February 6, 2025

NBER Innovation Research Boot Camp Committee
National Bureau of Economic Research
Cambridge, MA

Dear Selection Committee,

I am writing to apply for admission to the 2025 NBER Innovation Research Boot Camp. I am a third-year Ph.D. candidate in Economics at the University of Turin and the Collegio Carlo Alberto, where I am supervised by Prof. Aldo Geuna and specialize in the economics of science and innovation.

My academic journey in this field began with a Master's degree in Economics and Public Policies, during which I developed a strong interest in innovation studies due to the significant role of innovation and technological advancement in driving socioeconomic growth, fostering change adaptability, and enhancing people's quality of life. My Master's thesis on innovation policies and their impact evaluation practices deepened this interest, exposing me to the complexities of balancing the positive and negative effects on growth distribution and the labor market outcomes.

The experience of consultancy at the OECD Science, Technology, and Innovation Working Group driven my focus on the role of universities in innovation processes and their interactions with firms, public institutions, and regional ecosystems.

Today, as a PhD applied economist, I am dedicated to exploring the impact of technological change in science organization and directions, with a particular interest in the research sector labor market and the knowledge transfer between academic and corporate science. I also have a keen interest in developing computational and coding tools to collect and analyze data and address the limitations often encountered in complex settings.

I am passionate about contributing to the academic field of innovation economics in the future. I believe the Boot Camp at this stage of my doctoral path offers a remarkable opportunity to engage with leading scholars and peers, challenge my perspectives, and enrich my research experience.

As part of my application, please consider the recommendation letter from Professor Aldo Geuna, who has closely supervised my PhD research and can attest to my academic capabilities and research commitment.

Thank you for considering my application. I hope to have the opportunity to engage with

NBER fellow researchers and peers through this excellent initiative.

Sincerely,



Eliana Diodati
Department of Culture, Politics and Society
University of Turin
Lungo Dora Siena 100 A, 10153 Torino, Italy
Phone: +39 342 04567 29
Email: eliana.diodati@unito.it, eliana.diodati@carloalberto.org

Research Statement

Eliana Diodati

February 6, 2025

I am Eliana Diodati, a PhD candidate in Economics at the University of Torino and a Doctoral Fellow at the Collegio Carlo Alberto. My research primarily focuses on the impact of technologies on science organization and scientists' careers.

Current Project My ongoing project (with Pierre Boutros, Michele Pezzoni, and Fabiana Visentin) aims to investigate whether AI training affects PhD students' careers as the new generation of scientists recently trained at the frontier of knowledge. As AI technologies rapidly evolve, understanding their impact on the labor market, particularly on highly skilled workers, is crucial. We develop a propensity score matching on a comprehensive dataset covering the entire population of French STEM PhD students who graduated between 2010 and 2018. While preliminary results indicate no significant effect on the likelihood of transitioning to research or private sector jobs, discipline heterogeneity and varying market readiness for AI skills emerge. We are currently exploring these aspects further.

Future Project As a potential solo project, I am exploring the topic of university-industry collaboration in the field of quantum computing, as a critical example of science-driven innovation. In a famous talk in 1981, Nobel laureate Richard Feynman said that *"Nature isn't classical, dammit, and if you want to make a simulation of Nature, you'd better make it quantum mechanical, and by golly it's a wonderful problem because it doesn't look so easy".* While this technology is still not fully developed, expectations have surged over the last decade, as shown by the growth in publications, patents, and both public and private investments. Public and private actors are engaged in a competitive race. Compared to other technological sectors, a broader spectrum of firms are engaged in research, e.g. tech giants, incumbent firms in the ICT, startups, spinoffs, software and hardware companies. The recent release of cloud access services to quantum hardware (e.g. IBM Quantum Platform from 2016) has potentially reshaped the interactions among actors. This diversity provides a unique framework for understanding the types of industries entering collaborations with academic institutions, the key factors driving these partnerships, and the evolution over time of knowledge diffusion. In the future, this research aims to provide new insights into how emerging technologies reshape scientific collaboration and industry engagement in the broader landscape of science and innovation.

