CURRICULUM VITAE AUDREY C. CHOH OCTOBER 2024

UNIVERSITY ADDRESS:

Department of Epidemiology University of Health Houston, Regional Location - Brownsville SPH Building N1.102C, One West University Boulevard, Brownsville, TX 78520 E-mail:audrey.c.choh@uth.tmc.edu

Telephone: 956) 755-0652 Facsimile: (956) 755-0606

EDUCATION:	DEGREE:	DATE:	MAJOR:
University at Albany - SUNY Albany, New York, U.S.A.	Ph.D.	December 2002	Anthropology
University of Guelph Guelph, Ontario, Canada	M.Sc.	February 1994	Human Biology
University of Toronto Scarborough, Ontario, Canada	B.Sc.	June 1991	Anthropology / Biology

BOARD CERTIFICATION:

Certified in Public Health (CPH) by National Board of Public Health Examiners, October 31, 2015.

APPOINTMENTS:

April 2021 - Present	Assistant Professor (NTI), Human Genetics Center, Department of Epidemiology, The University of Texas Health Science Center at Houston School of Public Health – Brownsville Location, Brownsville, Texas.
January 2017 - March 2021	Assistant Professor (NTT), Human Genetics Center, Department of Epidemiology, Human Genetics and Environmental Sciences, University of Texas Health Science Center at Houston School of Public Health – Brownsville Campus, Brownsville, Texas.
January 2017 - Present	Adjunct Assistant Professor, Department of Population and Public Health Sciences, Boonshoft School of Medicine, Wright State University, Dayton, Ohio.

July 2016 - December 2016	Research Assistant Professor, Department of Population and Public Health Sciences, Boonshoft School of Medicine, Wright State University, Dayton, Ohio.
February 2006 - July 2016	Research Assistant Professor, Lifespan Health Research Center, Department of Community Health, Boonshoft School of Medicine, Wright State University, Dayton, Ohio.
January 2003- January 2006	Postdoctoral Researcher in Cardiovascular Epidemiology, Lifespan Health Research Center, Department of Community Health, Boonshoft School of Medicine, Wright State University, Dayton, Ohio.
June 2000- August 2000	Field Director, Tutuila, American Samoa. (Dr. Stephen T. McGarvey, PI, Brown University)
Fall 1998 , 1999 Spring 1999, 2000	Research Assistant, State University of New York at Albany, New York. (Dr. John Justeson, Supervisor)
Fall, 1994, Summer 1995, 1998, 1999 Spring 1996, 1998	Research Assistant, State University of New York at Albany, New York. (Dr. Lawrence M. Schell, Supervisor)
Summer 1995,1996	Research Assistant, State University of New York at Albany, New York. (Dr. Timothy Gage, Supervisor)
Spring 1992	Research Summer Career-Oriented Student Employment Program (COSEP) student, Petawawa National Forestry Institute. (Drs. Willard Fogal and Kurt Johnston, Supervisors)

FIELDWORK EXPERIENCE:

June 2000-	Worked with undergraduate Brown University students to collect
November 2000	genealogical data (June-August). Worked with local translators and health
	nurses, to collect genealogical, anthropometric, and blood pressure data
	(September-November). Tutuila, American Samoa

TEACHING EXPERIENCE:

Fall 2024	Instructor for Capstone (PHWM2996), University of Texas Health Science Center at Houston – School of Public Health, Online Class.
Summer 2021-2024	Instructor for Epidemiology 2 (PHWM2615), University of Texas Health Science Center at Houston – School of Public Health, Online Class.

Spring 2022-2024	Instructor for Epidemiology 2 (PHWM2615), University of Texas Health Science Center at Houston – School of Public Health, Online Class.
Spring 2019-2024	Instructor for Epidemiology 1 (PHWM2612), University of Texas Health Science Center at Houston – School of Public Health, Online Class.
Fall 2018-2024	Instructor for Epidemiology 1 (PHWM2612), University of Texas Health Science Center at Houston – School of Public Health, Online Class.
Spring 2002	Graduate Teaching Assistant in Cultural Anthropology (ANT108), University at Albany-SUNY. Supervisor: Bradley Tatar.
Fall 1997	Graduate Teaching Assistant in Environment, Economics and Culture, Society and Biology (ANT355Z), University at Albany-SUNY. Supervisors: Jan Olson and Geoffrey Purcell (respectively).
Summer 1997	Instructor for Introduction to Human Evolution (ANT110N), University at Albany-SUNY.
Spring 1997	Graduate Teaching Assistant in Physical Growth and Development (ANT319), University at Albany. Supervisor: Dr. Lawrence Schell.
Fall 1996	Graduate Teaching Assistant in Human Evolution (ANT110N), University at Albany-SUNY. Supervisor: Dr. Dean Falk.
Spring 1996	Graduate Teaching Assistant in Introduction to Biological Anthropology (ANT102), University at Albany-SUNY. Supervisor: Dr. Carol Raemsch.
Fall 1995	Graduate Teaching Assistant in Human Population Biology (ANT 211), University at Albany-SUNY. Supervisor: Dr. Timothy B. Gage.
Spring 1995	Graduate Teaching Assistant in Demography (ANT 313), University at Albany-SUNY. Supervisor: Dr. Timothy B. Gage.
Spring 1993, 1992	Graduate Teaching Assistant in Human Evolution (75-208), School of Human Biology, University of Guelph. Supervisor: Dr. Susan K. Pfeiffer.
Fall 1992, 1991	Graduate Teaching Assistant in Developmental Human Biology (75-308), School of Human Biology, University of Guelph. Supervisor: Dr. Michael C. Mahaney.
Fall 1997 Summer 1997 Spring 1997 Fall 1996 Spring 1996 Fall 1995 Spring 1995 Spring 1993, 1992	Class. Graduate Teaching Assistant in Cultural Anthropology (ANT108), University at Albany-SUNY. Supervisor: Bradley Tatar. Graduate Teaching Assistant in Environment, Economics and Cultur Society and Biology (ANT355Z), University at Albany-SUNY. Supervisors: Jan Olson and Geoffrey Purcell (respectively). Instructor for Introduction to Human Evolution (ANT110N), University at Albany-SUNY. Graduate Teaching Assistant in Physical Growth and Development (ANT319), University at Albany. Supervisor: Dr. Lawrence Schell. Graduate Teaching Assistant in Human Evolution (ANT110N), University at Albany-SUNY. Supervisor: Dr. Dean Falk. Graduate Teaching Assistant in Introduction to Biological Anthropology (ANT102), University at Albany-SUNY. Supervisor: Dr. Carol Raemsch. Graduate Teaching Assistant in Human Population Biology (ANT 211), University at Albany-SUNY. Supervisor: Dr. Timothy B. Gag Graduate Teaching Assistant in Demography (ANT 313), University Albany-SUNY. Supervisor: Dr. Timothy B. Gage. Graduate Teaching Assistant in Human Evolution (75-208), School of Human Biology, University of Guelph. Supervisor: Dr. Susan K. Pfeiffer. Graduate Teaching Assistant in Developmental Human Biology (75-308), School of Human Biology, University of Guelph. Supervisor:

PRACTICA and INTEGRATIVE LEARNING EXPERIENCE:

Summer 2024	Viviana de Leon – <i>Polycylic Aromatic Hydrocarbons Impact</i> (Get-PHIT)	Practicum Faculty Mentor
Fall 2023	Amanda D. Daniels – <i>Impacts of Substance Use Disorder Program in Large Metro</i>	Practicum Faculty Mentor
Spring 2023	Astrid Perez - Tu Salud Si Cuenta	Practicum Faculty Mentor

Summer 2022	Cecilia Colom - Creation of a Community Education	Practicum
	Initiative to Address End-of-Life Conversations in the Rio	Faculty Mentor
	Grande Valley	
Summer 2022	Rachel Russek - Telomere length variation by MetS cluster	ILE
		Supervising
		Faculty
Summer – Fall	Addison Peck COVID-19 case and contact tracing manual	Practicum
2020	(COVID-related changes in Practicum rules due to COVID-	Preceptor
	19)	

SEMINARS & WORKSHOP PRESENTATIONS:

"Laredo 2024 STEM Immersion Week Experience", June 12, 2024 – June 14, 2024, Texas A&M International University (TAMIU), Laredo, Texas. Two presentations (Epidemiology and Me, and an activity) were aimed at giving high school students exposure to the different types of higher education STEM areas of research available to them.

