

# CENTER FOR Aging & Translational Research

## SUMMER 2017 NEWSBLAST



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# A MESSAGE FROM OUR DIRECTOR



Welcome to the Summer 2017 NewsBlast.

Another academic year has passed, and the UWM campus is coming alive with new and returning student faces eager to learn and engage. Thinking of this, and in reflection of the Center's mission and goals, it is pleasing and inspiring to read the student spotlight of Amal Ali-Al-Ghassani, as she puts her newly acquired knowledge to a purpose of improving the health of older adults in Oman. The necessity to expand critical knowledge specific to older adults and increase the number of working professionals in support of our aging society continues to escalate and, as such, the Center's overall education efforts will continue to grow.

Within this edition we highlight an excellent cadre of community-driven professional education opportunities, and make special note to the multiple awards given to the new undergraduate class - Aged to Perfection: An Introduction to Aging, a class that is part of the Undergraduate Certificate in Healthy Aging.

Faculty and students continue to add to scientific and translational knowledge, and the Health Research Symposium highlights some of this excellent work and achievement. Please be sure to read how the Center Scientists have been in the news. These reports truly emphasize the breadth and diversity of the work being conducted.

We greatly appreciate any feedback and suggestions you may have, and thank you in advance for taking the time to read this Summer edition.

A handwritten signature in blue ink that reads "S. Strath".

Scott Strath, PhD, FACSM  
CATR Director

## ► 2017-2018 Professional Development offerings announced

We've finalized another exciting season of Professional Development offerings! Continuing Education Hours (CEHs) are available to eligible professionals. Visit our [Professional Development webpage](#) for full course descriptions, registration details, printer-friendly season-at-a-glance, and much more.

### **Standing Together to Prevent Falls: Strategies for Fall Prevention in Older Adults**

Friday, September 22, 2017

9:00-12:00

Saint John's On The Lake

Instructor: Nancy Shea, RPh, BCGP

### **Activities and Dementia Care: Engaging with Rhythm**

Friday, October 6, 2017

9:00-12:00

Brookfield Rehabilitation

Instructors: Diane Baughn, MA & Tom Gill, BS

### **A Delicate Balance: Yoga's Effect on Fall Prevention**

Friday, October 20, 2017

8:30-12:30

Milwaukee Catholic Home

Instructor: Paul Mross, E-200 RYT, LMT

### **As Life Wanes: Hospice Basics and the Ethical Challenges at End of Life**

Friday, December 1, 2017

8:30-12:30

Alzheimer's Association

Instructors: Megan Federighe, BA & Dimitri Mills, PhD

### **Caring, Living, and Laughing: Helping Caregivers Have a Life While Caring**

Friday, January 19, 2018

9:00-12:00

Alzheimer's Association

Instructors: Diane Baughn, BA & Lynda Markut, MS

### **Expanding Awareness: Mindfulness-Based Techniques for Aging Well**

Friday, February 9, 2018

8:30-12:30

Milwaukee Catholic Home

Instructor: Marietta Pucillo, CYT, RYT



### **LGBTQ+ Populations and Aging**

Friday, March 2, 2018

9:00-12:00

Saint John's On The Lake

Instructors: Jen Murray, BA & Jeanette Martin, MAEd

### **Supporting Caregivers: The Art of Connection**

Friday, April 20, 2018

9:00-12:00

Jewish Home and Care Center

Instructors: Diane Baughn, MA & Lori Stahl, BM

### **Aging Well: Yoga in Later Life to Connect the Mind, Body, and Spirit**

Friday, May 11, 2018

8:30-12:30

Alzheimer's Association

Instructor: Paul Mross, E-200 RYT, LMT

### **Healing or Harming: Prescription Drug Use in Older Adults**

Friday, June 8, 2018

8:30-12:30

Brookfield Rehabilitation

Instructor: Nancy Shea, RPh, BCGP

Contact Director of Education and Programming [Rachelle Alioto](#) with any questions: (414) 229-7316.

