the ACSM Annual Meeting website and Mobile App. Hor d’oeuvre will be served along with a cash bar.
A new Centers for Disease Control (CDC) report on Americans’ physical inactivity suggests Hoosiers in particular should be doing more. Data from the CDC’s National Center for Health Statistics show 23 percent of Americans meet federal government guidelines for aerobic and muscle-strengthening activities, and in Indiana the numbers drop to 15 percent, ranking the state 47th nationally. Jorge Banda, Assistant Professor of Health and Kinesiology at Purdue University West Lafayette, told the Region News Team that there seems to be a misconception that you need to go to a gym, lift weights, hop on a treadmill and/or be active for long periods of time, when in reality you can get a lot of health benefits from bicycling, gardening, tennis, and simply walking briskly in your neighborhood, all going a long way toward getting in 150 minutes of moderate or vigorous activity every week. Purdue experts note that while 23 percent surpass the Department of Health and Human Services target goal, 45 percent of Americans reach neither the 150 minutes of moderate aerobic activity per week goal nor the goal of at least two days of muscle strengthening per week.

You can hear more at News Audio on Demand here at our website and via the News Audio on Demand link at Regionnewsteam-dot-com.

Public Health Student Receives Scholarship For Travel to Portugal.

Public Health student, Martasia Carter received a monetary scholarship from the International Association for Communication in Healthcare to support her conference travels to Porto, Portugal in September.

Martasia is co-author on the following paper/presentation: DeMaria AL, Meier S, Carter M. (September 2018). “And understand I am a person and not just a number:” Health care decision making among Italian women in the 16th International Conference on Communication in Healthcare (ICCH). Porto, Portugal.
Americans, and Indiana residents in particular, are not getting enough exercise, according to a new report from the Centers for Disease Control and Prevention. The new numbers from the CDC’s National Center for Health Statistics show that only 23 percent of American adults meet the federal government guidelines for aerobic and muscle-strengthening activities. It is much worse in Indiana. Only 15 percent of Hoosiers meet the requirements, which ranks 47th nationally.

Tim Gavin, a Purdue exercise physiology professor, says the numbers show a country in crisis when it comes to physical fitness.

“Meeting recommended levels of exercise is a proven, cost-effective way to prevent many chronic illnesses such as heart disease, diabetes and cancer,” said Gavin, head of the Department of Health and Kinesiology. “This public health crisis can only be overcome through concerted efforts focused on increasing physical activity in our communities.”

Cassandra Ledman, a clinical assistant professor, expresses concern for those on the low end of the exercise spectrum.

“We are doing ourselves and our community a disservice if we settle for 77 percent of our nation not getting enough physical activity and 24 percent not getting any,” she said. “Moving more and moving often is essential for a longer more fulfilling life.”

Gavin, Ledman and other Purdue health and kinesiology experts are available to discuss Americans and exercise. They can talk about:

- Benefits of physical activity.
- Adverse effects of physical inactivity.
- Setting up a fitness regimen.
- Ways to promote physical activity in communities.

While 23 percent surpass the Department of Health and Human Services target goal, 45 percent of Americans reach neither the 150 minutes of moderate aerobic activity per week goal nor the goal of at least two days of muscle strengthening per week.

A link to the CDC report is available here.

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**Sources:** Tim Gavin, 765-494-3179, gavin1@purdue.edu
Cassandra Ledman, 765-494-3159, cledman@purdue.edu
Dr. Shirley Rietdyk gave the opening keynote lecture at the IX Congresso Brasileiro de Comportamento Motor (IX Brazilian Congress of Motor Behavior) on August 15 in Bauru, Brazil. The title of Dr. Rietdyk’s talk was “Identifying the role of the task, the environment, and the individual in shaping locomotor behavior.”

Health and Kinesiology researchers JEFFREY HADDAD and SHIRLEY RIETDYK examine problems with balance and movement in elderly people. They work to create interventions to help maintain balance and establish environmental improvements to reduce the risk for falls.

HK faculty Jeff Haddad and Shirley Rietdyk’s research with CERREBRAL is featured in the latest issue of the HHS Life 360 Magazine. See HHS LIFE 360 Magazine here: https://www.purdue.edu/hhs/life360/2018-fall/sustaining-the-simple-joys-of-life.html

As part of the 150 Years of Giant Leaps celebration, HK’s Tim Gavin and Angela Abbott spoke at the HHS Learn & Lunch series in November.

