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PLACEMENT DIRECTORS

Prof. Rui Castro	rui.castro@mcgill.ca	514-398-1226
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EDUCATION

Ph.D.	Economics, McGill University, expected August 2027
M.A.	Economics, Boston University, 2020
B.M.	Accounting, Renmin University of China, 2018
	International Development, University of Warwick Summer School, 2017

FIELDS OF SPECIALIZATION

Primary:	Macroeconomics, Innovation Economics
Secondary:	Industrial Organization, Development Economics

JOB MARKET PAPER

“Star Inventors and Innovation across U.S. Technology Classes”

Committee: Markus Poschke (Chair), Saraswata Chaudhuri, Nicolas Gendron-Carrier

A small number of star inventors account for a large share of technological output, yet whether they generate spillovers onto the other inventors in their technology class remains less well understood. This paper estimates the effect of star inventors on the innovation output of the other inventors in the same class across 124 technology classes in the United States between 1975 and 2014, using immigrant star inventors as the source of identifying variation. To address the endogenous allocation of stars across classes, I construct an instrument that interacts the top income tax rates of 17 origin countries, relative to the United States, with each country’s revealed technological advantage in a class. I find that immigrant star inventors have a positive causal effect on the innovation output of native non-star inventors. Weak-instrument-robust confidence sets exclude zero for both outcomes and imply that a 10% increase in the number of immigrant star inventors in a class raises the citation-weighted output of native non-star inventors by at least 0.5% and their patent counts by at least 0.8%. Spillovers onto native star inventors are six to seven times larger than spillovers onto native non-stars. Using an accounting decomposition, I show that immigrant stars directly produce 0.6% of class citation output, and that including their spillovers onto native inventors raises their contribution to 15.4%.

WORKING PAPERS

“Transportation Infrastructure and the Quality of Regional Innovation,” 2026, SSRN Working Paper, <https://doi.org/10.2139/ssrn.7308354>

PUBLISHED PAPERS

“How the Level of Internet Development Affects China’s Economic Development: Evidence from Provincial Panel Data, 2003–2013,” *China Price*, no. 3, 14–17, 2017, with Peng Wang and Shuang Li [in Chinese]

TEACHING EXPERIENCE

Teaching Assistant, Microeconomic Theory, ECON 230 (undergraduate), McGill University, Fall 2023, Winter 2024, Fall 2024, Winter 2025, Winter 2026
Teaching Assistant, Introductory Econometrics 1, ECON 337 (undergraduate), McGill University, Fall 2025

RESEARCH AND RELEVANT WORK EXPERIENCE

Data Analyst, Financial Management Analysis Project, Ministry of Science and Technology, Beijing, August 2017–March 2020
Research Assistant, RA-Mentor Program, Department of Economics, Boston University, February–May 2019
Research Assistant, Hillhouse Academy, Beijing, May 2016–May 2018
Intern, Bank of China, Beijing, February–April 2017

GRANTS AND AWARDS

McCall MacBain Fellowship, 2022, 2023
Clifford Wong Fellowship, 2021, 2022
Graduate Excellent Awards, 2021, 2024, 2025

CONFERENCE AND SEMINAR PRESENTATIONS

2026: Canadian Economics Association Conference, 20th CIREQ-CIRANO Ph.D. Students' Conference, CIREQ-McGill Lunch Seminar.
2025: Canadian Economics Association Conference.

PROFESSIONAL SERVICE

Referee for *Journal of Quantitative Economics*

LANGUAGES

English (fluent), Mandarin Chinese (native)

COMPUTATIONAL SKILLS

Stata, R, MATLAB, SPSS

REFERENCES

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Prof. Nicolas Gendron-Carrier	McGill University	nicolas.gendron-carrier@mcgill.ca	514-398-3751