"Fostering Teaching Excellence" with Drs. Elena Feofanova and Heather Essigmann, May 31, 2024, Department of Epidemiology Retreat, UTHealth Houston, Houston, Texas.

"RGV Summer Science Internship Workshop Series 2: Basic Statistics, Statistical Analysis and Excel Tutorial", June 28, 2023, UTHealth-Brownsville Campus, Brownsville, Texas (with Miryoung Lee, PhD).

"Summer SAS Workshop - Tips and Tricks", June 17-18, 2019, UTHealth-Brownsville Campus, Brownsville, Texas.

MENTORING / ADVISING:

Post-doctoral fellows:

Fall 2023 –	Ariana L Garza, PhD,	Primary
present	Cancer Education and Career Development Program,	Mentor
	UTHealth Houston, School of Public Health	
2018 - 2020	Marlene Garcia, MD, Kleberg Grant Recipient	Co-Mentor
	University of Texas Health Science Center at San Antonio	

Graduate:

University of Texas Health Science Center at Houston – School of Public Health, Brownsville Regional Location

regional Location		
2024 Fall -	Raushana Tajudeen, MPH student in Epidemiology,	Faculty Advisor
present	Houston	
2024 Fall -	Linjie Li PhD, student in Epidemiology, Houston	Faculty Advisor
present		·
2024 Summer -	Selina (Urbina) Fernandez, PhD student in	Faculty Advisor
present	Epidemiology	·

2023 Fall - present	Mei Wong Robson, MPH student in Epidemiology	Faculty Advisor
2023 Fall –	Carole Nail, PhD student in Epidemiology, San Antonio	Faculty Advisor
present 2023 Fall – left UTH Fall 2024	Natividad Rangel-Hinojosa, PhD student in Epidemiology	Faculty Advisor
2021 Fall – present	Viviana Deleon, MPH student in Epidemiology	Faculty Advisor
2020 Fall – present	Amanda Daniels, MPH student in Customized	Faculty Advisor
2022 Summer – 2024 Summer 2020 Spring – 2022 Summer	Anayeli Herrera Morales, PhD student in Epidemiology - Association Between Maternal Sleep Disorders and Maternal and Birth Outcomes: A Retrospective Analysis of Optum's De-Identified Clinformatics® Data Mart Database	-as Committee Member -as Faculty Advisor
2020 Spring – 2023 Summer	Ariana Garza, PhD in Epidemiology, CPRIT predoctoral fellow 2022-2023 - Genetics of Liver Fat in Association with Metabolic Dysfunction in the Fels Longitudinal Study	Dissertation Chair & Faculty Advisor
2022 Summer – 2023 Summer	Paul Yeh, DrPH in Health Promotion and Behavioral Sciences - Guiding Cancer Prevention Equity: Epidemiological and Economic Evaluation of Lifestyle Behavior to Facilitate Cancer Screening in Hispanic Adults Along the Texas-Mexico Border	Committee Member
2021 Fall – 2023 Spring	Astrid Perez, MPH in Epidemiology	Faculty Advisor
2022 Fall – left UTH 2022 Fall	Joel Rojas, MPH student in Epidemiology	Faculty Advisor
2022 Fall – left UTH 2022 Fall	Sarah Rodriguez, MPH student in Customized	Faculty Advisor
2020 Spring – 2022 Fall	Estefania Gonzalez, MPH in Customized	Faculty Advisor
2022 Summer	Rachel Russek, MPH in Epidemiology - Telomere length variation by MetS cluster	ILE supervisor
2022 Summer	Cecilia Colom, MPH in Epidemiology	Practicum advisor
2022 Spring – 2022 Summer	Minji Chae, MS in Biostatistics, Houston - Predicting hospitalization and length of stay following emergency department admission in working adults with chronic kidney disease	Minor Representative Committee Member
2020 Spring – 2022 Spring	Alejandra Esparza, MPH in Customized	Faculty Advisor
2021 Fall	Jessica Pena, Dr Ph in Health Promotion and Behavioral Sciences - Exploring the Relationship Between SDoMH, Anxiety, and Childhood Trauma in Children	External Committee Member / Reviewer
2020 Spring – last advised	Gilberto Lopez, MPH student in Health Promotion/Education	Faculty Advisor

2021 Fall		
2020 Spring – last advised 2021 Fall	Gabriel Yanez, MPH student in Epidemiology	Faculty Advisor
2020 Spring – 2020 Spring	McKenzie L Ford, MPH in Epidemiology - Anti- Müllerian hormone and skeletal age in female children	Committee Member
2020 Spring – 2020 Spring	Alan Francisco Villareal Rizzo, MPH in Epidemiology - Understanding how social determinants of health impact diabetes management: A Residency Research Network of Texas study	Committee Member
2018 Spring – 2020 Spring	Walter L. Barthel, IV, MPH in Customized program	Faculty Advisor
2019 Fall – last advised 2019 Fall	Amber Elizabeth Deane, MPH student in Epidemiology	Faculty & Thesis Advisor
2017 Spring – 2019 Fall	Mario Alberto Ramos, MPH in Epidemiology	Faculty Advisor
2017 Spring – 2019 Summer	Michael Othon Roa, MPH in Epidemiology - Evaluation of food journal application validity in comparison with DHQ III	Committee Member
2017 Spring – 2018 Summer	Brandon Gonzalez, MPH in Epidemiology – Recent trends in central adiposity in the Fels Longitudinal Study	Committee Member
2017 Spring – 2018 Spring	Victoria M. Limon, MPH in Health Promotion and Behavioral Sciences - A longitudinal analysis of metabolic syndrome and its impact on mental health-related quality of life and the development of depression	Committee Member
2017 Spring – 2018 Spring	Nelson Gonzalez, MPH student in Epidemiology - The burden of subclinical peripheral artery disease in Mexican Americans: results from the Cameron County Hispanic Cohort	Committee Member
2017 Fall – last advised 2018 Spring	Vanessa Salazar, MPH student in Health Promotion and Behavioral Sciences	Faculty Advisor

Wright State University

June 2013 – Aug. 2013	Pamela M. Cullen, Grad Prep Biomedical Graduate Degree Preparation Program	Mentor
Nov. 2008 – Jul. 2009	Sushant Takesande, Biomedical Science MS student in CVD and genetic epidemiology	Committee Member

Undergraduate:

Summer Institute for South Texas Public Health Research, UTHealth Science Center at Houston, School of Public Health

