**Application to the NBER Digital Economics and AI Tutorial – September 2023**

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| Keywords | diversity, entrepreneurship, innovation, labor market, AI, experimental |
| Committee Chair | Nicola Lacetera, University of Toronto |
| Committee Members | Avi Goldfarb, University of Toronto<br>Sarah Kaplan, University of Toronto<br>András Tilcsik, University of Toronto |

**PhD Courses (completed between 2020 and 2022):**

I am a 3rd year PhD student in Strategic Management at Rotman School of Management.

***Methods***

- Econometrics I/II
- Models and Methods
- Quantitative Methods in the Applied Behavioral Sciences
- Microeconomic Theory I/II
- Computer-Assisted Textual Analysis
- Economic Applications of Machine Learning

***Strategy - Fundamentals***

- Research Methods in Strategic Management
- Strategy and Economics
- Organizational Theory
- Economic Sociology

***Strategy – Special Topics***

- Economics of Innovation
- Behavioral Economics
- Stakeholder Theory

## Research Interests

My research interest revolves around the social value we create through innovation. First, I am curious how we find entrepreneurial ideas and what encourages or hinders us to pursue those ideas. I am also interested in the factors which influence for whom we innovate and how it shapes shared prosperity. My research takes a particular interest in underrepresented groups such as women or ethnic minorities.

My overarching question is "How do the social and institutional factors drive the contribution of talent and pursuing of entrepreneurial ideas?" More specifically, I ask how gender, institutions, or work environments shape own beliefs about ability, contribution of talent, group performance, or gender diversity in STEM. The answers to those questions help us understand why there is a lack of diversity in fields which yield transformative technology and inventions.

Why should we care about diversity in fields that yield transformative technology and inventions? An emerging body of evidence suggests that under the right conditions, minority groups or diverse groups produce the most innovative ideas (Jeppesen and Lakhani (2010); Goncalo et al. (2015); Gompers and Wang (2017); AlShebli, Rahwan, and Woon (2018); Hofstra et al. (2020)) and that diversity changes the direction of innovation (Koning, Samila, and Ferguson 2021; Truffa and Wong 2022). However, diversity, or lack thereof, is currently a problem in positions where ideas matter (Ding, Murray, and Stuart 2006; Chari and Goldsmith-Pinkham 2017; Paul A. Gompers et al. 2020).

## Why I want to attend the NBER AI Tutorial

Some call machine learning a general-purpose technology (i.e. Goldfarb, Taska, and Teodoridis 2023). Machine learning-related technologies have risen sharply this past year, for example in the form of products based on large language models. An open question remains, however, how this technology is used more broadly– and by whom – and what kind of value it creates. I hope to utilize this tutorial to develop research questions around that topic area.

## Working Papers

1. **Stereotypes and Belief Updating** ***(joint with Katherine Baldiga Coffman and Leena Kulkarni; Accepted at Journal of European Economic Association)***

*Abstract:* We explore how feedback shapes, and perpetuates, gender gaps in self-assessments. Participants in our experiments take tests of their ability across different domains. We elicit their beliefs of their performance before and after feedback. We find that, even after the provision of highly informative feedback, gender stereotypes influence posterior beliefs, beyond what a Bayesian model would predict. This is primarily because both men and women update their beliefs more positively in response to good news when it arrives in a more gender congruent domain (i.e., more male-typed domains for men, more female-typed domains for women), fueling persistence in gender gaps.

2. **Whether to Apply** ***(joint with Katherine Baldiga Coffman and Leena Kulkarni; Accepted at Management Science)***

*Abstract:* Labor market outcomes depend, in part, upon an individual's willingness to put herself forward for different opportunities. We use a series of experiments to explore gender differences in willingness to apply for higher return, more challenging work. We find that, in male-typed domains, qualified women are significantly less likely to apply than similarly well-qualified men. We provide evidence both in a controlled setting and in the field that reducing ambiguity surrounding required qualifications increases the rate at which qualified women apply. The effects are more mixed for men. Our results suggest a path forward for increasing the pool of qualified female applicants.

3. **Gender Gaps in Ph.D. Graduation and Scientific Publishing: A Case Study of East and West Germany** ***(Working Paper)***

*Abstract:* Gender diversity is a key driver of the rate and direction of innovative activities, but we know little about how to achieve it. I look at the pipeline of potential female inventors and study women's decisions to complete graduate school and their propensity and intensity to publish under two different institutional and normative settings. For that, I turn to the German reunification in 1990 as my empirical setting. At that time, East and West Germany show sizable differences in institutional incentives and attitudes toward working women. Using a newly assembled dataset of German Ph.D. graduates in Science, Medicine, and Technical fields, I show that East Germany graduates significantly and persistently more women doctorates than West Germany. A difference-in-difference approach infers that a change in institutional incentives and norms (namely the reunification) leads to gender gaps in the propensity to publish and an increase in the gender gap in the intensity to publish. This case study offers insights into how to increase gender diversity in science.

**Research Projects**

4. **Gender and Feedback in Entrepreneurship (joint with Mitchell Hoffman and Daphné Baldassari)**
    - We study the relationship between the gender of the venture founder and the type of feedback the mentor provides in an accelerator program. We have access to the universe of data from the accelerator Creative Destruction Lab (CDL). Particular focus for this project are all the transcribed conversations between mentors, investors, and founders.
5. **The Impact of Hostile Work environments on Sorting and Knowledge Contribution (joint with Clémentine Van Effenterre)**
    - We study the value of work environments in the form of different non-monetary workplace amenities and how this translates into gender sorting and gender differences in knowledge contributions.