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## **Short biography**

I received my Ph.D. in Economics and Technology Management from University of Bergamo (Italy). I am currently Maitre de Conférences (HDR) at the Université Côte d'Azur. I was a postdoctoral fellow at EPFL (Switzerland), Bicocca University (Italy), and University of Brescia (Italy).

## **Research interests**

My main research interest concerns the economics of science. My research currently focuses on two subjects: (i) the study of the effectiveness of private and public funding of science and (ii) the study of PhD students' productivity and careers. On this latter subject, I am starting a project studying the impact of artificial intelligence competencies on PhD students' careers. I am also interested in more classical subjects in innovation, such as the study of development trajectories of novel technologies and the university-industry technology transfer activities. Technique-wise, I use large datasets (~millions of observations), and I am attracted by the study of specific econometric problems, data quality issues, simulations, and network analysis. I am currently applying machine learning techniques for text analysis on large corpora of documents such as patents, publications, and PhD thesis documents.

## **Current Appointments**

Maitre de Conférences - HDR, Université Côte d'Azur, and GREDEG, Nice, France (Since 2014)

Scientific advisor, Observatoire des Sciences et Techniques, HCERES, Paris, France (Since 2017)

Affiliate researcher, OFCE, SciencesPo, Paris, France (Since 2021)

Affiliate researcher, ICRIOS, Bocconi University, Milan, Italy (Since 2010)

## **Previous Appointments**

- 2021 Scientific advisor for the Inter-American Development Bank, Washington, US
- 2014 – 2015 Senior research scientist STARMETRICS project, Washington, US
- November 2013 - Septembre 2014 Post-doc, CEMI, École Polytechnique Fédérale de Lausanne, Switzerland
- July 2012 - November 2013 Post-doc, Milano-Bicocca University, Department of Economics, Research project: “Analysis of industrial dynamics with simulation and econometric techniques”, Italy
- December 2011 - December 2012 Research Fellow at OST (Observatoire des Sciences et des Techniques), Paris, France

- December 2010 - May 2011 Post-doc, University of Brescia, Department of Economics, Research project: “Collaboration network of journals in economics, the impact on research productivity and careers advancements”, Italy
- June 2009 to September 2013 Project coordinator of “Academic Patenting in Europe” (APE-INV) funded by European Science Foundation
- December 2005 - November 2006 Research assistant, University of Brescia, Research project: “History-Friendly simulation models to estimate the effects of research and labour investments: ICT, pharmaceutical and biotechnology”, Italy

### **Teaching experience**

*Courses:* Data analysis (Bachelor/Master), Economics of Science (Bachelor/Master/PhD), Economics of Innovation (Bachelor/Master), Empirical Analysis of Regional Dynamics (Master), Economics and Management of Organizations (Master), Microeconomics (Bachelor), Industrial Dynamics (Master), History of Economic Crises (Master), Empirical Economics (Master), Econometrics (Bachelor)

*Institutions:* Université Côte d’Azur, University of Brescia (Faculty of economics and engineering), University of Torino, International doctoral program in economics (Pisa-UCA), Maastricht University.

### **Education and training**

2021 HDR, Université Côte d’Azur, “Micro-Dynamics of Scientific and Technological Knowledge Production”

2010 Ph.D. in Economics and Technology Management, University of Bergamo, Dissertation: “Productivity, Career and Collaboration in Science: Three Studies on French and Italian Physicists”

2005 Degree in industrial engineering, University of Brescia, Dissertation: “Evolution of pharmaceutical industry in a dynamic simulation model”

### **Research grants and awards**

2018 - 2021, co-PI of “Scientific Networks and IDEX Funding” (SNIF) funded by Université Côte d’Azur (UCA)

2019 - 2022, co-PI of “Gender bias In Grant Allocation” (GIGA) funded by Agence Nationale de la Recherche (ANR)

2019 - 2020, PI of “Advancing the Science of Funding”, funded by National Bureau of Economic Research (NBER)

2022 Maastricht University and UNU-MERIT, Visiting Professorship Support. Grant for a 2-month visit.

2021 University of Brescia, Visiting Professorship Support. Grant for a one-week visiting.

2017 Research award by the Research Incentive Program of Collegio Carlo Alberto for the paper “At the origins of learning: Absorbing knowledge flows from within the team.”