## ► New CATR course turns heads at national conferences and beyond



CATR's Director of Education and Programming, **Rachelle Alioto**, has been working for months with Donna Spars (Vice President) and MaryBeth Peterson (resident) at Saint John's On The Lake to offer an intergenerational learning environment in our new course **Aged to Perfection: An Introduction to Aging** where students spend the class period interacting with residents at Saint John's.

The three presented this innovative new course at two conferences this spring, and received two awards for their work.

*Donna Spars (Saint John's On The Lake), Rachelle Alioto (UWM Center for Aging & Translational Research), and MaryBeth Peterson (Saint John's On The Lake) after presenting in Chicago this spring.*

### PRESENTATIONS

#### **Forty-third Annual Meeting and Educational Leadership Conference**

Association for Gerontology in Higher Education  
Miami, Florida; March 2017

#### **Aging in America Conference**

American Society on Aging  
Chicago, Illinois; March 2017

### AWARDS

#### **2017 Promising Practices Award**

Mather Lifeways Institute on Aging; March 2017  
Recognizes new and innovative approaches in aging well.

#### **2017 Innovation Award**

LeadingAge; July 2017  
Recognizes programs and services that are models of innovation and excellence in aging.

*“This unique collaboration drew on the skills and experience of residents, who helped create the course curriculum and led the classes; playing an active role in contributing, rather than serving as subjects of study or passive learners.”*

-Mather Lifeways of Aged to Perfection

## ► CATR students and staff recognized at HBSSW Awards Ceremony



The Center for Aging & Translational Research had a big presence at the Helen Bader School of Social Welfare Awards Ceremony on Friday, May 19, 2017.

(Above, fourth from left) **Lydia LaGue**, CATR Program Associate, was awarded a Random Act of Kindness award.

(Right) Three [Helen Bader Age and Community Scholarships](#) were awarded to students enrolled in CATR's Graduate Certificate in Applied Gerontology. The winners are (left to right) **Brittany Heintz**, pursuing her PhD in Kinesiology; **Austin Holik**, pursuing his Master's in Social Work; and **Jeffrey Peterson**, pursuing his PhD in Kinesiology.

(Bottom left) **Austin Holik**, a student enrolled in our Graduate Certificate for Applied Gerontology, was awarded the Irene Frye Scholarship for Gerontology.

(Bottom right) **Melinda Kavanaugh, PhD LCSW**, a Center Scientist, was awarded the Helen Bader School of Social Welfare Excellence in Research Award for her work with young caregivers.

[Click here to see the full list of award-winners.](#)



Photos: Troye Fox, courtesy of HBSSW.

## ► Student Spotlight: Amal Ali-Al-Ghassani

Meet Amal! Amal recently completed our Certificate in Healthy Aging, entirely while living in Oman.

We interviewed her about the field of aging in Oman and how she plans to use the knowledge gained in our program to improve lives there.

### **Why did you choose to pursue a certificate in aging studies?**

*The area of aging became a topic of interest for me when working with nursing students and as a volunteer to provide social support for families who were caring for older adults, especially those with dementia. It was often observed by me and verbalized by caregivers, including family members and community health nurses, that caring for older adults often makes caregiving extremely challenging. This is worsened by a lack of understanding of the challenges older adults face, and the factors that contribute to those challenges.*

*Most of all, my inspiration had always been my father-in-law, who was an influential leader in the community before he suffered a stroke in 2013 and required full assistance with his daily living activities. He was 96 years old when it all started.*

*I concluded that, as a caregiver, I should be able to not only understand older adults' behaviors, but also learn to decode the communication signals to meet their needs more effectively. I was convinced that pursuing this certificate would further enlighten me in the field of aging and prepare me with adequate knowledge and understanding to provide effective care for older adults in Oman.*

### **How do you intend to use your certificate to impact lives in Oman?**

*There are currently no nursing home facilities for older citizens in Oman, and the government does not encourage the establishment of such facilities because they believe that the community will be able to take care of its older adult population, as religion and tradition emphasize.*