2018	Yash Motwani, University of Texas at Austin	(Primary mentor)
2017	Roma Bhandarkar, University of Texas at Austin	(Co-mentor)
2017	Umer Jalil, University of Texas Rio Grande Valley	(Co-mentor)

Texas A&M International University (TAMIU) Summer Research Bootcamp (May 18, 2020 – July 22, 2020)

Richard Almeida, University of Texas Rio Grande Valley, UTHealth certificate: <i>Too Little or Too Much Sleep Influences Mental Health: Depressive Symptoms</i>	Mentor
Maria Astrain, UTHealth – SBMI in Laredo: Hypertension and the New	Mentor
Guidelines	

Short-Term Research Experience Access for Minority Students (STREAMS), Wright State University

Omversi	ty	
2015	Paloma Wiggins, Smith College (3rd place poster competition winner)	(Co-mentor with Drs. S. Czerwinski, M. Lee, and M. Peterson)
2015	Tevin Dorsey, North Carolina A&T State University	(Co-mentor with Drs. S. Czerwinski, M. Lee, and M. Peterson)
2008	Miguel Vizbal, Boston University	(Co-mentor with Dr. Wm. C. Chumlea)
2008	Lauren Biekman, Vanderbilt University	(Co-mentor with Dr. M. Lee)
2006	Jessica Chavez	(Co-mentor with Drs. W.C. Cameron and M. Lee)
2005	Afton Jackson	(Co-mentor with Drs. S. Czerwinski and M. Lee)
2004	O. Rita Mbamalu	(Co-mentor with Drs. S. Czerwinski and M. Lee)
2004	Vicki De Santos	(Co-mentor with Drs. B. Towne and D. Duren)

High-School:

RGV Summer Science Internship, UTHealth Science Center at Houston, School of Public Health, Brownsville and UTRGV (https://www.utrgv.edu/school-of-medicine/departments/population-health-and-biostatistics/community/summer-science-internship/index.htm)

2023/6/6 -	Gabriela Abigail Villareal, Lopez Early College High School,	Mentor
2023/7/21	Brownsville: TX: Comparing Bone Age Determined by Automation	
2018	Oscar Hernandez, Gladys Porter High School, Brownsville, TX	Co-mentor

SERVICE:

University of Texas Health Science Center at Houston - Department of Epidemiology

Epidemiology Curriculum Committee Chair: Department of Epidemiology

September 2021 – present

Epidemiology Curriculum Committee Member: Department of Epidemiology

April 2020 – present

Academic Council representative for Department of Epidemiology

July 2021 – Present

Epidemiology Retreat Committee, Department of Epidemiology

June 2023 – June 2024

<u>Preliminary Exam Secondary Proctor</u>: Department of Epidemiology, Human Genetics & Environmental Sciences, Brownsville Campus August 2020, May 2021

<u>Preliminary Exam Primary Proctor</u>: Department of Epidemiology, Human Genetics & Environmental Sciences, Brownsville Campus January 3, 2018.

University of Texas Health Science Center at Houston – Brownsville Location

<u>Leadership group member</u> for Translational Research Science Seminar: As the leadership group, we find student hosts and speakers for monthly seminars at the Brownsville location in conjunction with faculty from the University of Texas Rio Grande Valley, Brownsville

June 2023 – present

Student Liaison for Epidemiology and Biostatistics Support, Brownsville Location

September 2022 – present

Academic Council representative for Brownsville Campus:

July 2021 – Present

Admissions Committee member for Brownsville Campus:

September 2021 – Present

Scholarship Committee member for Brownsville Campus: Committee to rank students from
Brownsville Campus applying for internal scholarships

May 2021 – Present

Wright State University

Assistant Director: Short-Term Training Program to Increase Diversity in Health-Related
Research (STREAMS, formerly Short-Term Research Experience Access for Minority
Students), Wright State University.
November 2015-September 2016

Interim <u>Assistant Director</u>: Short-Term Training Program to Increase Diversity in Health-Related Research (STREAMS, formerly Short-Term Research Experience Access for Minority Students), Wright State University.

July 2015-August 2015

National:

Reviewer: Frontiers in Genetics, BMC Medical Genetics, Journal of Human Hypertension,
Annals of Human Biology, Human Biology, American Journal of Human Biology,
American Journal of Hypertension, Obesity, Public Health Nutrition, Human Genetics,
International Journal of Obesity, PLoS One, Circulation: Cardiovascular Disease
Genetics, Mayo Clinic Proceedings.

<u>Chair</u>: Mentoring subcommittee of The Obesity Society Epidemiology Interest Group. October 2011 – January 2015

Regional:

Steering Committee Member: Translational Research Seminar Series, UTHealth - Brownsville Campus & UTRGV. July 2023 – present

COVID-19 <u>Case Investigator</u>: On behalf of Cameron County Health Department, TX.

July 2020 – September 2020

Steering Committee Member: Obesity Research Group, Ohio Center for Excellence in Human-Centered Innovation (OHCI), Wright State University.

January 2012 – July 2012

PROFESSIONAL MEMBERSHIP:

Current: The Obesity Society, Human Biology Association

Past: American Heart Association, American Association of Physical Anthropologists,

Canadian Association for Physical Anthropology

TRAINING:

Epidemiology Retreat, Department of Epidemiology, UTHealth Houston, May 30-31, 2024, Houston, TX.

Non-Tenure Faculty Retreat, Office of the Faculty Affairs, UTHealth Houston, May 17, 2024, Houston, TX.

Maternal-Child Health Retreat, Office of the Dean, UTHealth Houston, June 24-25, 2024, Austin, TX.

AI and Student Learning: What We Know (and What We Don't), Inside Higher Ed Webinar, April 10, 2024

- Raising a Resilient Scientist (RRS) series, Office of Intramural Training & Education, National Institutes of Health, Feb 1, 2024 – June 20, 2024
- Diversity, Collaboration, and Opportunities in Current Health Science Education, The 2023 Innovation in Health Science Education Annual Conference, Shine Academy UT System, March 3-4, 2023
- How to 'Flip' the Classroom, Chronicles of Higher Education Webinar, Sep 21, 2022
- Teaching Scholars Summer Institute, West Virginia University Robert C. Byrd Health Sciences Center Faculty Development, June 6-8, 2022,
- Closing the Gap: Required Skills for Developing Innovative, Engaging and Interactive Online Courses, Summer Teaching Institute, UTHealth School of Public Health, June 5, 2019.
- Applied Biostatistical & Epidemiological Methods, Survival Analysis, July 16-20, 2007 at the Ohio State University, Columbus, Ohio
- Advanced Gene Mapping/Linkage Analysis Course, December 7-13, 2003 at Rockefeller University, New York, New York.
- 29th Ten-Day Seminar on the Epidemiology and Prevention of Cardiovascular Disease, July 20 -August 1, 2003 at Lake Tahoe, California.

