

# Quintin Kreth

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Research Project Lead for Studies of Postsecondary and Labor Market Outcomes  
Center for the Study of Higher and Postsecondary Education  
Marsal Family School of Education  
University of Michigan

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## EDUCATION

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**Georgia Institute of Technology**, School of Public Policy December 2024  
Ph.D. Candidate in Public Policy

- Dissertation: Understanding Faculty Research Productivity at Striving Research Universities
- Committee chair: Dr. Juan Rogers
- Defense date: June 13, 2024

**University of Oregon** 2014  
B.S. Mathematics &  
B.S. Planning, Public Policy, and Management (PPPM)

## PROFESSIONAL APPOINTMENTS

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**Research Project Lead**, University of Michigan 2024 – Present

- Working in the lab of [Dr. Peter Riley Bahr](#) on externally funded projects examining educational and labor market outcomes among students in postsecondary stackable credential pathways.

**Graduate Assistant**, Georgia Institute of Technology 2015 – 2024  
Concurrent with doctoral studies in the School of Public Policy

- Graduate Teaching Assistant (2015, 2019 – 2024)
- Lecturer (2023)
- Graduate Research Assistant (2015 – 2019, 2021 – 2022)
- Co-Instructor (2019, 2021)

## PUBLICATIONS

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### Journal Articles

1. Ruthotto, I., **Kreth, Q.**, & Melkers, J. (2021). Entering or Advancing in the IT Labor Market: The Role of an Online Graduate Degree in Computer Science. *The Internet and Higher Education*.  
<https://doi.org/10.1016/j.iheduc.2021.100820>

2. Ruthotto, I., **Kreth, Q.**, Stevens, J., Trively, C., & Melkers, J. (2020). Lurking and participation in the virtual classroom: The effects of gender, race, and age among graduate students in computer science. *Computers & Education*. <https://doi.org/10.1016/j.compedu.2020.103854>

3. **Kreth, Q.**, Spirou, M. E., Budenstein, S., & Melkers, J. (2019). How Prior Experience and Self-Efficacy Shape Graduate Student Perceptions of an Online Learning Environment in Computing. *Computer Science Education*, 29(4). <https://doi.org/10.1080/08993408.2019.1601459>

#### Reviewed Conference Proceedings

1. **Kreth, Q.**, Schiff, D. S., Lee, J., Zegura, E., & Borenstein, J. (2022), *Social responsibility attitudes among undergraduate computer science students: an empirical analysis*. Presented at the 2022 ASEE Annual Conference & Exposition, Minneapolis, MN. <https://doi.org/10.18260/1-2--41369>

#### Book Chapters

1. **Kreth, Q.**, Schiff, D.S., Lee, J., Borenstein, J., Zegura, E. (2024). Social Responsibility and Ethics in STEM Education: The State of the Field. In: Hildt, E., Laas, K., Brey, E.M., Miller, C.Z. (Eds.) *Building Inclusive Ethical Cultures in STEM*. The International Library of Ethics, Law and Technology, vol 42. Springer, Cham. [https://doi.org/10.1007/978-3-031-51560-6\\_2](https://doi.org/10.1007/978-3-031-51560-6_2)

2. Melkers, J., Woolley, R., & **Kreth, Q.** (2023). Research Funding and Careers: Individual and Contextual Factors. In Lepori, B., Jongbloed, B., & Hicks, D. (Eds.). *Handbook of Public Research Funding*. Edward Elgar Publishing. <https://doi.org/10.31235/osf.io/emyb3>

#### Working Papers

1. With Bahr, P.R., May-Trifiletti, J., Yu, C., & Columbus, R. The Impact of Unemployment and Earnings on Postsecondary Credential-stacking Behavior.

2. With Bahr, P.R., May-Trifiletti, J., Yu, C., & Columbus, R. How do students sort into stackable credential pathways? Evidence from Ohio Community Colleges.

3. With Melkers, J. & Vingre, A. Science Planning in U.S. State Governments: New Developments.

4. The Evolution of the Publication Profiles of U.S. Striving Research Universities in the 21<sup>st</sup> Century.

5. Understanding Variation in the Publication Production and Productivity of Striving Research University Faculty.

6. Strategizing and Implementing Change in Striving Research Universities.

#### Reports & Program Evaluations

1. Borenstein, J., **Kreth, Q.**, Lee, J., Schiff, D., & Zegura, E. (2022). *Measuring Personal and Professional Responsibility Attitudes Among Georgia Tech Undergraduates*. Atlanta, GA: Georgia Institute of Technology.

