Department of ECONOMICS

March 7, 2024

Yuulin An
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Dear Selection Committee:

I am writing to express my strong interest in the Mentoring Program on Aging and Health Economics Research at the National Bureau of Economic Research (NBER), with support from the National Institute of Aging. As a second-year doctoral student specializing in health economics at Colorado State University, I am deeply invested in advancing my research within the realms of aging, health economics, and demography. I believe that this program would provide an excellent opportunity for me to receive the training and experience necessary to make meaningful contributions in this field.

The program's emphasis on comprehensive training, including the discussion of cutting-edge empirical methods and the exploration of relevant datasets, as well as its focus on project development through identifying impactful research questions, aligns perfectly with my goal of crafting meaningful dissertation chapters. I am particularly excited about the opportunity to work alongside mentors who are at the forefront of aging and health economics research and connecting with fellow students from diverse, underrepresented, and non-traditional backgrounds. As a Cambodian woman who is committed to exploring the challenges of health disparities and social inequality—a field that has limited resources and development in Cambodia—I value initiatives aimed at reducing under-representation in academia and view this program as a crucial step towards fostering a more inclusive academic environment.

I am currently working on a paper that examines the disparities in health and well-being between rural and urban older populations in the US. This project has laid a strong foundation for my understanding of health disparities across different demographics and geographical settings by employing an expected utility framework that incorporates differences in consumption, leisure, health, mortality, and wealth. However, I believe that this program would help me to deepen my understanding of these topics and gain exposure to innovative ideas and perspectives. My other research topics include: (1) emotional shocks and complications in the workplace using the confidential Vital Statistics Natality Birth data from Texas, and (2) the causal effects of sleep and mood on cognitive performance using data of chess players and regression discontinuity design. My research aims to answer policy-relevant questions by applying a diverse set of machine learning techniques and econometric methods including dynamic panel

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data estimators, natural experiments, and microsimulations.

As a graduate student affiliate at the Center for Healthy Aging at Colorado State University, I have had the opportunity to gain invaluable resources and guidance, enhancing my ability to examine policy implications within the scope of my research focus. This affiliation has allowed me to appreciate the interdisciplinary nature of research. By interacting with scholars from diverse disciplines, I have gained a holistic understanding of the dynamics of healthy aging. I draw inspiration not only from the excellent work being done in the economics of aging but also from sociology, political science, and anthropology. This exposure enriches my scholarship and broadens my perspective on aging research.

Thank you for considering my application to the Mentoring Program on Aging and Health Economics Research at the National Bureau of Economic Research. I am excited with the opportunity to contribute to and learn from the diverse community of scholars. I have enclosed my curriculum vitae and personal statement. Please contact me for any additional information by email (yuulin.an@colostate.edu) or phone (253-230-0495). I am looking forward to hearing from you soon.

Sincerely,

Yuulin An
Ph.D. Student

Updated March 7, 2024

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Current Position

Aug. 2022 – present: Graduate Teaching Assistant, Department of Economics, Colorado State University

Education

Colorado State University — Fort Collins, CO
Ph.D., Economics — Aug. 2022 – present
Advisor: Ray Miller (chair)

Coe College — Cedar Rapids, IA
B.A., Economics and Business Administration — May 2022

Research Fields

Health Economics, Regional Economics, Demographics, Economics of Aging

Research

Working Papers

Growing Old in Rural America: Measuring Late-Life Health and Economic Well-being, with Sayorn Chin and Ray Miller.

Abstract: *We estimate well-being among older rural Americans using an expected utility framework that incorporates differences in consumption, leisure, health, mortality, and wealth using data from the Health and Retirement Study (HRS). At age sixty, we estimate mean rural consumption expenditures of $24,404, a retirement probability of 53%, and a remaining life expectancy of 20.5 years for the cohort born 1931-36. When adjusting life expectancy for living in poor health, we obtain an age sixty quality adjusted life expectancy (QALE) of only 15.7 years. Our combined welfare metric suggests well-being among rural residents is only 72% that of older urban residents—largely driven by substantial consumption and QALE gaps. Moreover, our measure broadly indicates that regional inequality is larger than suggested by other welfare metrics such as income or consumption alone. We also find that older rural Americans are generally falling further behind older urban American across birth cohorts. Most of this widening gap is also driven by declining relative consumption and QALE.*

Work in Progress

Emotional Shocks and Complications in the Workplace, with Sayorn Chin and Sammy Zahran.

Sleep, Mood, and Cognitive Performance: Evidence from Chess Players, with Sayorn Chin and Sammy Zahran.