GRANT & FINANCIAL AWARDS:

Current

UTRGV Maternal Health Research Center

Co-PIs: Robledo, C (contact PI, University of Texas Rio Grande Valley) & George, D

(University of Texas Rio Grande Valley)

Role: subcontract PI/Co-I

Funding Agency: Health Resources and Services Administration (HRSA) Maternal Health Research Network (MH-RN) for MSIs--Research Awards (UR6MC50345)

Dates: 09/31/2023 - 09/29/2028

Texas has the highest maternal mortality rate in the developed world and since 2006 has experienced an 87% increase in maternal deaths. The goals and objectives are to establish the UTRGV Maternal Health Research Center (MHRC) and to plan and implement relevant, culturally appropriate peer led interventions to address health disparities in maternal health research studies, and to increase capacity for maternal health disparity research in the RGV by supporting the training and supervision of community health workers

Learning by Doing! Expanding, Harmonizing, & Sharing Effective Field Study Experiences for Epidemiology II

Co-PIs (alphabetical order): Essigmann HT, Feofanova EV, John JC, Wilkinson AV

Funding Agency: *Teaching Innovation Award for AY2024-2025*, UTHealth Houston School of Public Health, Office of Instructional Design

Field Methods in Epidemiology (Epi II, PH 2615L) is a required core course for all MPH Epidemiology students, held every semester with multiple sections, and is a popular course for non-epidemiology majors. A key element of Epi II is gaining practical experience in creating, organizing, and conducting real-world public health research. An improved field study experience will translate didactic instruction into practice throughout the semester by operationalizing and using documented procedures to collect real-world data at students' local campus or virtually. This hands-on training will equip students with the training necessary for public health practice.

Building Strong Foundational Knowledge Through Student Engagement in Asynchronous Epidemiology I

Co-PIs (alphabetical order): Essigmann HT, Feofanova EV

Funding Agency: *Teaching Innovation Award for AY2023-2024*, UTHealth Houston School of Public Health, Office of Instructional Design

The online asynchronous Epidemiology I (Introduction to Epidemiology) class is a core course for all master's level students as well as those majoring and minoring in Epidemiology. Our plan is address challenges related to sub-optimal delivery of course content and low interaction between students and the instructional team. Our plans for sustainability include sharing the developed materials with other Epidemiology I instructors for their use in hybrid sections and to help faculty transition to online teaching.

Encouraging Student Engagement in Asynchronous Epidemiology II PHW 2615 Epidemiology II

Co-PIs: Feofanova EV, Choh, AC, Essigmann HT

Funding Agency: *Teaching Innovation Award for AY2023-2024*, UTHealth Houston School of Public Health, Office of Instructional Design

The online asynchronous Epidemiology II (Epi II, Field Methods in Epidemiology) class is in high demand by Epidemiology majors, minors, customized students and doctoral students. Despite the group work, there is still low interaction between students those outside of their group projects. There also appears to be a disconnection between students and the course content as they do not have field data collection experience, and often do not understand why they are doing what the course requires of them. We will address these issues by improving the quality of the online course delivery and introducing practical real-world field experiences to promote student engagement and interaction and give students pragmatic experience in conducting scientific research.

Completed

Telomere length dynamics in relation to changes in adiposity and metabolic risk

Co-PIs: Lee, M (contact PI) & Curran, J

Role: Co-I

Funding Agency: NIH/NIDDK (DK111201)

Dates: 09/23/2016 - 08/31/2023

The goal of this project is to investigate the influence of obesity on human aging, and to identify genes influencing telomere length and telomerase activity.

Quantifying Healthy Birth, Growth and Development Knowledge Integration (HBGDki)

PI: Choh, AC

Funding Agency: Bill and Melinda Gates Foundation (OPP1135978)

Dates: 07/28/2015 - 12/31/2016

The HBGD knowledge integration (HBGDki) initiative integrates data sets from diverse, focused studies into a larger body of knowledge. The purposes of integrating multidisciplinary data are to understand fully the effects of risk factors on growth outcomes and develop effective solutions. As part of this initiative, Fels Longitudinal Study data is among the datasets utilized for integrative analysis.

Short-term Training for Minority Students Program

PI: Czerwinski, SA

Role: Assistant Director, Mentor

Funding Agency: NIH/NHLBI (R25 HL103168)

Dates: 06/01/2010 - 02/28/2016

The major goal of this project is to give short-term training in the cardiovascular sciences with emphasis on basic mechanisms of cellular and neural physiology, cardiovascular and endocrine control/epidemiology to minority undergraduates.

Adiposity Disease Risk Factors, and Lifetime Health

PI: Czerwinski, SA Role: Co-investigator

Funding Agency: NIH/NICHD (R01 HD012252)

Dates: 7/10/2010 - 6/30/2015

This research project will use both new and existing data from the Fels Longitudinal Study, a unique database that began in 1929. The Fels Longitudinal Study is the world's longest continuous serial study of growth, body composition and risk factors for chronic disease in randomly ascertained individuals. A major focus of this continuation is the comprehensive assessment of the role of adipose tissue in cardiometabolic disease risk. Liver fat content and abdominal adipose tissue in several depots will be quantified by magnetic resonance imaging (MRI) in order to examine the interrelationships among liver fat, visceral and subcutaneous abdominal adiposity, and total body adiposity with respect to risk for cardiometabolic diseases. These data will be combined with existing data to test a variety of hypotheses by conducting both serial and cross-sectional analyses.

PREP Scholars

PI: Czerwinski, SA

Role: Mentor

Funding Agency: NIH/NIGMS (R25 GM086257)

Dates: 03/01/2010 - 02/28/2016

The continuation of a Wright State University Post-baccalaureate Research Education Program, WSU GRAD PREP, (WSUGP) provides research and academic training through an apprenticeship in the biomedical/behavioral sciences for seven scholars per year from underrepresented racial and ethnic groups, individuals with disabilities and/or individuals from disadvantaged backgrounds.

Job Demands as Moderators of the Relationship between Physical Activity and Health

PI: Choh, AC

Co-PI: Bowling, N, Co-I: Czerwinski SA

Funding Agency: Wright State Unversity Emerging Science Seed Grant

Dates: 07/01/2013 - 6/30/2014

This grant extracts objective measures spanning various dimensions of job demands, and examine how job-related dimensions, physical activity, and interactions between the two, influence obesity, blood pressure, general health, and depression, while adjusting for demographic, and behavioral risk factors.

Feasibility study for cerebrovascular health assessment

PI: Choh, AC

Co-I: Czerwinski SA, Jacobs B

Funding Agency: Wright State University Department of Community Health Seed Grant

Dates: 01/01/2011 - 12/31/2013

Brain aging is marked by cognitive decline, brain atrophy and increased prevalence of indicators of subclinical stroke such as white matter ischemic disease and cerebral microbleeds. This proposal seeks to develop research tools for use in an epidemiologic study of brain health in a sample of adults over the age of 50. Specifically, we refine and develop data collection and magnetic resonance (MR) image analysis protocols to quantify and analyze brain structures including regional brain volumes, white matter hyperintensities, cerebral microbleeds and stroke. We also test the reliability of the brain parameter measurements obtained from MR images for inter-reader, intra-reader, and image analysis reliability.

The Genetics of Infant Growth and Later Obesity

Demerath, EW (PI, University of Minnesota), Towne, B (subcontract PI)

Role: Co-Investigator

Funding agency: NIH/NICHD (R01 HD053685) Dates: 09/26/2006 – 07/31/2012 (no cost extension)

This study uses serial growth and BMI data from 675 related individuals in the Fels Longitudinal Study to identify genes involved in infant growth and their possible pleiotropic effects on BMI and the risk of overweight and obesity during childhood and adolescence.

Genetic Analysis of Osteoporosis Risk Factors

PI: Czerwinski SA Role: Co-Investigator

Funding agency: NIH/NIAMS (R01 AR052147)
Dates: 09/01/2005 – 06/30/2012 (no cost extension)

The study investigates the genetic determinants of bone mineral density (BMD) and measures of bone quality in a sample of 2,000 adult individuals from large extended pedigrees. The main goal of the study is the identification of genes influencing BMD and measures of bone quality, as well as the identification of genes that have joint influences on these traits.