2. Melkers, J., **Kreth, Q.**, Singhanian, R., & Wall, J. (2019). *External Evaluation: The Kentucky EPSCoR Project: Powering the Bioeconomy for a Sustainable Future: Annual Evaluation Report: Year 5*. Atlanta, GA: Kentucky NSF EPSCoR.

3. Melkers, J. & **Kreth, Q.** (2018). *External Evaluation: The Kentucky EPSCoR Project: Powering the Bioeconomy for a Sustainable Future: Annual Evaluation Report: Year 4*. Atlanta, GA: Kentucky NSF EPSCoR.
4. DeMillo, R., Ferri, B., Baker, N., Cozzens, S., Herazy, J., Hoeting, M., Isbell, C., Jacobs, L., Potts, C., Clough, W., Selingo, J., Anderson, P., Barchers, C., Barke, R., Bishop, C., Blum, T., Bramblett, S., Butera, R., Coyle, E., Cummins, M., Curtis, J., DeStefano, L., Forest, C., Gazi, Y., Goel, A., Harmon, S., Henry, A., Holloway, S., Jenkins, B., Kim, J., Kingsley, G., **Kreth, Q.**, Le Doux, J., Lefton, L., Ludovice, P., Nair-Reichert, U., Newstetter, W., Overby, E., Realf, M. L., Rizwan, M., Schatz, M., Sivakumar, R., Spencer, C., Wang, B., Webster, D., Weinsheimer, J., & Zegura, E. (2018). *Deliberate Innovation, Lifetime Education: Final Report of the Commission on Creating the Next in Education*. Atlanta, GA: Georgia Institute of Technology Provost's Office.
5. Melkers, J., **Kreth, Q.**, Spirou, M. E., & Budenstein, S. (2017). *External Evaluation: Georgia Institute of Technology Online Master of Science in Computer Science Program: Outcomes of Online Graduate Education for Women*. Atlanta, GA: Georgia Institute of Technology College of Computing.
6. Melkers, J. & **Kreth, Q.** (2017). *External Evaluation: The Kentucky EPSCoR Project: Powering the Bioeconomy for a Sustainable Future: Annual Evaluation Report: Year 3*. Atlanta, GA: Kentucky NSF EPSCoR.
7. Melkers, J., **Kreth, Q.**, & St. Clair, R. (2016). *External Evaluation: The Kentucky EPSCoR Project: Powering the Bioeconomy for a Sustainable Future: Annual Evaluation Report: Year 2*. Atlanta, GA: Kentucky NSF EPSCoR.

## **PRESENTATIONS**

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### Invited Talks

**Kreth, Q.** (2023, December). *The Implications of The Wizard of AI, the "First AI-Created Film," for the Future of Creative Work*. Discussant at the Georgia Tech & University of Manchester Joint AI Discussion Group, Atlanta, GA, USA.

### Oral Research Presentations

**Kreth, Q.** (2024, November). *Strategizing and Implementing Change in Striving Research Universities*. Presented at the 2024 Association for Public Policy Analysis and Management (APPAM) Fall Research Conference, National Harbor, MD, USA.

**Kreth, Q.** (2023, November). *Understanding Faculty Research Productivity at Striving Research Universities*. Presented at the 2023 Association for Public Policy Analysis and Management (APPAM) Fall Research Conference, Atlanta, GA, USA.

**Kreth, Q.** (2023, May). *Understanding Faculty Research Productivity at Striving Research Universities*. Presented at the 2023 Atlanta Conference on Science & Technology Policy, Atlanta, GA, USA.

**Kreth, Q.**, Schiff, D., Lee, J., Borenstein, J., & Zegura, E. (2022, June). *Social responsibility attitudes among undergraduate computer science students: an empirical analysis*. Proceedings paper presented at

the 2022 American Society for Engineering Education Annual Conference and Exposition, Minneapolis, MN, USA.

**Kreth, Q.**, Schiff, D., Lee, J., Borenstein, J., & Zegura, E. (2022, June). *Examining Professional Social Responsibility Development among Computer Science Undergraduates Using the Generalized Professional Responsibility Assessment*. Presented at the Embedded EthiCS @ Harvard Ethical Issues in AI and Computing Conference, Cambridge, MA, USA.

