

# Kristin Vrona

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## EDUCATION

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Ph.D.	Economics, Northern Illinois University (NIU)	2025
	<b>Degree specializations:</b> econometrics, labor economics	
	<b>Secondary Fields:</b> health economics, strategy and game theory, public policy	
M.A.	Economics, Northern Illinois University	2018
B.S.	Economics, <i>summa cum laude</i> , Northern Illinois University	2016

## Dissertation

*An Analysis of Mental Health and Workplace Absenteeism:* This dissertation investigates how untreated mental illness affects employee absenteeism and the role of fringe benefit package design on the magnitude of productivity loss attributed to mental illness. Using MEPS data (2010-2014), I apply several econometric frameworks to isolate the causal impact of mental health on labor outcomes and examine the possibility of non-random selection into employment that biases the magnitude of estimates. A key innovation is a spectral approach to mental illness measurement that captures symptom variation beyond formal diagnosis. The findings support the business case for early intervention and tailored health benefits to improve productive time losses.

## EMPLOYMENT

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***Freelance Field Expert: Applied Microeconomics, Econometrics*** 2024 - present  
Currently contracted with Snorkel AI (remote)

- Designed and executed adversarial overload strategies to expose model limitations in real-world applications

***Graduate Research Fellow*** 2022 – 2024  
Institute for the Study of the Environment, Sustainability, and Energy, DeKalb, IL

- Fellowship sponsored by Illinois Department of Natural Resources (IDNR)
- Consulted IDNR on improving scoring indexes that determine funding allocations

***Teaching Fellow*** 2017 - 2022  
Department of Economics, NIU, DeKalb, IL

- Independently instructed courses for 15 - 38 students
- Promoted team-based learning (TBL) initiatives
- Led graduate level recitation sessions
- Acted as Undergraduate Academic Advisor, preparing students to succeed in the program and representing the Economics Department at events

***Business Operations Analyst*** 2016 - 2017  
MOL Logistics, U.S. Corporate Office, Lombard, IL

- Increased forecasting accuracy by 5-8% in three months
- Monitored and assessed projection model performance, presented actionable insights to domestic and international executive management
- Conducted operational auditing, reallocating idle assets and cutting costs

## AWARDS, HONORS, & FELLOWSHIPS

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### Academic

- 2022 Dissertation Fellowship, NIU Graduate School, *runner-up position, awarded tuition waiver*
- 2018 Outstanding Graduate Student Award, NIU Graduate School, April
- 2017 Outstanding Master's Student Award, Department of Economics, NIU, December
- 2017 Kellstadt Graduate Scholarship, DePaul University Kellstadt Graduate School of Business, *declined in favor of offer Teaching Fellowship at NIU*
- 2012-2016 Departmental Honors, Department of Economics; Dean's List, College of Liberal Arts & Sciences; Academic Excellence List, NIU

### Professional

- 2023 IL congressional session (February 28) & gubernatorial press conference (March 1). *ESE team honored for management of \$59 million in grant funds across IL parks projects.*
- 2017 MOL Spot Award, MOL Logistics, June, *Monetary award for streamlining data processes and developing standard operating procedures for cross-departmental implementation.*

## ADVANCEMENT & DEVELOPMENT

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- 2024 Retirement Confidence Survey: Results and Insight Webinar, Employee Benefit Research Institute (EBRI), June 25
- 2024 EBRI & American Benefits Council: 2024 Spring Policy Forum, May 16
- 2024 Collaborative Institutional Training Initiative: Human Subjects Research Training, February 22
- 2023 IDNR & Federal Department of Natural Resources Collaborative Sessions, February 27-28
- 2022 The Committee on the Status of Women in the Economics Profession (CSWEP) Mentorship Seminar
- 2020 CSWEP Successfully Navigating Your Economics PhD, November 20
- 2019 Federal Reserve Bank of Chicago 12th Annual Risk Conference
- 2019 NIU Department of Economics ECONference, April
- 2017 NIU Department of Economics ECONference, April 26

### Certifications

CITI Program Human Subjects Research Training Certification (February 2024 - February 2029)

