## Seokkyun Joshua Woo

Assistant Professor (tenure-track) Graduate School of Science and Technology Policy, KAIST

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## **EDUCATION**

## Georgia Institute of Technology, Atlanta, GA

August 2016 – May 2022

- School of Public Policy
- Ph.D. in Public Policy
- Committee: John Walsh (Chair), Mary Fox, Staša Milojević, Cassidy Sugimoto, Juan Rogers

## Georgia Institute of Technology, Atlanta, GA

August 2017 - May 2020

- H. Milton Stewart School of Industrial & Systems Engineering
- M.S. in Statistics (with emphasis on computational statistics/machine learning)

## Seoul National University, Seoul, South Korea

Mar 2011 - Feb 2013

- Technology Management, Economics and Policy Department, School of Engineering
- M.A. in Engineering Economics

## The University of Colorado at Boulder, Boulder, CO

August 2005 - June 2008

B.A. in Economics

### RESEARCH INTERESTS

- Sociology and Organization of Science
- Science of Science
- History of Science
- Organization Theory

### RESEARCH METHODS

- Advanced Statistical Methods
- Text-mining and Natural Language Processing
- Historical Data Analysis
- Ethnography

### PROFESSIONAL EXPERIENCE

## KAIST, Daejeon, South Korea

August 2023 - Present

- Graduate School of Science and Technology Policy
- Assistant Professor (tenure-track)

## Northwestern University, Evanston, IL, USA

June 2022 - August 2023

- Center of Science of Science and Innovation, Kellogg School of Management
- Post-doctoral Research Fellow

## Georgia Institute of Technology, Atlanta, GA, USA

August 2016 - May 2022

- School of Public Policy
- Graduate Research Assitant

#### TEACHING EXPERIENCE

# Main Instructor for PUBP 6012 "Fundamentals of the Policy Process" (at Georgia Tech) Spring 2022

The class familiarized master's students with many of the fundamental concepts and theories of public
policy studies, particularly helping students to understand, anticipate, and shape public policies and
providing them with a well-grounded theoretical lens through which to analyze public policy processes and
outcomes.

## Instructor for PUBP 8803 "Bibliometrics, Citation Analysis & Tech Mining" (at Georgia Tech) Fall 2019

 The class focused on teaching computational skills to public policy students to tackle a wide range of research topics around innovation activities by using both structured and unstructured texts from various documents.

### PEER-REVIEWED PUBLICATIONS

Kim, Y. H., Lee, Y. N., & Woo, S. 2023. "The rocky road to translational science: An analysis of Clinical and Translational Science Awards" *Research Evaluation* 

Woo, S., Youtie, J., Ott, I., Scheu, F. 2021 "Understanding the Long-Term Emergence of Autonomous Vehicles Technologies" *Technological Forecasting and Social Change* 

Youtie, J., Kwon, S. and Woo, S. 2021. The Impact of I-Corps on Accelerating Venture Discontinuation in a Southeastern US University. *Science and Public Policy*.

Kolesnikov, S., Woo, S., Li, Y., Shapira, P., & Youtie, J. 2019. Mapping the emergence of international university research ventures. *The Journal of Technology Transfer* 

Woo, S., Jang, P., & Kim, Y. 2015. Effects of intellectual property rights and patented knowledge in innovation and industry value added: A multinational empirical analysis of different industries. *Technovation* 

### **WORKING PAPERS**

"On the Shoulders of Fallen Giants: What do references to retracted research tell us about citation behaviors?" (with John P. Walsh)

"How Culture shapes Science: Testing Merton Thesis by examining the effects of the Protestant Reformation on the Rate and Direction of Science during the 16th-18th century Holy Roman Empire." (with Joshua Jackson and Dashun Wang)

"The Cycle of Doubt: How Scientists Cope with Uncertainties in Production of Data" (with John Walsh)

"Gender and Attrition in Research Careers" (with You-Na Lee)

"Burden of Novelty: Understanding the Ambiguous Role of Evidence in Novel Findings." (with Robert Ward and Cassidy Sugimoto)

### CONFERENCES, WORKSHOPS AND INVITED TALKS

**Seokkyun Woo** "Understanding scientific work through "failures" in production, consumption, and careers in science", Metrics 2022: Workshop on Informetric and Scientometric Research (SIG/MET) Program, 8<sup>th</sup> October 2022 (Invited Talk)

**Seokkyun Woo**, John Walsh "The Cycle of Doubt: How Scientists Cope with Uncertainties in Production of Data", American Sociological Association Annual Meeting at Los Angeles, CA, 7<sup>th</sup> August 2022 (Oral Presentation)

**Seokkyun Woo**, John Walsh "On the Shoulders of Fallen Giants: What do post-retraction citations tell us about the citation behavior, cumulative advantage, and misinformation in science", The 15th Workshop on the Organisation, Economics and Policy of Scientific Research at Leuven, Belgium, 7<sup>th</sup> – 8<sup>th</sup> April 2022 (Oral Presentation)

