CES Lectures

Professor Myra Mohnen

University of Ottawa

Gives a series of lectures on

The Economics of Scientific Knowledge Production

1 The Knowledge Production Function—Who Produces Ideas, and How?

2 The Rate and Direction of Science—Measuring, Redirecting, and Disrupting

3 Science as an Institution—Incentives, Spillovers, and Policy

Dates: Tuesday, 23/06/2026, 10:15 – 11:45

Wednesday, 24/06/2026, 14:15 – 15:45

Tuesday, 30/06/2026, 10:15 – 11:45

Location: CES, Schackstr. 4, 2nd floor, seminar room (214)

Registration for PhD and MQE students: For an official recognition and confirmation of participation of the lecture in your transcript, registration at My ECONPAS the CES Lectures is mandatory. Please adhere to the registration deadline for this course as no registration is possible after this date.
If you cannot register at MyECONPAS please contact the MGSE PhD Office mgse-phd@econ.lmu.de.

CES Lectures 2026

The Economics of Scientific Knowledge Production

Myra Mohnen

Tuesday June 23, 10.15–11.45 am
Wednesday June 24, 2.15–3.45 pm
Tuesday June 30, 10.15–11.45 am

These three lectures survey the empirical economics of scientific knowledge production, synthesising recent advances at the intersection of innovation, networks, and the science of science. Lecture 1 asks who produces ideas—examining family background, immigration, education, and the geography of scientific collaboration. Lecture 2 turns to the rate and direction of science: what patent citations actually measure, what redirects the trajectory of research, and how generative AI is reshaping the science–technology frontier. Lecture 3 examines the institutions of science: open-science norms, public R&D and the costs of redirecting research, and the geography and network structure through which knowledge spills over.

Lecture 1: The Knowledge Production Function—Who Produces Ideas, and How?

- Bell, Chetty, Jaravel, Petkova & Van Reenen (2019), "Who Becomes an Inventor in America?" *The Quarterly Journal of Economics* 134(2): 647–713
- Chodavadia, Kerr, Kerr & Maiden (2024), "Immigrant Entrepreneurship: New Estimates and a Research Agenda," NBER WP 32400
- Bianchi & Giorcelli (2020), "Scientific Education and Innovation: From Technical Diplomas to University STEM Degrees," *Journal of the European Economic Association* 18(5): 2608–2646
- Catalini, Fons-Rosen & Gaulé (2020), "How Do Travel Costs Shape Collaboration?" *Management Science* 66(8): 3340–3360

Lecture 2: The Rate and Direction of Science—Measuring, Redirecting, and Disrupting

- Kuhn, Younge & Marco (2020), "Patent Citations Reexamined," *The RAND Journal of Economics* 51(1): 109–132
- Park, Leahey & Funk (2023), "Papers and Patents Are Becoming Less Disruptive Over Time," *Nature* 613: 138–144
- Azoulay & Greenblatt (2025), "Does Peer Review Penalize Scientific Risk Taking? Evidence from NIH Grant Renewals," NBER WP 33495
- Brynjolfsson, Li & Raymond (2025), "Generative AI at Work," *The Quarterly Journal of Economics* 140(2): 889–942

Lecture 3: Science as an Institution—Incentives, Spillovers, and Policy

- Murray, Aghion, Dewatripont, Kolev & Stern (2016), "Of Mice and Academics," *AEJ: Economic Policy* 8(1): 212–52

- Azoulay, Li, Graff Zivin & Sampat (2019), "Public R&D Investment and Private Sector Patenting," *The Review of Economic Studies* 86(1): 117–152
- Myers (2020), "The Elasticity of Science," *AEJ: Applied Economics* 12(4): 103–34
- Moretti (2021), "The Effect of High-Tech Clusters on the Productivity of Top Inventors," *American Economic Review* 111(10): 3328–75