**Kreth, Q.**, Ruthotto, I., Stevens J., & Melkers, J. (2018, November). *Career Advancement and Change Through an Online Graduate Degree in Computing*. Paper presented at the 2018 Association for Public Policy Analysis and Management (APPAM) Fall Research Conference, Washington, DC, USA.

**Kreth, Q.**, Ruthotto, I., Stevens J., & Melkers, J. (2018, October). *Career Change or Advancement Through an Online Graduate Degree in Computing*. Paper presented as part of the Georgia Tech School of Public Policy Workshop on Original Policy Research (WOPR) paper series, Atlanta, GA, USA.

**Kreth, Q.**, Vingre, A., Wells, C., White, S., Shah, N., & Melkers, J. (2017, October). *Science Planning in State Governments: Policy Priorities and New Developments*. Paper presented at the Korean Advanced Institute of Science and Technology/Georgia Tech School of Public Policy Joint Early-Career Research Symposium, Atlanta, GA, USA.

**Kreth, Q.**, Vingre, A., Wells, C., White, S., Shah, N., & Melkers, J. (2016, October). *Science Planning in State Governments: New Developments*. Invited presentation at the annual meeting of the Research, Technology, and Development Evaluation Topic Interest Group of the American Evaluation Association, Atlanta, GA, USA.

**Kreth, Q.** (2016, September). *Institution and Gender in Mathematics Research Funding*. Paper presented as part of the Georgia Tech School of Public Policy Workshop on Original Policy Research (WOPR) paper series, Atlanta, GA, USA.

#### Poster Presentations

**Kreth, Q.**, Vingre, A., Wells, C., White, S., Shah, N., & Melkers, J. (2017, October). *Science Planning in State Governments: New Developments*. Poster presented at the 2017 Atlanta Conference on Science & Technology Policy, Atlanta, GA, USA.

### **RESEARCH INTERESTS**

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Research productivity and competitiveness; emerging research institutions; higher education policy; associate and master's degrees; STEM workforce and education; Sociology of Science; regional government.

### **TEACHING INTERESTS**

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Research Design, Quantitative Methods, Qualitative Methods, Science & Technology Policy, Program Evaluation, American Politics, State and Local Government, and Senior Design/Project.

**TEACHING EXPERIENCE**

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<b>Term</b>	<b>Role</b>	<b>Number</b>	<b>Title</b>	<b>Mode</b>	<b>Instructor</b>
SPR 2024	TA	PUBP 8211	Microeconomic Theory	In-person	Dr. Alan Marco
Fall 2023	TA	PUBP 6116	Microeconomics for Policy Analysis	In-person	Dr. Alan Marco
SUM 2023	Lecturer	POL 1101	Government of the United States	In-person	Self
SPR 2023	TA	PUBP 8211	Microeconomic Theory	In-person	Dr. Alan Marco
Fall 2022	TA	PUBP 6116	Microeconomics for Policy Analysis	In-person	Dr. Alan Marco
SUM 2021	Co-Inst.	POL 2101	State & Local Government	Online	Dr. Cliff Lipscomb
SUM 2021	TA	PUBP 4226	Business and Government	Online	Dr. Cliff Lipscomb
SPR 2021	Co-Inst.	PUBP 6112	Research Design in Policy Science	Online	Dr. Cliff Lipscomb
Fall 2020	TA	PUBP 3120	Statistical Analysis in Public Policy	Online	Dr. Cliff Lipscomb
SUM 2020	TA	POL 2101	State & Local Government	Online	Dr. Cliff Lipscomb
SPR 2020	TA	PUBP 8211	Microeconomic Theory	Hybrid	Dr. Alan Marco
Fall 2019	Co-Inst.	PUBP 3120	Statistical Analysis in Public Policy	In-person	Dr. Juan Rogers
SPR 2019	TA	PUBP 8211	Microeconomic Theory	In-person	Dr. Alan Marco
Fall 2015	TA	POL 1101	Government of the United States	In-person	Dr. Julia Melkers

**LEADERSHIP AND SERVICE**

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Society Memberships

The American Society for Engineering Education (ASEE), the Association for Education Finance & Policy (AEFP), the Association for Public Policy and Management (APPAM), the Association for the Study of Higher Education (ASHE), and the Council for the Study of Community Colleges (CSCC)

Professional Service

**Reviewer** for the ASEE Engineering and Public Policy (EPP) Division and the ASEE Liberal Education/Engineering and Society (LEES) Division