*I am exploring the idea to construct an institute on aging that aims to bring together the expertise of researchers, educators, scholars, and clinicians with leading local, national, and international partners to mutually develop and provide better care, better systems, and better resources through qualified training and research for older adults and their caregivers in Oman.*

*I am very optimistic that earning this certificate along with my PhD is the right step toward achieving my goal to improve the field of aging and the health of older adults in Oman.*

[Read the full interview with Amal on the Certificate Alumni Spotlight page of our website.](#)



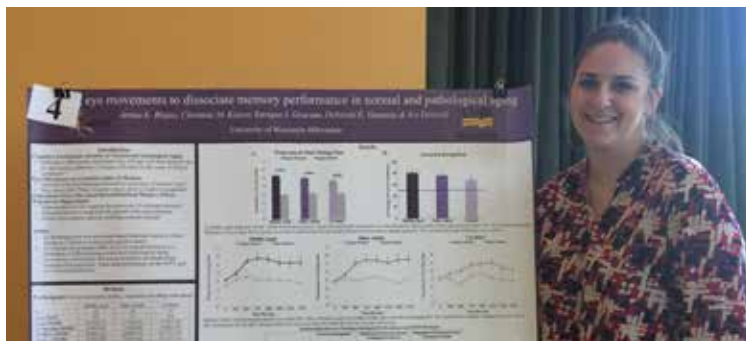
## ► Seven CATR students present at 2017 Health Research Symposium



Presenters (from left): Martin Mikell, Omid Jahanian, Linda Wesp, Gabriel Serafin, Anna Luterbach, Kristi Lenz, Katherine Reichel, Noelle Serketich, Gretchen Natter, Yiqing Zhao, Elise Olson, and Rachel Lecher. Photo: Troye Fox.

The [Health Research Symposium](#) on May 5, 2017 was hosted by the College of Health Sciences, the College of Nursing, and the Joseph Zilber School of Public Health. It offered an opportunity for graduate and undergraduate students to introduce their research projects and showcase their work in a public setting before their peers, professors, and the community.

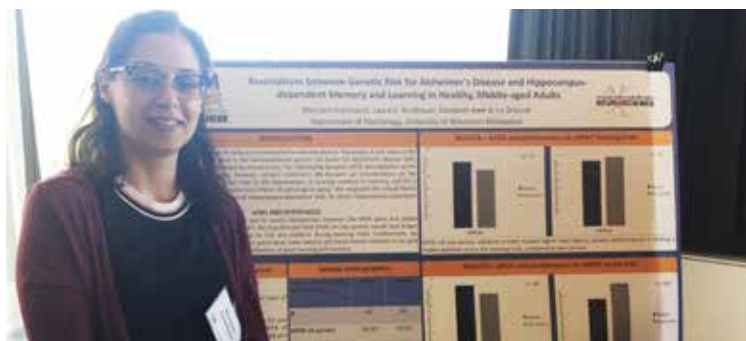
The Center for Aging & Translational Research is proud to highlight the work of the following seven students who are conducting research under the direction of our CATR Scientists.



**Jenna Blujus**, Christine Kaiver, Enrique Gracian, Deborah Hannula & **Ira Driscoll**

*Using Eye Movements to Dissociate Memory Performance in Normal and Pathological Aging*

Department: Psychology  
Faculty Sponsor: **Ira Driscoll**



**Marijam Frahmand**

*Associations between Genetic Risk for Alzheimer's Disease and Hippocampus-Dependent Memory and Learning in Healthy, Middle-Aged Adults*

