
BIOGRAPHICAL SKETCH

NAME Jane A. Cauley	POSITION TITLE Professor, Vice Chair for Research Department of Epidemiology
eRA COMMONS USER NAME jcauley	

EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
Boston College, Chestnut Hill, MA	BSN	04/75	Nursing
University of Pittsburgh, Pittsburgh, PA	MPH	04/80	Epidemiology/ Public Health Nursing
University of Pittsburgh, Pittsburgh, PA	DrPH	04/83	Epidemiology

A. Personal Statement

The overarching goal of Training Programs is to train individuals with relevant scientific backgrounds in epidemiologic approaches to important public health problems engendered by our aging society. Of particular importance is the need to develop epidemiologists who can effectively integrate knowledge and skills from multiple disciplines into epidemiologic studies in a rapidly evolving research environment. This requires knowledgeable, experienced and committed mentors with expertise in the field of aging research to guide potential Trainees. I have served as the Director of the Epidemiology of Aging Training Program since its inception in 1989 and will continue as the Co-Director in the future. I have a longstanding history of mentoring and leadership. I have served as a primary adviser and committee chair for 38 MPH and PhD students. I was also a co-mentor for an additional 21 Epidemiological students while on their Masters or Doctoral Committees. I have mentored 6 post-doctoral students, 5 of whom lead successful careers in academia. As the Vice Chair of Research in the Department of Epidemiology, I also mentor junior faculty and coordinate the department internal grant review program, ensuring the excellence of all proposals being submitted for funding. I have been instrumental in the development of a program to support career awards and new grants for junior faculty and I oversee a departmental pilot research grant program for trainees. From a research perspective, I am the PI or Co-PI on several large, multi-site longitudinal studies and clinical trials focusing on issues related to aging. The primary focus of my research is on osteoporosis in both men and women. These data sets will provide a rich environment for students. Finally, I also currently serve on the Executive Committees of the Reproductive Epidemiology Training grant and the Cancer Epidemiology training grant.

B. Positions and Honors

1975-77	Staff Nurse, Pediatric Intensive-Intermediate Care, Georgetown University Hospital, Washington, DC
1977-78	Staff Nurse, Home Health Services, Washington, DC
1979-83	Graduate Research Asst, Dept of Epidemiology, University of Pittsburgh, Pittsburgh, PA
1983-84	Research Associate, Dept of Epidemiology, University of Pittsburgh, Pittsburgh, PA
1984-86	Postdoctoral Fellow, Dept of Epidemiology, University of Pittsburgh, Pittsburgh, PA
1986-93	Assistant Professor, Dept of Epidemiology, University of Pittsburgh, Pittsburgh, PA
1993-2002	Associate Professor with Tenure and Director, Aging Epidemiology Program, Dept of Epidemiology, University of Pittsburgh, Pittsburgh, PA
2002-Present	Professor, Dept of Epidemiology, University of Pittsburgh, Pittsburgh, PA
2006-Present	Vice Chair for Research, Dept of Epidemiology, University of Pittsburgh, Pittsburgh, PA

Honors

1975	BSN, Boston College, Cum Laude
1984	University Scholar, University of Pittsburgh
1984	National Research Service Award, Individual Postdoctoral Fellow in Epidemiology
1990	Public Health Honor Society Membership, Delta Omega Society
1996	American Epidemiological Society
2004	Graduate School of Public Health, Distinguished Alumni Award, University of Pittsburgh
2011	Provost Award, Excellence in Mentoring, University of Pittsburgh
2011	Frederic C. Bartter Award, American Society of Bone Mineral Research

Service

1998-2002	Biological and Clinical Aging Review – Subcommittee B, NIA, Member,
1998-2002	American Society for Bone and Mineral Research, Advocacy Committee, Member,
1997-2004	National Osteoporosis Foundation, Advisor
2002-2005	American Society of Bone and Mineral Research, Governing Council
2003-2007	Neurological, Aging, & Musculoskeletal Epidemiology Study Section, Member
2005-2006	GSPH Faculty Senate Executive Committee, President
2006-Present	Steering Committee, Howard University/Johns Hopkins Univ: Cancer Center Partnership
2006-2009	Osteoporosis International, Editorial Board
2007-Present	Endocrine Society, Performance Measures Committee
2008-2011	American Society of Bone and Mineral Research, Ethics Committee