Visceral Adiposity: Genetic and Environmental Influences

PI: Czerwinski, SA Role: Co-Investigator Funding agency: NIH/NIDDK (R01DK064870)

Dates: 09/20/2003 - 07/31/2009

The goal of the study is to identify genomic regions influencing the deposition of visceral adipose tissue, and to determine how the genetic control of visceral obesity may be modified by environmental (behavioral) factors such as physical activity and diet. In addition, the genetic epidemiology of systemic inflammation and hormonal dysregulation, which frequently accompany, and are exacerbated by visceral obesity, are explored.

MR Imaging of the Human Body

PI: Sherwood

Role: Co-Investigator

Funding agency: WSU Research Challenge/Major Collaboration

Dates: 03/01/2009 - 06/30/2010

This major collaboration grant to develop infrastructure at the Lifespan Health Research Center to facilitate collaborative research projects between LHRC and Wallace Kettering Neuroscience Institute.

Adiposity Disease Risk Factors, and Lifetime Health

PI: Siervogel, RM Role: Co-Investigator

Funding agency: NIH/NICHD (R01HD12222)

Dates: 12/01/2004 - 11/30/2009

This project involves the collection and analysis of long-term serial data from the Fels Longitudinal Study. Data are related to indices and measures of body fatness, adipose tissue distribution, lifestyle, lipids and lipoproteins, blood pressure, and other risk factors for cardiovascular disease. Analyses concern prediction of future states, associations among measures of body composition and other risk factors for cardiovascular disease, and patterns of change in individuals.

Genetic Epidemiology of Cardiovascular Reactivity to Physiological Stressors

PI: Choh AC

Funding agency: American Heart Association/Ohio Valley Research Affiliate (AHA0325371B)

Dates: 07/01/2003 - 06/30/2005

The overall goal of this project is to examine the role of genetic factors in blood pressure reactivity to physiological stressors. More specifically, we use maximum likelihood variance components-based techniques to search for genetic predispositions for exaggerated blood pressure responses to stress and to determine how much of the genetic effect is shared among the different stress responses and other CVD risk factors such as resting blood pressure. Ultimately, this research attempts to answer how genes affect physiological processes that are likely to be predictors of cardiovascular disease.

Genetic Epidemiology of CVD Risk Factors

PI: Siervogel, RM Role: Co-Investigator

Funding agency: NIH/NHLBI (R01HL69995)

Dates: 12/01/2002 - 11/30/2008

This study elucidates the role of genetic factors that influence risk of cardiovascular disease (CVD) and identifies specific genes influencing the age-related progression of CVD risks.

Drew Diabetes Education Program

PI: Czerwinski, SA (subcontract PI)

Role: Co-Investigator

Funding agency: Ohio Commission on Minority Health (666037), Combined Health District of

Montgomery County (PI)
Dates: 10/01/2004 - 06/31/2006

The primary goal of this pilot study is to collect preliminary data evaluating the effectiveness of diabetes intervention program conducted at the Drew Health Center to establish a comprehensive diabetes intervention aimed at improving health and reducing the progression of diabetes-related complications in a medically underserved African-American community.

Other awards:

July 2003	29 th Ten-Day Seminar on the Epidemiology and Prevention of Cardiovascular Disease travel stipend, American Heart Association
Summer 2002	Initiatives for Women (IFW) general award, University at Albany
Spring 2000	Edward E. Hunt Student Prize, Human Biology Association
Spring 1999	Juan Comas Award, American Association of Physical Anthropologists
Spring 1996, 1997, 1999	Graduate Student Organization Travel Grant, University at Albany

PUBLICATIONS:

Articles in Peer-Reviewed Journals: (*student from UTHealth Houston, or former institution)

- 1. Ford ML*, **Choh AC**, Gonzalez B*, Lindheim SR, Stancyzk FZ, McGinnis LK, Czerwinski SA and Lee M (2024): Anti-Müllerian hormone levels are associated with skeletal maturity in adolescent girls in the Fels Longitudinal Study. *Health Scientific Reports* (in press).
- 2. Yeh PG*, **Choh AC**, Fisher-Hoch SP, McCormick JB, Lairson DR and Reininger BM (2024): The association of cancer-preventive lifestyle with colonoscopy screening use in border Hispanic adults along the Texas-Mexico border. *Cancer Causes & Control*. PMID:38743343.
- 3. Garza AL*, Lee M, Blangero J, Bauer CX, Czerwinski SA and **Choh AC** (2024): Genetic correlations between liver fat content, metabolic health, and adiposity distribution in the Fels Longitudinal Study. *Nutrition, Metabolism, and Cardiovascular Diseases* 34(7):1610-1618. PMID:38555241.
- 4. Prasad A, Choh AC, Gonzalez ND*, Garcia M, Lee M, Watt G, Maria Vasquez L, Laing S, Wu S, McCormick JB and Fisher-Hoch S (2024): A High Burden of Diabetes and

