NEW study Announcement-

**PTH and Calcium Responses to Exercise in Older Adults**

*(PACE Sr.)*

The goal of PACE Sr. is to study how the changes in blood calcium during exercise impact how bone responds. Generally, exercise is good for bone health, but some studies have shown that older adults do not always get the bone gains that we expect with regular exercise. This may happen because calcium is lost through the sweat during exercise. This causes a decline in blood calcium and increase in parathyroid hormone (PTH, the hormone that causes calcium to be released from bone). It is possible that the reduced bone gain in people who exercise a lot is related to calcium loss during exercise. This project will study whether the amount of calcium lost through the sweat during exercise impacts blood calcium and markers of bone loss.

We are looking for healthy older adults who are accustomed to vigorous walking exercise to take part in a research study that will determine 1) if sweating rate during exercise affects the decrease in blood calcium level, and 2) if this causes an increase in parathyroid hormone (or PTH) which causes bone to release calcium.

We will ask participants to walk on a treadmill for 1 hour on two occasions at an intensity that will cause sweating. On one occasion the room will be cool (about 60 degrees) and on one occasion the room will be warm (80 degrees). We hope to find out if a higher sweating rate leads to a greater decrease in the blood calcium level. The decrease in blood calcium level during exercise may be one reason why some adults who exercise very vigorously sometimes have low bone density.

If you are interested in participating in the PACE study, please contact Toby Wellington at 720-848-6376 or toby.wellington@ucdenver.edu.

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**NEW STAFF ANNOUNCEMENT**

**Dr. Christine Swanson**

Dr. Christine Swanson received her M.D. from Tulane University and completed her Internal Medicine Residency at the Mayo Clinic in Arizona. She completed her Endocrinology Fellowship at Oregon Health and Science University in Portland, Oregon where she became involved in bone research. She joined the Endocrinology division at the University of Colorado in August 2015, to work with her mentors, Drs. Wendy Kohrt and Kenneth Wright. Dr. Swanson’s research will focus on the skeletal effects of sleep disturbance.

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**IMAGE Holiday Party**

**Tuesday, December 1, 2015**

3:30-6:00 PM

Keep an eye out for the invitations. The Holiday party is at the same location as last year’s party (Krugman Hall, Rm 2100, in RC2). Reserve the Date !!! Directions and parking details can be found at

[www.medschool.ucdenver.edu/image](http://www.medschool.ucdenver.edu/image)

(...and, yes, the chocolate fountain will be in attendance)
Does the image group have a study for you?

STUDIES FOR WOMEN & MEN:

**SPARX** is a study to determine whether individuals recently diagnosed with Parkinson’s disease, and have not yet started drug treatment, can successfully take part in an aerobic exercise program. Individuals with PD are randomized to a control group that does not exercise, or to a group that exercises on a treadmill at a moderate or high intensity. Participants will exercise 4 days a week, for 30 minutes a day, for 6 months. If you or someone you know has been diagnosed with Parkinson’s disease and is interested in participating in this clinical research, please contact 720 848-6376 or Tracy.Wellington@ucdenver.edu. (COMIRB#11-1237)

The Determination of Pain Phenotypes in Older Adults with Knee Osteoarthritis study is exploring what causes pain with knee osteoarthritis. We are looking for people aged 50 to 85 years with and without knee pain to attend a single testing session at the Anschutz Medical Campus (~2 hours) to explore factors that contribute to knee pain. Monetary compensation provided. To learn more, please email KNEE-pain@ucdenver.edu or call 303-724-9590 (COMIRB#12-1168).

**SITA Study:** Do you have type 2 diabetes? This research study will evaluate the effects of two FDA-approved diabetes medications on cardiovascular function during exercise. Qualified participants will receive study medication, as well as free lab screenings, physical exams and exercise testing. Financial compensation is provided. If you are between the ages of 22 and 49, you may qualify for this study. If interested, email Deirdre.rafferty@ucdenver.edu or call Deirdre Rafferty 720-848-6688 (PI: Regensteiner, COMIRB# 13-2015).

Leg Blood Flow Study This is a study evaluating men and women with or without type 2 diabetes during single leg calf exercise. Eligible participants are healthy men and women with type 2 diabetes (not using insulin) between the ages 30-70 years who are non-smokers and currently exercise no more than one time per week. The study involves 8 study visits and two weeks of supervised exercise training over the course of two months. If interested, email Deirdre.rafetty@ucdenver.edu or call Deirdre Rafferty 720-848-6688 (PI: Regensteiner, COMIRB# 06-0062).

Do you like to EAT? The purpose of the EAT study is to research whether age affects how fat tissue responds to meal eating over the course of two months. We are looking for healthy men aged 25-40 yr or 55-75y who are overweight to mildly obese, sedentary to moderately active and who do not smoke. Monetary compensation will be provided. To learn more please contact Tracy Swibas at Tracy.Swibas@ucdenver.edu or 720.848.6418 (PI: Van Pelt, COMIRB# 14-2411).

In the Exercise study, we seek to identify barriers to physical activity for overweight people with and without type 2 diabetes. This study hopes to provide a greater understanding of how to overcome those barriers! This is a study for people both with and without type 2 diabetes (not on insulin). We’re looking for male and female non-smokers, 50-70 years of age, who exercise less than one hr. per week, but would like to do more. If that describes you, email Ian.Leavitt@UCDENVER.EDU or call Ian at 303-724-2255.

STUDIES FOR WOMEN:

**The FAME study** is examining how the loss of estrogen changes metabolism and risk of disease in women. Eligible participants are healthy women between the ages of 40 and 60 years who have regular menstrual cycles and are not currently using hormonal contraceptives. Monetary compensation will be provided for your time (up to $900). To learn more, please call 720-848-6398 or email: FAMEstudy@ucdenver.edu. (COMIRB# 12-1157).

The GEM study investigates the relationship between volume of aerobic exercise and positive changes in DNA methylation over four months among previously sedentary women, and whether aerobic exercise favorably influences DNA methylation in genes associated with breast cancer. We are looking for women between the ages of 30 and 45 who plan to live in the Denver Metro area for the next 10 months. Eligible participants should not be exercising regularly but should be willing to participate in an exercise program 4 times per week for 16 weeks. Monetary compensation will be provided for your time (up to $300). To learn more, please call 303-492-9549 or email: GEM.CUstudy@gmail.com. (COMIRB# 13-2314).

**SHAPEx** is a study to determine how the menopause transition and the loss of estrogen impacts the health and function of arteries in women. We are looking for Premenopausal women 18-49 years, and Perimenopausal women 40-55 years (Non-smokers). Volunteers should NOT be taking Birth Control or Hormone Replacement Therapy (HRT), or exercising vigorously more than 2 days per week. To learn more, please email shape.study@ucdenver.edu or call Lila Sisbarro 720-848-6419 (PI Kerrie Moreau COMIRB# 06-0537).

**The SHAPE study** is exploring what causes knee pain. Monetary compensation will be provided for your time (up to $900). To learn more about a study, offer comments, suggest an article, request this newsletter electronically or be removed from our mailing list contact: Drew Hepler, 720-848-6480, Andrew.Hepler@ucdenver.edu.