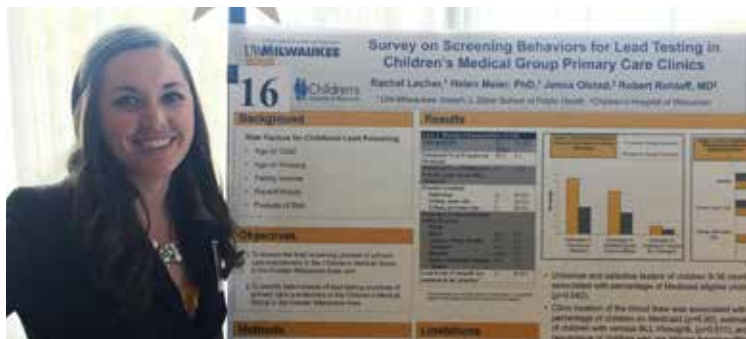
Department: Psychology  
Faculty Sponsor: **Ira Driscoll**



**Laura Korthauer**

*KIBRA Polymorphism and Brain Integrity in Middle Age*

Department: Psychology  
Faculty Sponsor: **Ira Driscoll**



**Rachel Lecher**

*Survey on Screening for Lead Poisoning in Children's Hospital of Wisconsin Primary Care Clinics*

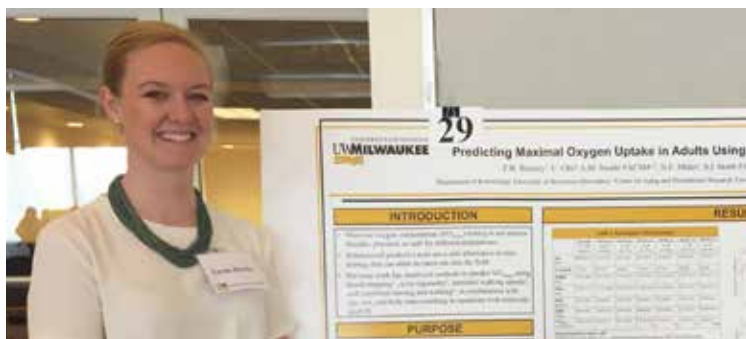
Department: Public Health  
Faculty Sponsor: **Helen Meier**



**Nicholas Lerma**

*Isotemporal Substitution of Sedentary Behavior and Physical Activity on Functional Performance in Older Adults*

Department: Kinesiology  
Faculty Sponsor: **Scott Strath**



**Taylor Rowley**

*Predicting Maximal Oxygen Uptake in Adults Using a Walk Test*

Department: Kinesiology  
Faculty Sponsor: **Scott Strath**



**Hannah Scherkenbach**

*Complement Receptor type 1 Polymorphisms Associated with Reduced Cortical Volume and Thickness in Healthy Middle-Aged Adults*

Department: Psychology  
Faculty Sponsor: **Ira Driscoll**

Photos: Meg Zimont, CATR



## ► CATR Director receives \$2.82 million grant for research

Congratulations to **Scott Strath** who received R01 funding from the National Institutes of Health, National Cancer Institute totaling \$2.82 million!

The award started April 1, 2017 and will go through March 31, 2022. The project, “Calibrating free-living physical activity characteristics across functionally-limited populations using machine-learned accelerometer approaches,” will employ whole room calorimetry, doubly labeled water, and free-living video-feed direct observation to develop and train machine learning wearable technology algorithms to assess physical activity energy expenditure, domain, type, and location in 380 individuals with and without physical function limitations.

[Read the full story here.](#)



## ► CATR Scientists in the news

**Dr. Xiao Qin**



[“Roads Scholars”](#)

UWM Report  
April 14, 2017

**Dr. Christine Kovach**



[“UWM researcher studying nighttime agitation in Alzheimer’s patients”](#)

UWM Report  
April 26, 2017

**Dr. Melinda Kavanaugh**



[“The Young Caregivers”](#)

UWM Report  
April 6, 2017

[“When a parent is in need, every day is Mother’s Day”](#)