**Session Organizer**, APPAM Fall Research Conference 2024

**Session Chair**, Atlanta Conference on Science & Innovation Policy 2017

**Volunteer Coordinator**, Atlanta Conference on Science & Innovation Policy 2015

University Service

**Academic Chair**, GT Public Policy Graduate Student Association 2019-2020  
School of Public Policy Graduate Committee non-voting member

**Trustee**, Georgia Tech Athletic Association 2017-2018

**Student Member**, GT Commission on Creating the Next in Education 2016-2018

<b>Funding Review Panel</b> , GT Strategic Plan Advisory Group	2016-2018
<b>Executive Vice President</b> , Georgia Tech Graduate SGA	2016-2017
<b>Public Policy Senator</b> , Georgia Tech Graduate SGA	2015-2016
<u>Other Service</u>	
<b>Delegate for Oregon At-large</b> , Democratic National Convention	2020
<b>Chair</b> , Democratic Party of Oregon Rural Caucus	2013-2015
<b>Delegate for Oregon's 4<sup>th</sup> CD</b> , Democratic National Convention	2012

## **HONORS AND AWARDS**

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### Professional Honors

<b>ASEE Professional Interest Council 1 Best Paper Award</b> (\$1000) Top-5 paper out of 1,752 presented at the 2022 ASEE Annual Conference (Kreth, Schiff, Lee, Zegura, and Borenstein, 2022)	2022
<b>ASEE Engineering Ethics Division Best Paper Award</b> (\$200) For (Kreth, Schiff, Lee, Zegura, and Borenstein, 2022)	2022
<b>Chih Foundation Graduate Student Research Award</b> (\$2500) Top paper in Engineering, Computer Science, or Health Sciences by a GT Ph.D. student (Kreth, Spirou, Budenstein, and Melkers, 2019)	2020

### Grants

<b>Dean's Travel Grant</b> , Ivan Allen College of Liberal Arts (\$2000)	2023
<b>Student Scholar Travel Grant</b> , NSF SciSIP & SSTI (\$1600)	2016

### Other Honors

<b>Diamond Award</b> , Oregon Flock and Fiber Festival	2013
<b>Person of the Year</b> , <i>Corvallis Gazette-Times</i>	2013
<b>Eleven Most Inspiring Oregonians</b> , Meyer Memorial Trust (\$2000)	2013
<b>Mortar Board</b> , University of Oregon	2011
<b>Eagle Scout</b> , BSA Troop 244, Monroe, OR	2011

## **OTHER EDUCATION AND TRAINING**

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**European Forum for Studies of Policies for Research and Innovation (Eu-SPRI) Winter Training School on Artificial Intelligence (AI) for Science, Technology, and Innovation Policy**, 5 days, November 2023, Manchester, UK. Residential workshop for early-career researchers on AI-enhanced research methods and applications for science, technology, and innovation policy research.

**Inter-University Consortium for Political and Social Research (ICPSR)**, 4 weeks, summer 2017, Ann Arbor, MI. Intensive, residential quantitative methods workshop and seminar.

**NSF Science of Science and Innovation Policy (SciSIP) Colloquium on Science and Innovation Policy Research and Practice**, 3 days, November 2016, Columbus, OH. Technology-based economic development research seminar for doctoral students attached to the State Science and Technology Institute (SSTI) Annual Conference.

**Ford Institute Leadership Program**, 60 hours of instruction, 2010-2011, Alpine, Bend, Monroe, and Roseburg, OR. Catalytic leadership and social capital course for rural community leaders.

## **SKILLS AND SOFTWARE PROFICIENCIES**

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**Statistical software proficiencies:** Python (limited), R, SPSS, & Stata

**Other software proficiencies:** LaTeX, NVivo, Pajek, Microsoft Office, R Bibliometrix, Qualtrics, Sawtooth Lighthouse Studio, VantagePoint, & UCINET

**Languages:** English (native), Spanish (limited)

## **REFERENCES**

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**Juan Rogers, Ph.D.**

Professor  
School of Public Policy  
Georgia Institute of Technology

**Gordon Kingsley, Ph.D.**

Professor  
School of Public Policy  
Georgia Institute of Technology

**Julia Melkers, Ph.D.**

Professor and Director  
Center for Organization Research & Design (CORD)  
School of Public Affairs  
Arizona State University