NBER Boot Camp At this stage of my PhD path, attending the NBER Innovation Research Boot Camp would provide invaluable exposure to cutting-edge research and methodologies in the field, helping me to refine my current projects and develop new research directions. Engaging with leading scholars and peers in this field will enhance my understanding of the broader implications of innovation, contributing significantly to my academic growth and future research endeavors.

ELIANA DIODATI

CONTACT INFORMATION

E-mail: eliana.diodati@unito.it **Phone:** +39 342 0456729
LinkedIn: Eliana Diodati

EDUCATION

PhD in Economics *October 2022 - present*
University of Turin - Collegio Carlo Alberto *Turin, IT*
Expected Graduation: Fall 2026
Research Topic: Economics of Innovation and Science
Advisors: Prof. Aldo Geuna
Expected graduation: November 2026

Erasmus Traineeship *July 2021 - September 2021*
OECD and Université Paris Saclay *Paris, FR*
Supervisors: prof. Ahmed Bounfour (Paris-Saclay) and Caroline Paunov (OECD)

Master Degree in Economics and Public Policies *April 2021*
University of Modena and Reggio Emilia *Modena, IT*
Department of Economics "Marco Biagi"
Final grade: 110/110 cum laude
Thesis: *Innovation Policies and their Evaluation: practices in the U.K.*
Supervisors: prof. Margherita Russo and prof. Federica Rossi

Bachelor Degree in Political, Social and International Sciences *March 2018*
Alma Mater Studiorum - University of Bologna *Bologna, IT*
Department of Political and Social Science
Thesis: *Economic Inequalities in Italy*
Supervisor: prof Anna Soci

TEACHING

Microeconomics, Teaching assistant *October 2024 - present*
B.A. International Studies, Development and Cooperation *University of Turin*
Instructor: Silvia Pasqua

Microeconomics, Teaching assistant *February 2025 - present*
B.A. Business Administration (Online course) *University of Turin*
Instructor: Teodoro Togati

PREVIOUS PROFESSIONAL EXPERIENCES

OECD consultant *October 2021 - September 2022*
Working Party on Innovation and Technology Policy (TIP) *Paris, France*
Directorate for Science, Technology, and Innovation
Supervisor: Caroline Paunov

Research Assistant *November 2021 - August 2022*
Paris-Saclay, RITM Centre *Paris, France*
Supervisor: Prof. Ahmed Bounfour

Research Assistant *January 2020 - June 2020*
Cattaneo Institute (Research Foundation) *Bologna, Italy*

SUMMER SCHOOLS AND CONFERENCES

1. KID2024 (Summer School in Knowledge Dynamics, Industry Evolution, Economic Development) - Université Côte d'Azur, Nice - 2024, 1-5 July
2. Summer School in Complex Network Analysis: Tools for Economic Development - Barcelona School of Economics - 2023, 10-14 July
3. OECD Policy Paper Presentation, *Recovery and Resilience Plans after COVID19: Evidence from policy indicators using natural language processing*, at the 59th Meeting of the Working Party on Innovation and Technology Policy (TIP), OECD - 2022, June 23

ACADEMIC SERVICE

1. Ad hoc reviewer, *Economics of Innovation and New Technology*
2. Group coordinator and project organizer, Young Scholars Initiative (YSI) - Institute for New Economic Thinking (INET).
3. Organizer of the PhD Workshop in Economics of Innovation, Complexity, and Knowledge at the Collegio Carlo Alberto (2023, 13-14 December; 2024, 12-13 December)
4. Local Organizer of the 17° Workshop on the Organisation, Economics and Policy of Scientific Research (WOEPS) under the supervision of Prof. Aldo Geuna at the Collegio Carlo Alberto, Turin, Italy (2024, 18-19 April)
5. Reporter for the *CIFAR Automation & the Role of Place in Economic Change Program Meeting Report* Romano Canavese, Turin, Italy (2024, 15-18 May)