Journal Sentinel  
May 12, 2017

## ► Recent Publications

- Bao H, Lei Y, **Wang J**. Experiencing a reaching task passively with one arm while adapting to a visuomotor rotation with the other can lead to substantial transfer of motor learning across the arms. *Neuroscience Letters*. PII: S0304-3940(16)30964-8. DOI: 10.1016/j.neulet. 2016.
- Bazett-Jones D, **Huddleston WE**, **Cobb SC**, O'Connor K, Earl-Boehm JE. Acute responses of strength and running mechanics following increased and decreased pain in patellofemoral pain. *Journal of Athletic Training*. 2016.
- Cobb SC**, Joshi MN, Pomeroy RL. Reliability of a seven-segment foot model with medial and lateral midfoot and forefoot segments during walking gait. *Journal of Applied Biomechanics*. 608-13. 10.1123/jab.2015-0262. 2017.
- Driscoll I**, Shumaker SA, Snively BM, Margolis KL, Manson J, Vitolins MZ, Rossom R, Espeland M. Relationships between caffeine intake and risk for probable dementia or global cognitive impairment: The women's health initiative memory study. *Journal of Gerontology and Biological Science and Medical Science*. PII: glw078. 2016.
- Farrell MH, Sprenger C, Sullivan SL, Trisler BA, Kram JJ, **Ruppel EK**. Benefit of report card feedback after point-of-care assessment of communication quality indicators. *Journal of Patient-Centered Research and Reviews*, 4, 7-17. <http://doi.org/10.17294/2330-0698.1283>. 2017.
- Huddleston WE**, Corbin EW, Recka NM, Smith BE. Cognitive contributions to gait characteristics in older adults. *Archives of Physical Medicine and Rehabilitation*. 2016.
- Imboden MT, Welch WA, **Swartz AM**, Montoye AHK, Finch HW, Harber MP, Kaminsky LA. Reference standards for body fat measures using GE dual energy x-ray absorptiometry in Caucasian adults. *PLOS ONE* 12(4): e0175110. <https://doi.org/10.1371/journal.pone.0175110>. 2017.
- Imboden MT, **Swartz AM**, Finch HW, Harber M, Kaminsky LA. Reference standards for lean mass measures using GE dual energy x-ray absorptiometry in Caucasian adults. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0176161>. 2017.
- Kavanaugh MS**, **Cho CC**, Maeda H, Swope C. "I am no longer alone": Evaluation of the first North American youth camp for youth in families with Huntington's Disease. *Children and Youth Services Review*. 2017.
- Kavanaugh MS**, Kalipeni J, Stamatopoulos V. Application of the UN Convention on Rights of the Child to young carers in the United States: US policies in international context. *Child Abuse Research: A South African Journal*.17(1):68-81. 2017.
- Kavanaugh MS**, Noh H, Zhang L. Caregiving youth knowledge and perceptions of parental end-of-life wishes in Huntington's Disease. *Journal of Social Work in End-of-Life Care*. 2016.
- Keenan KG**, **Huddleston WE**, Ernest BE. Altered visual strategies and attention are related to increased force fluctuations during a pinch grip task in older adults. *Journal of Neurophysiology*. DOI: 10.1152/jn.00928.2016. 2017.
- Korthauer L, Nowak N, Frahm M, **Driscoll I**. Cognitive correlates of spatial navigation: associations between executive functioning and the virtual Morris water task. *Behavioural Brain Research*. 317:470-478. DOI: 10.1016/j.bbr.2016.10.007. 2016.
- Kovach CR**. Research in Gerontological Nursing's commitment to moving intervention science forward: specifying targets, mechanisms of action, and outcomes. *Research in Gerontological Nursing*, 10(2), 55-56. 2017.

*Publications, continued.*

**Kovach GR.** 10-Year milestone for Research in Gerontological Nursing: trends affecting scientific publishing. *Research in Gerontological Nursing*, 10(1), 3-4. 2017.

**Kovach GR,** Taneli Y, Neiman T, Dyer EM, Arzaga AJA, Kelber ST. Evaluation of an ultraviolet room disinfection protocol to decrease nursing home microbial burden, infection and hospitalization rates. *BMC Infectious Diseases*, 17(1), 186. DOI: 10.1186/s12879-017-2275-2. 2017.