Teaching Experience

Department of Economics, Colorado State University
Graduate Teaching Assistant — Aug. 2022 – present

Spring 2024: Principles of Microeconomics (3 sections)
Fall 2023: Principles of Macroeconomics (3 sections)
Spring 2023: Principles of Microeconomics (3 sections)
Fall 2022: Principles of Microeconomics (3 sections)

Honors & Awards

Graduate Teaching Assistantship — 2022 – 2027
Awarded a full tuition scholarship and monthly stipend from the Department of Economics at Colorado State University.

Harley W. Howell Prize — May 2022
An award of $500, endowed by the Harley W. Howell Charitable Foundation, recognizes Mr. Howell's distinguished career in the business and financial world, coupled with a high sense of civic responsibility. This award is given to a senior business and economics major for superior academic achievement, promise of leadership career in the field, sound moral character and campus citizenship. This award was issued by the Stead Department of Business Administration & Economics from Coe College.

Spellman Optimum Optimorum — May 2022
An award of $500 is given to a senior major who will be entering an economics Ph.D. program immediately following his or her graduation from Coe. The cash award is in honor of Dr. Bill Spellman, who taught economics at Coe from 1970 until his untimely death in 1997.

Skills

Programming & Software
Proficient in: Stata, R, Python
Intermediate: Git/GitHub, IntelliJ IDEA, Java

Affiliations

Center for Healthy Aging at Colorado State University, American Economic Association, American Society of Health Economists

Completed Courses

Fall 2023: Econometric Theory I, Macroeconomic Analysis II, Microeconomic Analysis II

Spring 2023: Heterodox Approaches to Economics, Microeconomic Analysis I, Macroeconomic Analysis I

Fall 2022: Quantitative Methods for Economists, Applied Econometrics, History of Economic Thought, Supervised College Teaching

Current Courses

Spring 2024: Seminar: Development, Econometric Theory II, Advanced Econometric Methods: Panel Data Models, Research Technical Paper

Personal Statement

by Yuulin An

The nexus of aging, health economics, and demography represents a critical area of study, particularly as the demographic composition of global populations shifts towards a higher prevalence of older individuals. This shift poses unique challenges to healthcare systems worldwide, necessitating a deep dive into the complexities of aging and its associated health disparities. These disparities are not confined to a single country but are a worldwide phenomenon, requiring a global lens to fully understand and address. My research interests squarely fall within this domain, with a specific focus on quantifying and understanding the disparities in health and economic well-being among older populations across different demographics and geographical settings. This passion has culminated in a working paper that I am co-authoring, which utilizes an expected utility framework to estimate late-life well-being among rural and urban older populations, drawing on a longitudinal panel data from the Health and Retirement Study. Our findings underscore significant consumption and quality-adjusted life expectancy (QALE) disparities between older rural and urban Americans, pointing towards a well-being metric that suggests rural residents' well-being is approximately 72% that of their urban counterparts. This disparity is primarily driven by differences in consumption and QALE, with the gap widening across birth cohorts. Such insights are not only academically intriguing but also have profound policy implications, emphasizing the need for targeted interventions to bridge these gaps.

The motivation behind my application to the NBER Mentoring Program for Aging and Health Economics Research is twofold. Firstly, the program represents an unparalleled opportunity to engage with leading researchers and peers dedicated to aging and health economics. The collaborative environment, mentorship, and detailed feedback mechanisms are vital for honing my research skills and methodologies. Secondly, the interdisciplinary nature of the program aligns with my commitment to leveraging diverse analytical frameworks and methodologies to address complex issues in aging and health economics. Hence, I view this mentoring program as a great opportunity to broaden my professional network within this vital field.

In addition to my current research, I am exploring two nascent projects that further reflect my commitment to innovative and impactful research. The first investigates the effects of sleep and mood on cognitive performance using data of chess players. The second project examines the emotional shocks and complications in the workplace of physicians. Both projects illustrate my endeavor to apply rigorous, creative research methodologies to uncover insights into health and well-being. Through this mentoring program, I aim to further deepen my methodological skills and gain fresh perspectives to enhance the impact of my research, particularly as they pertain to aging populations. By examining the relationship between sleep, mood, and cognitive performance, the first project could illuminate potential strategies for mitigating cognitive decline in older adults through sleep and mood management. The second project, focusing on the emotional well-being of healthcare providers and its impact on patient outcomes, underscores the importance of considering healthcare providers' emotional states in efforts to optimize patient care and minimize adverse outcomes.

Participating in the NBER Mentoring Program is not merely an opportunity for academic and professional development; it is a once-in-a-lifetime opportunity to contribute meaningfully to the broader discourse on aging and health economics. I am eager to immerse myself in the program's collaborative, interdisciplinary setting, which I believe will be instrumental in advancing my research agenda and enabling me to contribute to solving some of the most pressing issues facing aging populations today.