## DEPARTMENTAL & UNIVERSITY SERVICE

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- 2019 *Academic Advisor*, Department of Economics, NIU Transfer Student Open House Days, October 18 & November 11
- 2019 *Department Representative, Department Organizer*, Department of Economics, NIU Major and Minors Fair, September 18
- 2018 *Academic Advisor*, Department of Economics, NIU Transfer Student Open House Days, October 8 & November 12
- 2018 *Academic Advisor*, Department of Economics, NIU Transfer Student Open House Days, March 30
- 2018 *Department Representative, Co-organizer*, Department of Economics, NIU Spring Internship and Job Fair, February 20
- 2017 *Assistant Undergraduate Academic Advisor*, Department of Economics, Fall 2017. Created and updated NIU Department of Economics pamphlets and posters

## SERVICE TO PROFESSION

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2022-2023 *Primary Grant Reviewer*, IDNR Open Space Land Acquisition and Development Program

## CAMPUS & DEPARTMENTAL TALKS

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2022 “Labor Productivity and Health”, ECON 700: Labor Economics I, NIU Department of Economics, November 27  
2021 “Moderate to Severe Diagnosed Mental Disorders and Absenteeism”, NIU Department of Economics Graduate Colloquium Seminar, March 24  
2018 “Mental Health & Labor Supply”, NIU Department of Economics Graduate Colloquium Seminar, November 23

## Conference Presentations

2025 “An Analysis of Mental Health and Workplace Absenteeism” (dissertation), NIU Annual ECONference, April

## TEACHING EXPERIENCE

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### Northern Illinois University (NIU)

Principles of Macroeconomics, undergraduate, <i>Instructor of Record</i>	SU22, SU21, SP21, F20
Intermediate Macroeconomics, undergraduate	SP22
Econometric Analysis, undergraduate	F21
Public Sector Economics, graduate	F20
Microeconomic Analysis, graduate	SP20, F18

## TECHNICAL SKILLS

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### Programming Languages

- Proficient in R, SAS, VBA, L<sup>A</sup>T<sub>E</sub>X
- Intermediate experience with Python, GitHub, STATA

### Operational Database & Public Fund Management

- SQL, BI software, ODS management, STARNET (contract management & auditing), AmpliFund (public grant management software)

### Econometric Methods

- Time-Series Analysis, Instrumental Variables, Panel Methods, Regression Discontinuity, Duration & Survival Analysis, Simultaneous Regression
- Matching, Simulation, Bias Reduction & Re-Sampling Techniques (Bootstrap, Jackknife), Sensitivity Analysis

## SELECTED RESEARCH ABSTRACTS

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### Job Market Paper

#### *Labor Supply Dynamics Among Employed Workers with Mental Illness*

Abstract: In this article, the impact of diagnosed mental illness on workplace productivity is examined, focusing on variations between levels of psychological distress and perceived physical health. I also explore the influence that comorbidity of chronic physical and mental illnesses imposes on absenteeism using the Medical Expenditure Panel Survey (MEPS). For both genders, I find that the impact of mental illness is eventually overshadowed by distress-related symptomatology, highlighting the significant role of undiagnosed mental illness in productivity losses.

## Manuscript in Preparation

### *Mental Health and Absenteeism: the Role of Fringe Benefits as Moderators*

Abstract: This study examines the impact of mental illness on health-related labor supply decisions, using data from the Medical Expenditure Panel Survey (MEPS) for employed adults in the United States. The analysis explores the effects of both diagnosed mental illness and self-reported mental well-being on health-induced absenteeism, while investigating how job characteristics may amplify or mitigate these effects. Employer-sponsored health benefits, while generally associated with higher absenteeism due to labor substitution for health-related needs, are found to mitigate the impact of mental illness on absenteeism.

## Additional Paper

### *The Role of Individual Health Patterns and Endogenous Employment on Absenteeism*

Abstract: This paper examines the question often present in behavioral models of health - the bias that can persist across estimates when unobserved factors drive behavior. In the context of this study, individuals may select into employment non-randomly. For instance, ability to balance health issues while being productive. When these possibilities are ignored, the magnitude of the effect that mental illness has on absenteeism is likely underestimated. A classic Heckman selection model, supported by strong exclusion restrictions, suggests the presence of endogenous sample selection that is validated by a semi-parametric copula-based selection model that accommodates the discrete and overdispersed nature of absence data.

## Dissertation Committee & References

**Virginia Wilcox, *chair***  
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