**Kovach GR,** Venes C. Patterns of new physical problems emerging in long-term care residents with dementia. *Journal of Gerontological Nursing*. 2017.

Lerma NL, **Keenan KG, Strath SJ,** Forseth BM, **Cho CC, Swartz AM.** Muscle activation and energy expenditure of sedentary behavior alternatives in young and old adults. *Physical Measurement*. 37:1686-1700. 2016.

Rains SA, **Ruppel EK.** Channel complementarity theory in the health information-seeking process: further investigating the implications of source characteristic complementarity. *Communication Research*. 43:232-252. 2016.

**Ruppel EK,** Burke TJ, Cherney MR. Long-distance friends' patterns of communication technology use: channel complementarity and multiplexity. *New Media & Society*. [doi.org/10.1177/1461444817699995](https://doi.org/10.1177/1461444817699995). 2017.

**Ruppel EK,** Gross C, Stoll A, Peck B, Allen M, Kim S. Reflecting on connecting: Meta-analysis of differences between mediated and face-to-face self-disclosure. *Journal of Computer-Mediated Communication*, 22, 18-34; [doi.org/10.1111/jcc4.12179](https://doi.org/10.1111/jcc4.12179). 2017.

**Ruppel EK,** Blight M, Cherney MR, Fyelling SQ. An exploratory investigation of communication technologies as a means to alleviate communicative difficulties and depression in older adults. *Journal of Aging and Health*. 28:600-620. 2016.

**Ruppel EK,** Gross C, Stoll A, Peck B, Allen M, Kim S. Reflecting on connecting: Meta-analysis of differences between mediated and face-to-face self-disclosure. *Journal of Computer-Mediated Communication*. 2016.

**Swartz AM,** Miller NE, **Cho YI,** Welch WA, **Strath SJ.** A prospective examination of the impact of high levels of exercise training on sedentary behavior. *European Journal of Sports Science*. 1-9. [dx.doi.org/10.1080/17461391.2016.1251496](https://dx.doi.org/10.1080/17461391.2016.1251496). 2016.

Taani MH, **Kovach GR,** Buerhing B. Muscle mechanography: a novel method to measure muscle function in older adults. *Research in Gerontological Nursing*. 10(1) 17-24. 2017.

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## ► Recent Presentations

**Ellis J.** Reducing resident-on-resident abuse. Kansas Adult Care Executives Conference; Wichita, KS. 2016.

Forseth BM, Hauff C, **Swartz AM.** Quantifying Physical Activity Performed During Yoga. American College of Sports Medicine Annual Meeting; Denver, CO. 2017.

Fueger C, Petrovska L, **Huddleston WE.** The effects of increasing cognitive and motor demand on visuomotor behavior. College of Health Sciences Spring Research Symposium; Milwaukee, WI. 2016.

*Presentations, continued.*

**Huddleston WE**, Recka NM, Wohkittel NP. Timing of cortical activation related to an attention-mediated delayed saccade task. Annual Meeting of the Society for the Neural Control of Movement; Dublin, Ireland. 2017.

**Huddleston WE**, Recka NM. Interaction of attention-mediated visual and motor processes within the dorsal attention pathway. Gordon Conference on the Control of Eye Movements; Lewiston, ME. 2017.

Imboden MT, **Swartz AM**, Harber MP, Kaminsky LA. Reference standards for lean mass measures using GE dual energy x-ray absorptiometry. American College of Sports Medicine Annual Meeting; Denver, CO. 2017.

**Kavanaugh MS**. How to recognize and support children who act as caregivers. Wisconsin Public Radio Interview; Milwaukee, WI. 2016.

**Kavanaugh MS**. Characteristics of young caregivers and their families: results from a national US survey. 27th International Symposium on ALS/MND; Dublin, Ireland. 2016.

**Kavanaugh MS**. The South African ALS caregiving experience: lessons learned from a cross-country collaboration between the US and South Africa. 27th International Symposium on ALS/MND; Dublin, Ireland. 2016.