**Seokkyun Woo**, John Walsh "The Cycle of Doubt: How Scientists Cope with Uncertainties in Production of Data", Special session on DMREF collaborations at National Academies of Science, 21<sup>st</sup> February 2022 (Invited Talk)

**Seokkyun Woo**, John Walsh "The Cycle of Doubt: How Scientists Cope with Uncertainties in Production of Data", Sociology of Science Workshop, Berlin, Germany, 23<sup>rd</sup> February 2022 (Virtual Presentation)

**Seokkyun Woo**, John Walsh "The Cycle of Doubt: How Scientists Cope with Uncertainties in Production of Data", 4S 21 at Toronto, Canada, 6<sup>th</sup> – 9<sup>th</sup> October 2021 (Virtual Presentation)

**Seokkyun Woo**, John Walsh "The Cycle of Doubt: How Scientists Cope with Uncertainties in Production of Data", Workshop on Original Policy Research at Atlanta, USA, 2<sup>nd</sup> September 2021 (Virtual Presentation)

**Seokkyun Woo**, Stasa Milojevic, Filippo Radicchi, John Walsh "Gender and Attrition in Science", Workshop on Original Policy Research at Atlanta, USA, 2<sup>nd</sup> October 2020 (Virtual Presentation)

Yin Li and **Seokkyun Woo**, "How Humor Drives Science: Ig Nobel Prizes and Direction of Research", The 14th Workshop on the Organisation, Economics and Policy of Scientific Research at Munich, Germany, 9<sup>th</sup> – 10<sup>th</sup> July 2020 (Virtual Presentation)

**Seokkyun Woo**, "On the Shoulders of Fallen Giants: Empirical Analysis of Post-retraction Citations", APPAM 19 at Denver, USA, 6<sup>th</sup> – 9<sup>th</sup> June 2019 (Poster Presentation)

**Seokkyun Woo**, "On the Shoulders of Fallen Giants: Empirical Analysis of Post-retraction Citations", 7<sup>th</sup> Atlanta Conference on Science and Innovation Policy, Atlanta, 14<sup>th</sup> – 16<sup>th</sup> October 2019 (Oral Presentation)

**Seokkyun Woo**, "On the Shoulders of Fallen Giants: Empirical Analysis of Post-retraction Citations", 4S 19 at New Orleans, USA, 4<sup>th</sup> – 7<sup>th</sup> June 2019 (Oral Presentation)

**Seokkyun Woo** and Yin Li, "The Role of Curiosity in Science: Evidence from Ig Noble Prizes", 17<sup>th</sup> Schumpeter Conference, Korea, 2<sup>nd</sup> – 4<sup>th</sup> July 2018 (Oral Presentation) (**Best Young Scholar Award**)

**Seokkyun Woo** and Yin Li, "The Role of Curiosity in Science: Evidence from Ig Noble Prizes", DRUID 18 at Copenhagen, Denmark, 11<sup>th</sup> – 13<sup>th</sup> June 2018 (Oral Presentation)

**Seokkyun Woo** and Yin Li, "Does Humor Advance Science? Evidence from Ig Nobel Prizes", 6<sup>th</sup> Atlanta Conference on Science and Innovation Policy, Atlanta, 9<sup>th</sup> – 11<sup>th</sup> October 2017 (Oral Presentation)

**Seokkyun Woo**, Sergey Kolesnikov, Yin Li, Phil Shapira and Jan Youtie, "International University Research Ventures (IURV) Findings from U.S. Universities", DRUID 17 at New York Conference, New York, 12<sup>th</sup> – 14<sup>th</sup> June 2017 (Oral Presentation)

#### **GRANTS AND AWARDS**

Best Young Scholar Award, 17th Conference of the International Schumpeter Society.
 Fellowship from the Science and Technology Policy Institute (STEPI)
 July 2018
 January 2017

### TECHINCAL SKILLS AND LANGUAGE

- Computational Tools: Python, R, MATLAB, SQL, STATA
- Language: English (fluent), Korean (fluent)

#### ACADEMIC COMMUNITY SERVICE

•	Ad hoc reviewer for Research Policy	2018 -
•	Ad hoc reviewer for Technological Forecasting and Social Change	2018 -
•	Ad hoc reviewer for PLOS One	2021 -
•	Ad hoc reviewer for Scientometrics	2022 -
•	Ad hoc reviewer for Nature Human Behavior	2023 -

### REFERENCES

John P. Walsh

Professor, School of Public Policy Georgia Institute of Technology

Email: john.walsh@pubpolicy.gatech.edu

Dashun Wang

Professor, Kellogg School of Management

Director, Center for Science of Science and Innovation (CSSI) Northwestern University

Email: dashun.wang@kellogg.northwestern.edu

Cassidy R. Sugimoto

Professor, School of Public Policy

Tom and Marie Patton School Chair in the School of Public Policy Georgia Institute of Technology

Email: sugimoto@gatech.edu