C. Selected peer-reviewed publications (selected from 607 publications)

* previous student manuscripts

1. Faulkner K, Redfern MS, **Cauley JA**, Landsittel DP, Studenski SA, Rosano C, Simonsick Em, Harris TB, Shorr RD, Ayonayon HN, Newman AB; for the Health, Aging, and Body Composition Study. Multi-tasking: Association between poorer performance and a history of recurrent falls. *J Am Geriatr Soc* 2007;55(4):570-576.*
2. Barbour KE, Zmuda JM, Horwitz M, Evans R, Strotmeyer ES, Boudreau R, **Cauley JA**. The association of serum 25-hydroxyvitamin D with indicators of bone quality in men of Caucasian and African Ancestry men. *Osteoporos Int* 2010; Sep;22(9):2475-85. PMID: 21104232.*
3. Barbour KE, Zmuda JM, Boudreau R, Strotmeyer ES, Horwitz MJ, Evans RW, Kanaya AM, Harris TB, **Cauley JA**; The Health ABC Study. The effects of adiponectin and leptin on changes in bone mineral density. *Osteoporos Int*. 2011 Aug 30. [Epub ahead of print]. PMID:21877199. *
4. Barbour KE, Zmuda JM, Boudreau R, Strotmeyer ES, Horwitz MJ, Evans RW, Kanaya AM, Harris TB, Bauer DC, **Cauley JA**. Adipokines and the risk of fracture in older adults. *J Bone Miner Res*. 2011 Jul;26(7):1568-76. PMID:21312272. *
5. Cecchini R, Costantino JP, **Cauley JA**, Cronin WM, Wickerham DL, Bandos H, Weissfeld JL, Wolmark N. Baseline mammographic breast density and the risk of invasive breast cancer in postmenopausal women participating in the NSABP Study of Tamoxifen and Raloxifene (STAR). *Cancer Prev Res (Phila)*. 2012 Nov;5(11):1321-9. PMID: NIHMS412626 *
6. Danielson ME, Beck T, Karlamangla , Greendale G, Lian Y, Keaveny T, Kopperdahl D, Ruppert K, Greenspan S, Vuga M, **Cauley JA**. A comparison of DXA and CT based methods for estimating the strength of the femoral neck in post-menopausal women. *Osteoporos Int*. 2012 Jul 19. [Epub ahead of print]. PMID: 22810918.*
7. Metti AL, **Cauley JA**, Ayonayon HN, Harris TB, Rosano C, Williamson JD, Yaffe K; for the Health, Aging and Body Composition Study. The Demographic and Medical Correlates of Plasma A β 40 and A β 42. *Alzheimer Dis Assoc Disord*. 2012 Jun 22. [Epub ahead of print]. PMID:NIHMS388402. *
8. Metti AL, **Cauley JA**, Newman AB, Ayonayon HN, Barry LC, Kuller LM, Satterfield S, Simonsick EM, Yaffe K. Plasma Beta Amyloid Level and Depression in Older Adults. *J Gerontol A Biol Sci Med Sci*. 2013 Jan;68(1):74-9. PMID: 22499763. *
9. Janney CA, Ganguli R, Richardson CR, Holleman RG, Tang G, **Cauley JA**, Kriska AM. Sedentary behavior and psychiatric symptoms in overweight and obese adults with schizophrenia and schizoaffective disorders (WAIST Study). *Schizophr Res*. 2013 Feb 11. [Epub ahead of print]. PMID: 23410710.*

10. Sheu Y, Marshall LM, Holton KF, Caserotti P, Boudreau RM, Strotmeyer ES, Cawthon PM, **Cauley JA**. Abdominal body composition measured by quantitative computed tomography and risk of non-spine fractures: the Osteoporotic Fractures in Men (MrOS) study. *Osteoporos Int*. 2013 Aug;24(8):2231-41. PMID: 23471565.*
11. Thorson S, Prasad T, Sheu Y, Danielson ME, Arasu A, Cummings SR, **Cauley JA**. Sclerostin and bone strength in women in their 10th decade of life. *J Bone Miner Res*. 2013 Sep;28(9):2008-16. PMID: 23505206. *
12. Farhat GN, Parimi N, Chlebowski RT, Manson JE, Anderson G, Huang A, Vittinghoff E, Lee JS, LaCroix AZ, **Cauley JA**, Jackson R, Grady D, Lane D, Phillips L, Simon MS, Cummings SR. Sex hormone levels and risk of breast cancer with estrogen plus progestin. *J Natl Cancer Inst*. 2013 Oct 2;105(19):1496-1503. PMID: PMC3787910.*
13. Smagula SF, Reynolds CF 3rd, Ancoli-Israel S, Barrett-Connor E, Dam TT, Hughes-Austin JM, Paudel M, Redline S, Stone KL, **Cauley JA**; for the Osteoporotic Fractures in Men (MrOS) Research Group. Sleep Architecture and Mental Health Among Community-Dwelling Older Men. *J Gerontol B Psychol Sci Soc Sci*. 2013 Dec 10. [Epub ahead of print]. PMID: 24326077.*
14. Sheu Y, **Cauley JA**, Patrick AL, Wheeler VW, Bunker CH, Zmuda JM. Risk factors for fracture in middle-age and older-age men of African descent. *J Bone Miner Res*. 2014 Jan;29(1):234-41. PMID: PMC3830695.*
15. Dallal CM, Tice JA, Buist DS, Bauer DC, Lacey JV, **Cauley JA**, Hue TF, Lacroix A, Falk RT, Pfeiffer R, Fuhrman BJ, Veenstra TD, Xu X, Brinton LA. Estrogen metabolism and breast cancer risk among postmenopausal women: a case-cohort study within B-FIT. *Carcinogenesis*. 2014 Feb;35(2):346-55. PMID: PMC3908751.*