**Kavanaugh MS**, Scharmer A, Baker Horner L. Invited presentation: engaging ALS youth in support and DME: Pilot project in Wisconsin. ALS National Clinical Meeting; San Diego, CA. 2016.

**Kavanaugh MS**. Unacknowledged caregivers in the United States: A review of young carer research with implications for future directions. Second International Young Carers Conference; Malmö, Sweden. 2017.

Lerma NL, **Cho CC**, **Swartz AM**, Miller N, **Keenan KG**, **Strath SJ**. Isotemporal substitution of sedentary behavior and physical activity on functional performance in older adults. American College of Sports Medicine Annual Meeting; Denver, CO. 2017.

**Meier HCS**, Haan MH, Mendes de Leon CF, Simanek AM, Dowd JB, Aiello AE. Nativity, acculturation, and immune response to persistent infection in elderly latinos. Population Association of America Annual Meeting; Chicago, IL. 2017.

Newsom JT, Shaw BA, August KJ, **Strath SJ**. Physical activity-related social control and support, perceived norms and physical activity. Gerontological Society of America 69th Annual Scientific Meeting; New Orleans, LA. 2016.

Rowley T, **Cho CC**, **Swartz AM**, Miller N, **Strath SJ**. Predicting maximal oxygen uptake in adults using a walk test. American College of Sports Medicine Annual Meeting; Denver, CO. 2017.

**Ruppel EK**, Burke TJ, Cherney MR, Dinsmore D. Social competence and communication with parents in the transition to college. International Association for Relationship Research; Toronto, ON. 2016.

**Ruppel EK**, Fyelling SQ, Cherney MR, Alvarez S. "They call me": Older adults' use and perceptions of mediated communication in close relationships. International Association for Relationship Research; Toronto, ON. 2016.

Welch WA, **Strath SJ**, Walker RE, **Swartz AM**. Dose-response of light intensity physical activity and glucose dynamics in older adults. American College of Sports Medicine Annual Meeting; Denver, CO. 2017.

## ► Recent Grant Submissions

### **Calibrating Free-Living Physical Activity Characteristics Across Functionally-Limited Populations Using Machine-Learned Accelerometer Approaches**

National Institute of Health  
\$3,495,026 - **Funded**  
PI: Scott Strath, PhD, FACSM

### **Lessons from Healthy Obese: Longitudinal Studies, Weight Loss, and Animal Models**

Medical College of Wisconsin  
\$175,152 - Pending  
PI: Scott Strath, PhD, FACSM

### **Update and Novel Validation of the Pregnancy Physical Activity Questionnaire (PPAQ)**

University of Massachusetts - Amherst  
\$164,282 - Pending  
PI: Scott Strath, PhD, FACSM

### **Prediction and Prevention of Falls in Older Adults**

Leighton Foundation  
\$50,000 - **Funded**  
PI: Kevin Keenan, PhD

### **The Integration of Standing Desks in Elementary Schools to Reduce Daily Sedentary Behavior**

Safeco Products, Co.  
\$38,420 - **Funded**  
PI: Ann Swartz, PhD

### **Ischemic Pre-conditioning Improves Leg Function Post Stroke**

Marquette University  
\$11,690 - Pending  
PI: Chris Cho, MS

### **Intervention to Reduce Sedentary Behavior at Work**

Medical College of Wisconsin  
\$5,054 - Pending  
PI: Scott Strath, PhD, FACSM

### **The Effects of Ischemic Preconditioning on Walking Function Post Stroke**

Medical College of Wisconsin  
\$2,096 - Pending  
PI: Chris Cho, MS

## ► Research Participant Registry continues to grow

The Center's Research Participant Registry has **increased by 17.3% since January 1!** Our dedicated student callers have made tremendous progress in recruiting and maintaining this invaluable resource available to CATR scientists.

[For more information about the Research Participant Registry, please visit our website.](#)