- Ankle Brachial Index Abnormalities Exists in Mexican Americans in South Texas. *Preventive Medicine Reports* 38:102604. PMC10874877.
- 5. Limon VM*, Lee M, Gonzalez B*, Choh AC and Czerwinski SA (2020): The impact of metabolic syndrome on mental health-related quality of life and depressive symptoms. *Quality of Life Research*. PMID:32215841.
- 6. Reynolds KR, Stevens J, Cai J, Lewis CE, **Choh AC** and Czerwinski SA (2018): External Validation of Equations that Use Demographic and Anthropometric Measurements to Predict Percent Body Fat. *Obesity Science & Practice* 4(6):515-525. PMC6298207.
- 7. Watt GP*, Fisher-Hoch SP, Rahbar MH, McCormick JB, Lee M, Choh AC, Thanikachalam S and Thanikachalam M (2018): Mexican American and South Asian population-based cohorts reveal high prevalence of type 2 diabetes and crucial differences in metabolic phenotypes. *BMJ Open Diabetes Research & Care* 6(1):e000436. PMC5873536.
- 8. Lucas K, James P, Choh AC, Lee M, Czerwinski SA, Demerath EW and Johnson W (2018): The positive association of infant weight gain with adulthood body mass index has strengthened over time in the Fels Longitudinal Study. *Pediatric Obesity* 13(8):476-484. PMID:29493107.
- 9. Swanton S*, **Choh AC**, Lee M, Laubach LL, Linderman JK, Czerwinski SA and Peterson MJ (2017): Body mass index associations between mother and offspring from birth to age 18: the Fels Longitudinal Study. *Obesity Science & Practice* 3(2):127-133. PMC5478810.
- 10. Chu AY, Deng X, Fisher VA, Drong A, Zhang Y, Feitosa MF, Liu C-T, Weeks O, Choh AC, Duan Q, Dyer TD, Eicher JD, Guo X, Heard-Costa NL, Kacprowski T, Jr JWK, Lange LA, Liu X, Lohman K, Lu L, Mahajan A, O'Connell JR, Parihar A, Peralta JM, Smith AV, Zhang Y, Homuth G, Kissebah AH, Kullberg J, Laqua R, Launer LJ, Nauck M, Olivier M, Peyser PA, Terry JG, Wojczynski MK, Yao J, Bielak LF, Blangero J, Borecki IB, Bowden DW, Carr JJ, Czerwinski SA, Ding J, Friedrich N, Gudnason V, Harris TB, Ingelsson E, Johnson AD, Kardia SLR, Langefeld CD, Lind L, Liu Y, Mitchell BD, Morris AP, Jr THM, Rotter JI, Shuldiner AR, Towne B, Völzke H, Wallaschofski H, Wilson JG, Allison M, Lindgren CM, Goessling W, Cupples LA, Steinhauser ML and Fox CS (2017): Multiethnic genome-wide meta-analysis of ectopic fat depots identifies loci associated with adipocyte development and differentiation. *Nature Genetics* 49(1):125-130. PMC5451114.
- 11. Johnson W, **Choh AC**, Lee M, Towne B, Czerwinski SA and Demerath EW (2017): Is infant body mass index associated with adulthood body composition trajectories? An exploratory analysis. *Pediatric Obesity* 12(1):10-18. PMID:26756208.
- 12. Lu Y, Day FR, Gustafsson S, Buchkovich ML, Na J, Bataille V, Cousminer DL, Dastani Z, Drong AW, Esko T, Evans DM, Falchi M, Feitosa MF, Ferreira T, Hedman AK, Haring R, Hysi PG, Iles MM, Justice AE, Kanoni S, Lagou V, Li R, Li X, Locke A, Lu C, Magi R, Perry JR, Pers TH, Qi Q, Sanna M, Schmidt EM, Scott WR, Shungin D, Teumer A, Vinkhuyzen AA, Walker RW, Westra HJ, Zhang M, Zhang W, Zhao JH, Zhu Z, Afzal U, Ahluwalia TS, Bakker SJ, Bellis C, Bonnefond A, Borodulin K, Buchman AS, Cederholm T, Choh AC, Choi HJ, Curran JE, de Groot LC, De Jager PL, Dhonukshe-Rutten RA, Enneman AW, Eury E, Evans DS, Forsen T, Friedrich N, Fumeron F, Garcia ME, Gartner S, Han BG, Havulinna AS, Hayward C, Hernandez D, Hillege H, Ittermann T, Kent JW, Kolcic I, Laatikainen T, Lahti J, Mateo Leach I, Lee CG, Lee JY, Liu T, Liu Y, Lobbens S, Loh M, Lyytikainen LP, Medina-Gomez C,

Michaelsson K, Nalls MA, Nielson CM, Oozageer L, Pascoe L, Paternoster L, Polasek O, Ripatti S, Sarzynski MA, Shin CS, Narancic NS, Spira D, Srikanth P, Steinhagen-Thiessen E, Sung YJ, Swart KM, Taittonen L, Tanaka T, Tikkanen E, van der Velde N, van Schoor NM, Verweij N, Wright AF, Yu L, Zmuda JM, Eklund N, Forrester T, Grarup N, Jackson AU, Kristiansson K, Kuulasmaa T, Kuusisto J, Lichtner P, Luan J, Mahajan A, Mannisto S, Palmer CD, Ried JS, Scott RA, Stancakova A, Wagner PJ, Demirkan A, Doring A, Gudnason V, Kiel DP, Kuhnel B, Mangino M, McKnight B, Menni C, O'Connell JR, Oostra BA, Shuldiner AR, Song K, Vandenput L, van Duijn CM, Vollenweider P, White CC, Boehnke M, Boettcher Y, Cooper RS, Forouhi NG, Gieger C, Grallert H, Hingorani A, Jorgensen T, Jousilahti P, Kivimaki M, Kumari M, Laakso M, Langenberg C, Linneberg A, Luke A, McKenzie CA, Palotie A, Pedersen O, Peters A, Strauch K, Tayo BO, Wareham NJ, Bennett DA, Bertram L, Blangero J, Bluher M, Bouchard C, Campbell H, Cho NH, Cummings SR, Czerwinski SA, Demuth I, Eckardt R, Eriksson JG, Ferrucci L, Franco OH, Froguel P, Gansevoort RT, Hansen T, Harris TB, Hastie N, Heliovaara M, Hofman A, Jordan JM, Jula A, Kahonen M, Kajantie E, Knekt PB, Koskinen S, Kovacs P, Lehtimaki T, Lind L, Liu Y, Orwoll ES, Osmond C, Perola M, Perusse L, Raitakari OT, Rankinen T, Rao DC, Rice TK, Rivadeneira F, Rudan I, Salomaa V, Sorensen TI, Stumvoll M, Tonjes A, Towne B, Tranah GJ, Tremblay A, Uitterlinden AG, van der Harst P, Vartiainen E, Viikari JS, Vitart V, Vohl MC, Volzke H, Walker M, Wallaschofski H, Wild S, Wilson JF, Yengo L, Bishop DT, Borecki IB, Chambers JC, Cupples LA, Dehghan A, Deloukas P, Fatemifar G, Fox C, Furey TS, Franke L, Han J, Hunter DJ, Karjalainen J, Karpe F, Kaplan RC, Kooner JS, McCarthy MI, Murabito JM, Morris AP, Bishop JA, North KE, Ohlsson C, Ong KK, Prokopenko I, Richards JB, Schadt EE, Spector TD, Widen E, Willer CJ, Yang J, Ingelsson E, Mohlke KL, Hirschhorn JN, Pospisilik JA, Zillikens MC, Lindgren C, Kilpelainen TO and Loos RJ (2016): New loci for body fat percentage reveal link between adiposity and cardiometabolic disease risk. Nature Communications 7(7):10495. PMC4740398.

- 13. Whitaker KM, **Choh AC**, Lee M, Towne B, Czerwinski SA and Demerath EW (2016): Sex differences in the rate of abdominal adipose accrual during adulthood: the Fels Longitudinal Study. *International Journal of Obesity* 40(8):1278-1285. PMC4970892.
- 14. Malina RM, **Choh AC**, Czerwinski SA and Chumlea WC (2016): Validation of Maturity Offset in the Fels Longitudinal Study. *Pediatric Exercise Science* 28(3):439-455. PMID:26757350.
- 15. Redko C, Rogers N, Bule L, Siad H and **Choh A** (2015): Development and validation of the Somali WHOQOL-BREF among refugees living in the USA. *Quality of Life Research* 24(6):1503-1513. PMID:25429823.
- 16. **Choh AC**, Lee M, Kent JW, Diego VP, Johnson W, Curran JE, Dyer TD, Bellis C, Blangero J, Siervogel RM, Towne B, Demerath EW and Czerwinski SA (2014): Geneby-age effects on BMI from birth to adulthood: The Fels Longitudinal Study. *Obesity* 22(3):875-881. PMC3883986.
- 17. Demerath EW, **Choh AC**, Johnson W, Curran JE, Lee M, Bellis C, Dyer TD, Czerwinski SA, Blangero J and Towne B (2013): The positive association of obesity variants with adulthood adiposity strengthens over an 80-year period: a gene-by-birth year interaction. *Human Heredity* 75(2-4):175-185. PMC4091039.
- 18. Johnson W, Choh AC, Lee M, Towne B, Czerwinski SA and Demerath EW (2013): Characterization of the infant BMI peak: sex differences, birth year cohort effects, association with concurrent adiposity, and heritability. *American Journal of Human Biology* 25(3):378-388. PMC3988701.

