# Newsletter

## **2023 Recap**



We saw 334 participants in 2023! 249 were returners (75%) and 84 (25%) joined our study!



Please join us in welcoming our newest Ph.D student, **Jiyeon Yoon**, from Seoul National University (South Korea).

# We are on Social Media!







Click on the icons to visit our page!

## **SPRING 2024**

Dear valued PAAS participant,

Here are the latest updates from the study:

- In 2023, we had a total of **334** people undergo PAAS assessments, **84** of whom were **brand new participants.**
- We've now assessed > 1100 people since the study began in 2016!
- We encourage you to return for follow-up assessments roughly once every 12-months. Please reach out if we haven't yet booked your follow-up visit: (paas@iastate.edu or 515-294-4253).
- Our Principal Investigator (PI) and founder of PAAS (<u>Dr. Duck-chul</u> <u>Lee</u>) is sadly leaving Iowa State. We wish him continued success and happiness as he embarks on a new journey at the University of Pittsburgh. Thank you for everything, Dr. Lee!
- Taking Dr. Lee's place as PI is Assistant Professor in Kinesiology <u>Dr. Elizabeth Lefferts</u>, a former graduate student and postdoctoral scholar of our lab! She has a wealth of PAAS experience and plans to make exciting contributions to maximize the participant experience! Welcome back to the PAAS family, Dr. Lefferts!

As always, stay safe and active! Yours in health, The **PAAS** Team

### A recent meta-analysis by Paluch et al (2023) found that:

Approximately **6,000-9,000** steps per day were associated with a **40-50%** reduced risk of CVD for adults aged ≥60 years compared to those taking **2,000** steps per day.

For older adults, taking more daily steps was associated with a progressively **lower risk of cardiovascular disease**. Monitoring and promoting steps per day is a simple metric for clinician-patient communication and population health to reduce the risk of CVD.



Physical Activity

and Aging Study

# Latest research findings from PAAS

Associations of total and aerobic steps with the prevalence and incidence of frailty in older adults with hypertension

Elizabeth C. Lefferts, Esmée A. Bakker, Salvatore Carbone, Carl J. Lavie, Duck-chul Lee

### Population

427

**PAAS** 





36 frailty score

Frailty is defined by 5 subdomains including shrinking, weakness, slowness, low physical activity (PA), and exhaustion

### Measurement

participants with

hypertension

Participants were given a pedometer (1week)



Total Daily Steps and Aerobic Steps







Health Assessment conducted at baseline and last visit to assess frailty

#### Outcome



Aerobic Steps



**Total Daily Steps** 

### IS ASSOCIATED WITH



Prevalence of Frailty

click here to view the paper

Increasing Lifestyle Walking by 3000 Steps per Day Reduces Blood Pressure in Sedentary Older Adults with Hypertension: Results from an e-Health Pilot Study

Elizabeth C. Lefferts, Joseph M. Saavedra, Bong Kil Song, Angelique G. Brellenthin, Linda S. Pescatello, Duck-chul Lee



Average blood pressure: 137/81 (All 20 weeks)



After 20 weeks of participation: Average blood

pressure: 130/77

Outcome

The 3Ps of the 3K study "Inspiration is what gets you started. Habit is what keeps you going!" Walk whenever you can:

nice outside



Play

Find ways to make walking meaningful to you:

















click here to view the paper



Xiangyu Zhai recently completed her PhD as a member of the Sports Epidemiology lab (Waseda University, Japan). You may recall seeing Zhai in the fall of 2023 during her internship with PAAS. Zhai evaluated the relationship between daily steps and health-related quality of life using PAAS data, and she will present these results in May 2024 at the annual meeting of the American College of Sports Medicine (ACSM) in Boston, Massachusetts.