Gavin and Abbott along with College of Health and Human Sciences Extension staff have focused their efforts on two Indiana counties with over 40% adult obesity rates and with a combined population of approximately 90,000 residents. In collaboration with local partners, the goal of the grant was to build sustainable, health oriented coalitions focused on identifying areas of community need and implementing evidence-based strategies to increase access to healthy foods and opportunities for physical activity.
Health & Kinesiology Welcomes New Faculty

**Introducing Daniel Hirai**

Daniel Hirai joined the Purdue HK Department as an assistant professor in the Fall of 2018. Daniel earned a BS in Physical Therapy and an MS in Kinesiology from Londrina State University, Brazil. He has a PhD in Physiology from Kansas State University and completed post-doctoral training in Medicine at Queen’s University, Canada and Kinesiology at Kansas State University. Daniel’s research on the skeletal muscle microcirculation explores new interventions to improve functional capacity in health and patients with cardiopulmonary diseases. He utilizes a “bench-to-bedside” approach with investigations in rodent models and patients with heart failure.

**Introducing Shih-Chun (Alvin) Kao**

Alvin Kao joined the Department of Health and Kinesiology at Purdue as an assistant professor in the fall of 2018. Alvin earned his Bachelor and Master degrees in Physical Education from National Kaohsiung Normal University and National Taiwan Normal University, a PhD in Kinesiology and Community Health from the University of Illinois at Urbana-Champaign, and he completed his postdoctoral training in the Department of Psychology and Center for Cognitive and Brain Health at Northeastern University. Alvin’s general research interests focus on the relationship between physical activity and cognitive health across lifespan, with an emphasis on the acute and chronic effects of exercise on childhood executive function, memory, and academic achievement as well as the neuroelectric underpinnings of these high-order cognitive processes using electroencephalogram.

**Introducing Monica Kasting**

Monica Kasting is an assistant professor in the Department of Health & Kinesiology. She earned her bachelor’s degree in Biology from Purdue University and her PhD in Epidemiology from the IU Fairbanks School of Public Health in Indianapolis. Prior to starting her faculty position at Purdue, Dr. Kasting completed a postdoctoral fellowship in Behavioral Oncology at the Moffitt Cancer Center in Tampa, Florida. Her interdisciplinary program of research includes social epidemiology, behavioral oncology, and mixed methods to examine preventive health behaviors. Specifically, she focuses on prevention of infection-related cancers through vaccination and screening.
**HK Publications**


Berry DC, **Popp JK**. Athletic training students demonstrate supplemental oxygen administration skill decay, but retain knowledge over six months. Internet Journal of Allied Health Sciences and Practice. 2018;16(3), Article 11.


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**Our Newest HK Grants**

**An Evaluation of Project Swaddle, the Crawfordsville Community Paramedicine Home Visiting Program**, Laura Schwab Reese.

$24,998

Source: Indiana Clinical and Translational Sciences Institute

Role: PI (Co-PI: Miller, R)

**Evaluating Health Education Extension Services, Laura Schwab Reese**

$1,740

Source: Purdue Health and Human Sciences Extension

Role: PI
Opioid Overdoses, Depression Linked

- A 1 percent increase in statewide depression diagnoses was associated with a 26 percent increase in opioid-related deaths.
- Rates of opioid-related deaths rose substantially in 2014 and 2015.
- The states with the highest rates of opioid-related deaths often have a shortage of mental health care professionals.

The link between mental health disorders and substance abuse is well-documented. Nearly one in 12 adults in the U.S. is depressed, and opioid-related deaths are skyrocketing. As these numbers continue to climb, some mental health professionals have started to wonder if there’s a link between the two.

According to a new study published in Social Psychiatry and Psychiatric Epidemiology, the link is strong.

“For every additional 1 percent of the population that has a depression diagnosis, we see between a 25 and 35 percent increase in the number of opioid overdose deaths,” said Laura Schwab Reese, an assistant professor of health and kinesiology at Purdue University, who led the study. “We thought maybe suicide was driving this, but we sectioned out unintentional overdose and found that the relationship continued.”

More than 72,000 Americans died of drug overdoses in 2017, mostly from opioids. The Trump administration declared the crisis a public health emergency in October 2017, but the end is still out of sight. This, coupled with rising rates of depression and a lack of access to mental health care for many, is proving to be deadly.

Schwab Reese and Madeline Foley, a student at Riverdale Country School, analyzed data from the Centers for Disease Control and Prevention on opioid-related deaths from 2011 to 2015. Rates of opioid-related deaths were generally stable from 2011 to 2013, but increased substantially in the two following years.

Data on depression was collected by a telephone survey of more than 400,000 people across the country. About 19 percent of respondents reported a depression diagnosis in 2015 – up from 17.5 percent in 2011.

“‘We know from prior literature that people who are depressed are more likely to be prescribed opioids, but also that people who are prescribed opioids are more likely to become depressed,’ said Schwab Reese. ‘We need to recognize that this is probably a bidirectional relationship.’