D. Research Support.

Ongoing Research Support

803209-S107: Cal Pac CAULEY (PI) 05/01/2009 - 04/30/2014

Outcomes of Sleep Disorders in Older Men - Pgh Subcontract

This subcontract is for continuing participation as a subcontractor in an ancillary study to the Osteoporotic Fractures in Men Study (Mr.OS) investigating the consequences of sleep disorders in older men, including possible effects on risk for cardiovascular disease, mortality, physical and cognitive decline and risk for osteoporosis and fractures.

U01 AG042139-14A1:NIA CAULEY (PI) 08/01/2003 - 07/31/2018

Osteoporotic Fractures in Men – Mr.OS Renewal – Pittsburgh

This is a continuation of the multi-center, prospective study of risk factors for vertebral and non-vertebral fractures in older men provides a basis for the construction of crucial preventive and treatment strategies. The primary goal of the study is to determine the extent to which fracture risk in older men is related to bone mass, bone geometry, life style factors, biochemical measures, fall propensity, and other variables. This grant will include a fourth clinic visit with the surviving Mr.OS participants.

R01AG027576: NIH CAULEY (PI) 09/01/2011 - 08/31/2016

Study of Osteoporotic Fractures

This proposal will continue the prospective Study of Osteoporotic Fractures (SOF) and link the comprehensive SOF database with Medicare claims data to determine if age-related trajectories in cognitive function, physical performance, bone mineral density, body weight, and positive affect predict phenotypes of optimal aging defined by longevity, active lifespan, exceptional health span, and rates of inpatient and residential health care utilization.

552260: Penn

CAULEY (PI)

05/15/2009 - 04/30/2015

Testosterone Trial

This application proposes a closely coordinated set of four, randomized, placebo-controlled clinical trials to test the hypotheses that testosterone treatment for one year of men >65 years who have unequivocally low serum testosterone concentrations (<250 ng/dL) and both symptoms and objective evidence of mobility disability, age-associated memory impairment, low vitality, and diminished sexual function will show more favorable changes in these parameters than placebo treatment. This study should determine if testosterone treatment of older men with low testosterone concentrations will improve their physical, sexual and cognitive function and vitality.

R01 AG026463-03: NIA

CAULEY (PI)

06/01/2007 - 05/31/2014

Hip Strength Across the Menopausal Transition

This is an ancillary study to the Study of Women's Health Across the Nation (SWAN), a multi-center, multi-ethnic longitudinal study designed to characterize the biological and psychosocial changes that occur during the menopausal transition. Using archived hip DXA scans and data collected annually from the SWAN cohort, the study will analyze measures of hip geometry and strength.

HHSN268201200034C:NIH/NHLBI

CAULEY (PI)

07/01/2012-12/31/2014

Osteoarthritis Initiative

This is a renewed contract to continue to follow an existing cohort of approximately 1000 individuals in Pittsburgh who are at high risk for knee osteoarthritis. The collected data and images serve as a national resource to characterize the natural history of the onset and progression of knee OA. Annual knee radiographs, knee MRI and biological specimens are collected as well as other assessments of risk factors, medical history, health care utilization, physical examinations, and physical performance and strength.

U01 AG012546-16: NIA

MATTHEWS (PI)

06/01/2009 - 04/30/2014

Study of Women's Health Across the Nation (SWAN) – Pittsburgh

The Department of Epidemiology participates in this multicenter, multiethnic longitudinal study to characterize the physiological and psychosocial changes that occur during the menopausal transition and to observe their effects and risk factors for age-related disease in a community-based sample.

Role: Co-Investigator