- 19. Odegaard AO, **Choh AC**, Nahhas RW, Towne B, Czerwinski SA and Demerath EW (2013): Systematic examination of infant size and growth metrics as risk factors for overweight in young adulthood. *PLoS One* 8(6):e66994. PMC3688577.
- 20. Orlowski M, Adkins S, Ellison SA, **Choh AC**, Terwood N and Schuster RJ (2013): Assessment and management of adult obesity in a primary care practice. *World Medical & Health Policy* 5(1):19-36. DOI: 10.1002/wmh3.18.
- 21. Koller DL, Zheng HF, Karasik D, Yerges-Armstrong L, Liu CT, McGuigan F, Kemp JP, Giroux S, Lai D, Edenberg HJ, Peacock M, Czerwinski SA, Choh AC, McMahon G, St Pourcain B, Timpson NJ, Lawlor DA, Evans DM, Towne B, Blangero J, Carless MA, Kammerer C, Goltzman D, Kovacs CS, Prior JC, Spector TD, Rousseau F, Tobias JH, Akesson K, Econs MJ, Mitchell BD, Richards JB, Kiel DP and Foroud T (2013): Meta-analysis of genome-wide studies identifies WNT16 and ESR1 SNPs associated with bone mineral density in premenopausal women. *Journal of Bone and Mineral Research* 28(3):547-558. PMC3691010.
- 22. Graff M, Ngwa JS, Workalemahu T, Homuth G, Schipf S, Teumer A, Volzke H, Wallaschofski H, Abecasis GR, Edward L, Francesco C, Sanna S, Scheet P, Schlessinger D, Sidore C, Xiao X, Wang Z, Chanock SJ, Jacobs KB, Hayes RB, Hu F, Van Dam RM, Consortium G, Crout RJ, Marazita ML, Shaffer JR, Atwood LD, Fox CS, Heard-Costa NL, White C, Choh AC, Czerwinski SA, Demerath EW, Dyer TD, Towne B, Amin N, Oostra BA, Van Duijn CM, Zillikens MC, Esko T, Nelis M, Nikopensius T, Metspalu A, Strachan DP, Monda K, Qi L, North KE, Cupples LA, Gordon-Larsen P and Berndt SI (2013): Genome-wide analysis of BMI in adolescents and young adults reveals additional insight into the effects of genetic loci over the life course. *Human Molecular Genetics* 22(17):3597-3607. PMC3736869.
- 23. Johnson W, **Choh AC**, Curran JE, Czerwinski SA, Bellis C, Dyer TD, Blangero J, Towne B and Demerath EW (2013): Genetic risk for earlier menarche also influences peripubertal body mass index. *American Journal of Physical Anthropology* 150(1):10-20. PMC3539227.
- 24. Linabery AM, Nahhas RW, Johnson W, **Choh AC**, Towne B, Odegaard AO, Czerwinski SA and Demerath EW (2013): Stronger influence of maternal than paternal obesity on infant and early childhood body mass index: the Fels Longitudinal Study. *Pediatric Obesity* 8(3):159-169. PMC3765070.
- 25. Chumlea WC, **Choh A**, Towne B, Duren D, Siervogel RM and Czerwinski S (2012): Maintaining function with aging what we have learned from the Fels Longitudinal Study. *Journal of Frailty and Aging* 1(2):50-51.
- 26. Lee M, Choh AC, Demerath EW, Towne B, Siervogel RM and Czerwinski SA (2012): Associations between trunk, leg and total body adiposity with arterial stiffness. *American Journal of Hypertension* 25(10):1131-1137. PMC3578479.
- 27. Johnson W, Stovitz SD, **Choh AC**, Czerwinski SA, Towne B and Demerath EW (2012): Patterns of linear growth and skeletal maturation from birth to 18 years of age in overweight young adults. *International Journal of Obesity* 36(4):535-541. PMC3312969.
- 28. Johnson W, Soloway LE, Erickson D, **Choh AC**, Lee M, Chumlea WC, Siervogel RM, Czerwinski SA, Towne B and Demerath EW (2012): A changing pattern of childhood BMI growth during the 20th century: 70 y of data from the Fels Longitudinal Study. *American Journal of Clinical Nutrition* 95(5):1136-1143. PMC3325836.
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- 32. Duren DL, Blangero J, Sherwood RJ, Seselj M, Dyer T, Cole SA, Lee M, **Choh AC**, Chumlea WC, Siervogel RM, Czerwinski SA and Towne B (2011): Cortical bone health shows significant linkage to chromosomes 2p, 3p, and 17q in 10-year-old children. *Bone* 49(6):1213-1218. PMC3221785.
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- 36. Sherwood RJ, Duren DL, Mahaney MC, Blangero J, Dyer TD, Cole SA, Czerwinski SA, Chumlea WC, Siervogel RM, **Choh AC**, Nahhas RW, Lee M and Towne B (2011): A genome-wide linkage scan for quantitative trait loci influencing the craniofacial complex in humans (Homo sapiens sapiens). *Anatomical Record* 294(4):664-675. PMC3091483.
- 37. Lee M, Nahhas RW, **Choh AC**, Demerath EW, Duren DL, Chumlea WC, Sherwood RJ, Towne B, Siervogel RM and Czerwinski SA (2011): Longitudinal changes in calcaneal quantitative ultrasound measures during childhood. *Osteoporosis International* 22(8):2295-2305. PMC3988661.
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- 39. Demerath EW, Reed D, Choh AC, Soloway L, Lee M, Czerwinski SA, Chumlea WC, Siervogel RM and Towne B (2009): Rapid postnatal weight gain and visceral adiposity in adulthood: the Fels Longitudinal Study. *Obesity* 17(11):2060-2066. PMC2801420.
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- 41. Lee M, Choh AC, Demerath EW, Knutson KL, Duren DL, Sherwood RJ, Sun SS, Chumlea WM, Towne B, Siervogel RM and Czerwinski SA (2009): Sleep disturbance in relation to health-related quality of life in adults: the Fels Longitudinal Study. *Journal of Nutrition, Health & Aging* 13(6):576-583. PMC3988690.
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- 45. Towne B, Williams KD, Blangero J, Czerwinski SA, Demerath EW, Nahhas RW, Dyer TD, Cole SA, Lee M, **Choh AC**, Duren DL, Sherwood RJ, Chumlea WC and Siervogel RM (2008): Presentation, heritability, and genome-wide linkage analysis of the midchildhood growth spurt in healthy children from the Fels Longitudinal Study. *Human Biology* 80(6):623-636. PMC2801436.
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- 49. Demerath EW, Shen W, Lee M, **Choh AC**, Czerwinski SA, Siervogel RM and Towne B (2007): Approximation of total visceral adipose tissue with a single magnetic resonance image. *American Journal of Clinical Nutrition* 85(2):362-368. PMC2883309.
- 50. Duren DL, Sherwood RJ, **Choh AC**, Czerwinski SA, Chumlea WC, Lee M, Sun SS, Demerath EW, Siervogel RM and Towne B (2007): Quantitative genetics of cortical bone mass in healthy 10-year-old children from the Fels Longitudinal Study. *Bone* 40(2):464-470. PMC1945206.
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- 53. Remsberg KE, Rogers NL, Demerath EW, Czerwinski SA, **Choh AC**, Lee M, Chumlea WC, Sun SS, Towne B and Siervogel RM (2007): Sex differences in young adulthood metabolic syndrome and physical activity: the Fels Longitudinal Study. *American Journal of Human Biology* 19(4):544-550. PMID:17546618.
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- 55. Lee M, Czerwinski SA, **Choh AC**, Demerath EW, Sun SS, Chumlea WC, Towne B and Siervogel RM (2006): Unique and common genetic effects between bone mineral density and calcaneal quantitative ultrasound measures: the Fels Longitudinal Study. *Osteoporosis International* 17(6):865-871. PMID:16541205.
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- 57. Lee M, Czerwinski SA, **Choh AC**, Demerath EW, Sun SS, Chumlea WC, Towne B and Siervogel RM (2006): Quantitative genetic analysis of cellular adhesion molecules: the Fels Longitudinal Study. *Atherosclerosis* 185(1):150-158. PMID:16005461.
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<u>Published books, chapters, reviews:</u>

Czerwinski S. A. and **Choh A. C.** (2021): "The Genetic Epidemiology of Growth and Development". In Cameron N. and Schell L. M. (eds.): *Human Growth and Development, 3rd Edition*. London, UK: Elsevier/Academic Press, pp 203-244.