The solution, said Schwab Reese, is twofold. Doctors should screen for depression and discuss the risk with patients before prescribing opioids. Because nearly two-thirds of opioid overdoses involve prescription medications, doctors could play a significant role in preventing opioid misuse and depression.

Second, Americans need better access to mental health care.

More than 40 million Americans have a mental health condition, and more than half of them don’t receive treatment. In West Virginia, the state with the highest number of opioid-related deaths in 2015, nearly a million people live in areas with a shortage of mental health care providers. The U.S. would need an additional 3,000 providers to meet American’s mental health needs, according to another study.

“We can’t say this person had depression and that led to an overdose – this was a population-level analysis,” said Schwab Reese. “To me, that means we need a population-level response.”

The work aligns with Purdue’s Giant Leaps celebration, acknowledging the university’s global advancements made in health, longevity and quality of life as part of Purdue’s 150th anniversary. This is one of the four themes of the yearlong celebration’s Ideas Festival, designed to showcase Purdue as an intellectual center solving real-world issues.

Writer: Kayla Zacharias, 765-494-9318, kzachar@purdue.edu
Source: Laura Schwab Reese, 765-496-6723, lschwabr@purdue.edu
The Department of Health and Kinesiology received the 2018 Arthur G. Hansen Award recognizing the department’s support of both their own and other Purdue retirees. (Pictured are Don Gentry, Professor Emeritus Larry Leverenz—the nominator—and Dr. Timothy Gavin, department head.)

Dr. Gerry Hyner Inducted into Purdue University’s Book of Great Teachers

Dr. Hyner is one of forty-five Purdue professors who were honored on Dec. 11th when they were inducted into the University’s Book of Great Teachers, which honors outstanding teaching faculty who have demonstrated sustained excellence in the classroom.

2018 Fall Charles Cowell Lecture Speaker

Ximena Arriaga, PhD presented “The Invisible Harm of Partner Aggression”

Ximena Arriaga, PhD, is a Professor in the Department of Psychological Sciences and University Scholar at Purdue University was the Charles Cowell Lecture speaker this October. She spoke of partner aggression, how it is extremely common, and more harmful than may be widely recognized.
Gabby Quintana and Col Anderson help with the activities on Monday’s Public Health Day. Col and Gabby are both seniors and work with the HK Professor Yumary Ruiz Positive Youth Development research group. Col is from Montville, New Jersey, about 40 minutes from New York city. He plans to go to dental school after graduation. Col’s mother came to Purdue as a PhD student from Korea and helped influence his decision to find a school out of New York.

Gabby is from the San Francisco Bay area and transferred from San Jose State where she was a cheerleader. She wanted to find a school away from where she was raised. She came to Purdue for the research opportunities and liked Health & Kinesiology’s community-based health studies.

Jim Pifer, a Health & Kinesiology senior in Movement and Sport Science, writes on the Public Health wall. Jim is from Warsaw, Indiana and will go on to get his occupational therapy Master’s degree after he graduates this May.

Anna Tamulonis presents students with resources to unplug and distress at the “Mindfulness Room” located at the CoRec. Anna is a Nursing Grad Student from Tinley Park, Illinois, she completed her undergraduate nursing degree here at Purdue.
Get Up & Move Day!

Zoe O'Hare, Angelica Scanland, and Samantha Cavanaugh, juniors in HK’s Applied Exercise and Science, test their agility on balance boards during Tuesday’s Get Up & Move Day! Zoe is from Ft. Wayne, she originally studied Pharmacy and chose to move to APEX in order to become an occupational therapist. Angelica comes from Avon, Indiana and chose APEX because “you can do more with that degree.” Samantha hails from Valparaiso and always knew she would attend Purdue and plans to be a physical therapist in the future.

Everybody Move!

The HK classes join together to participate in a group exercise session!

Athletic Training Day!

Ready, Set, Tape! HK’s First Annual Ankle Taping Contest was held in the Lambert lobby where the ankles of Jeff Stein, Doug Boersma, and Dennis Miller were taped for the fastest time by HK Athletic Training students. Matt Parke, a Junior from Aiea, Hawaii was the winner with a time of 51 seconds. His Dad knew several of the AT faculty and recommended Purdue, he plans to continue his education with a graduate program.

Senior, Courtney Zickmund came in second with a time of 72 seconds. Courtney is from Windfall, Indiana. Her family are Purdue alumni. It was only natural that she attended Purdue. Courtney would like to work with Team USA Olympics in the future.

Sophomore Dan Burkhard came in third with a time of 76 seconds. Dan is from Carmel, Indiana and came to Purdue because of the exceptional AT program. He will pursue a Master’s degree in Athletic Training after graduation.