TECHNICAL STRENGTHS

Modeling and Analysis	Advanced knowledge of R, Python, Stata
Other technical competences	Use of APIs to access Scopus and OpenAlex Experience with scraping LATEX, Overleaf, Zotero, Microsoft Office Packages

LANGUAGE SKILLS

Italian	Native speaker
English	Fluent (C1)
French	Intermediate (B1)
Portuguese	Fluent (C1)

Date: February 6, 2025

List of PhD Courses Undertaken

Eliana Diodati

University of Turin and Collegio Carlo Alberto

Core Courses - First Year

- Microeconomic Theory (Prof. Ignacio Monzón – 30hr)
- Econometric Theory I (Prof. Christoph Albert - 30)
- Econometric Theory II (Prof. Giovanni Mastrobuoni – 30hr)
- Applied Economics (Prof. Ainoa Aparicio Fenoll - hr30)
- Dynamic Macroeconomics (Prof. Fabio Cesare Bagliano - 30h)
- Economic History for Economists (Prof. Paolo Di Martino – 15hr)
- Economics Communication (Prof. Marina della Giusta - 12hr)
- Stata (Prof. Flavia Coda Moscarola - 12hr)
- Economics of Networks (Prof. Valerio Leone Sciabolazza - 12hr)

Specialization Courses - First and Second Year

- Economics of Innovation (Prof. Cristiano Antonelli and Prof. Stan Metcalfe, 30 hr)
- Complexity Economics (Prof. Magda Fontana - 30 hr)
- Economics and management of Innovation and New Technologies (coordinated by Prof. Francesco Quatraro - 72hr):
  - Foundations of Economics of Innovation
  - Economics of Green Technologies and Eco-Innovations
  - Entrepreneurship and Regional Development
  - Economics of Science
  - Innovation and labor market dynamics
  - Green patents and firms' performances: Theory and methods
  - Innovation networks, complexity and green technologies: Theory and Methods

Other courses

- Economics of Ideas, Science, and Innovation Online PhD Short Course organized by the Institute for Progress (IFP) - Spring 2024
- Intensive Course on Causal Inference (Prof. Scott Cunningham - 20 hr)

UNIVERSITÀ DI TORINO

Dipartimento
Culture, Politica
e Società

Turin, 4/02/2025

To Whom It May Concern:

It is my great pleasure to recommend Eliana Diodati for admission to the 2025 NBER Innovation Research Boot Camp. As her supervisor at the University of Turin and Collegio Carlo Alberto, I have had the privilege of witnessing her academic evolution. Eliana is currently a third-year PhD student specializing in the Economics of Science, with a focus on the transformative role of technological change in science and university-industry collaborations.

From the very beginning of her PhD, Eliana has exhibited an exceptional level of intellectual curiosity, analytical rigor, and a deep commitment to advancing knowledge in her field. Her passion for research is matched by a solid foundation in both innovation studies and econometrics, allowing her to engage with complex theoretical frameworks and empirical methodologies.

In her second year, Eliana was a visiting scholar at the Université Côte d'Azur in Nice, where she collaborated with Professors Michele Pezzoni and Fabiana Visentin on a project funded by the French National Research Agency. The project investigates the impact of artificial intelligence on PhD graduates. She is now looking for innovative methods to enrich the dataset and strengthen the robustness of the results.

Currently, she is working a solo-authored project on quantum computing. This project so far reflects her interdisciplinary ability, combining in-depth qualitative research, through interviews with scientists and research managers in the field, with sophisticated econometric analysis. This dual approach exemplifies her ability to tackle complex research questions and generate original insights.

Eliana Diodati has consistently demonstrated herself to be an excellent student and junior researcher. I have no doubt that Eliana will not only benefit greatly from the program but will also bring valuable contributions to the community.

Kind regards,



Professor of Economic Policy
Department of Culture, Politics and Society
University of Torino
Fellow Canadian Institute for Advanced Research (CIFAR), Toronto
Fellow Collegio Carlo Alberto, Torino