Czerwinski S. A., **Choh A. C.**, and Lee M. (2020): "Growth and Maturation". In: Konek S. H. and Becker P. (eds.): *Pediatric Nutrition in Clinical Care*. 5th Edition: Burlington, MA: Jones and Bartlett Learning.

Donini L. M., Czerwinski S. A., **Choh A. C.**, Poggiogalle E., Migliaccio S. and Lenzi A. (2014): "Sarcopenic Obesity". In Lenzi A., Migliaccia S. and Donini L. M. (eds.): *Multidisciplinary Approach to Obesity: From Assessment to Treatment*. Switzerland: Springer International Publishing, AG, pp 89-98.

Manuscripts under revision or review:

Garza AL*, Blangero J, Lee M, Bauer CX, Czerwinski SA and **Choh AC** (2024): Bivariate linkage analyses for metabolic dysfunction-associated fatty liver disease in the Fels Longitudinal Study. *Metabolism*

Garza AL*, Choh AC, Blangero J, Bauer CX, Czerwinski SA and Lee M (2024): Cross-Sectional Assessment of Metabolically Healthy Obesity and Liver Steatosis in the Fels Longitudinal Study. *Obesity Research & Clinical Practice*.

Ford M. L.*, **Choh A. C.**, Gonzalez B., Lindheim S. R., Stancyzk F. Z., McGinnis L. K., Czerwinski S. A. and Lee M. (2023): Anti-Müllerian hormone levels are associated with skeletal maturity in adolescent girls in the Fels Longitudinal Study. *Scientific Reports*.

Gonzalez B.*, Lee M., **Choh A.**, Nahhas W. J. R. W., Limon V., Roa M. and Czerwinski S. (2020): Recent secular trends in abdominal adiposity in the Fels Longitudinal Study. *Obesity Research & Clinical Practice*.

Invited Presentations:

"Genetic epidemiology in the Fels Longitudinal Study", October 19, 2013, Symposium honouring Susan Pfeiffer's contributions to anthropology at the 41st Annual Meeting of the Canadian Association for Physical Anthropology, Toronto, Ontario, Canada.

"Genetic epidemiology of blood pressure responses to physiological stressors", February 16, 2004, Department of Geography, Geology and Anthropology, Indiana State University, Terre Haute, Indiana.

Abstracts:

- 1. Garza A. L., **Choh A. C.**, Blangero J., Czerwinski S. A. and Lee M. (2022): The Metabolically Healthy Obese Paradigm and Liver Fat Content in the Fels Longitudinal Study. *The 40th Annual Scientfic Meeting of the Obesity Society* San Diego, CA:Oral-055.
- 2. **Choh A. C.**, Ford M. L., Curran J. E., B G., Czerwinski S. A. and Lee M. (2022): The relationship between sleep characteristics and leukocyte telomere length in the Fels Longitudinal Study. *47th Annual Meeting of the Human Biology Association* Denver, CO:245.
- 3. Ford M. L., **Choh A. C.**, Gonzalez B., Lindheim S. R., Stancyzk F. Z., McGinnis L. K., Czerwinski S. A. and Lee M. (2022): Skeletal maturity influences anti-Mullerian hormone levels. *47th Annual Meeting of the Human Biology Association* Denver, CO:244.
- 4. Gonzalez B., **Choh A. C.**, Ford M. L., Curran J. E., Lee M. and Czerwinski S. A. (2022): Associations of behavioral, anthropometric, and dietary risk factors with leucocyte telomere length in the Fels Longitudinal Study. *47th Annual Meeting of the Human Biology Association* Denver, CO:244.
- 5. **Choh A. C.**, Diaz-Badillo A., Yao E., Lee M. and Czerwinski S. A. (2019): Patterns of BMI over the Lifespan and Cardiometabolic Disease Risk. *The 37th Annual Scientific Meeting of The Obesity Society* Las Vegas, NV:T-P-3050.
- 6. Gonzalez B., Limon V., Lee M., **Choh A.** and Czerwinski S. (2019): Sex Specific Predictors of Elevated Liver Fat Content. *The 37th Annual Scientific Meeting of The Obesity Society* Las Vegas, NV:T-P-3310.
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Non peer-reviewed abstracts:

Garcia M., **Choh A.**, Fischer-Hoch S. and Prasad A. (2019): Subclinical Atherosclerosis and Medical Therapy in a Mexican American Cohort. The 12th Annual Community Service Learning (CSL) Conference. San Antonio, TX:76

RESEARCH TOOLS:

- Genetic Analysis: Genome-Wide-Association (GWA) analysis (measured genotype analysis using SNPs), linkage analysis, combined linkage/association analysis, bivariate linkage analysis, qtl by age, qtl by environment analysis, quantitative genetic analysis, multivariate analysis, gene by age, gene by environment analysis, joint linkage and association analysis.
- **Anthropometric skills:** Experience in use of skinfold calipers, spreading calipers, stadiometer, blood pressure sphygmomanometers, infant length boards, and neonatometers.
- Computer skills: Proficient in UNIX, Windows and Macintosh Platforms. Programming in SAS, SPSS, S-plus, LISREL, C, SED, AWK, tcl, sh, csh, tcsh. Minor programming Dbase, R. Familiarity with C⁺⁺, Fortran. Proficient in PEDSYS (all platforms), SOLAR (versions 1.7.3 and 4.2.9) and other UNIX based programs/executables such as the vieditor, gcc. Working knowledge of PAP revision 3. Proficient in IBM based software such as Excel, Word, WordPerfect, Power Point, as well as Windows and MS-DOS. Proficient with Macintosh based software such as Word, PedDraw, and Q-Edit.
- **Database management:** Management of genetic database on UNIX platform including pedigree, IBD, and STR and SNP marker data for linkage and GWA at the Lifespan Health Research Center. These tasks include data retrieval, quality control and error checking of data. Other center related tasks include updating software, and power calculations.

AREAS OF RESEARCH INTEREST:

I am a genetic epidemiologist interested in risk factors related to obesity, blood pressure, growth and development, and cardiovascular disease. Using various statistical genetic methods such as genome-wide linkage analysis and family-based genome-wide association studies (GWAS), my research has examined the genetic architecture of blood pressure, obesity, and body composition. I have also collaborated with various large international consortiums conducting population- and family-based genetic studies. More recently, my research interests have expanded to include the influence of childhood, adulthood and lifetime adiposity and blood pressure variation on cognition and cerebrovascular health in later life in the Fels Longitudinal Study.