### **Other activities**

*Referee* for the Journal of Evolutionary Economics, Higher Education, Industry and Innovation, Research Policy, Journal of Artificial Societies and Social Simulation, Regional Studies, Triple Helix, and Industrial and Corporate Change.

*In the organizing committee of the conferences* Governance of a Complex World (Nice); Science, Technology and Innovation indicators in transition (Leiden); European Association for Evolutionary Political Economy (Nice); Knowledge Dynamics, Industry Evolution, Economic Development summer school (since 2015, Nice).

*In the scientific committee of* The Organisation, Economics and Policy of Scientific Research workshop; Knowledge Dynamics, Industry Evolution, Economic Development summer school.

*Editorship:* Guest editor of the special issue “The impact of academic research and science policy” in the Annals of Economics and Statistics.

*Lab responsibilities:* Since 2022, coordinator of the group FIT at GREDEG, Université Côte d’Azur. The project includes 16 permanent members, 11 PhD students and postdocs, and 6 associate members.

### **PhD students**

#### *supervised*

Alberto Corsini, Université Côte d’Azur, successfully defended in 2022, best thesis award. Thesis title “Scientific Networks and IDEX Funding”, Université Côte d’Azur, GREDEG.

Justin Quemener, enrolled in 2021, thesis title “Les impacts de la recherche sur la technologie et l’innovation : Mesure et interprétation des citations de publications scientifiques dans les brevets”, Université Côte d’Azur, GREDEG.

Davide Bonaglia, enrolled in 2019, thesis title “Novel technologies’ creation and diffusion: The role of multinational enterprises, global cities and inventors”, UNU-MERIT and Maastricht University.

#### *Committees*

Jin Ding, “The evolution and dynamics of Sectoral System of Innovation – A case study of orphan drug innovation in the US”, University of Edinburgh, Economics (Edinburgh, 23 February 2018)

Thorsten Doherr, “Disambiguation of Researcher Careers: Shifting the Perspective from Documents to Authors”, University of Luxembourg, Economics (Luxembourg, 28 June 2018).

Emilia Filippi, “Automation and its impact on occupations and employment” (Trento, 16 March 2023)

Yassine Guerroud, “Three essays on eco-innovation at the firm level” (Nice, 7 October 2021)

Bastian Krieger, “Public Policy And Firm Innovation” (Luxembourg, 14 October 2022)

## Publications in peer-reviewed journals

1. Corsini, A., Pezzoni, M., and Visentin, F. 2022. *What makes a productive Ph.D. student? Research Policy*, 51(10), (CNRS Rank 1).
2. Pezzoni M. Veugelers R. and Visentin F. 2022. *How fast is this novel technology going to be a hit? Antecedents predicting follow-on inventions. Research Policy*, 51(3), (CNRS Rank 1).
3. Baldessarelli, G., Lazaric, N., and Pezzoni, M. 2022. Organizational routines: Evolution in the research landscape of two core communities. *Journal of Evolutionary Economics*, 32(4): 1119–1154, (CNRS Rank 2).
4. Mairesse J. and Pezzoni M. 2021. *The Impact of Novelty in Scientific Articles: The Case of French Physicists. Revue d'economie industrielle*, 174(2) , (CNRS Rank 3).
5. Ayoubi, C. Pezzoni M. and Visentin F. 2021. *Does it Pay to Do Novel Science? The Selectivity Patterns in Science Funding. Science and Public Policy*
6. Vu, D. Pezzoni M. and Nguyen D.L. 2021. *Arbitrator teams and dispute resolution performance: an empirical analysis. European Journal of Law and Economics*, (CNRS Rank 2).
7. Mairesse, J. Pezzoni M. and Visentin F. 2020. Does Gender Matter for Promotion in Science? Evidence from Physicists in France *Revue Economique*, Volume 7, Issue 6, (CNRS Rank 2).
8. Orsatti G., Quattraro F., and Pezzoni M. 2020. The antecedents of green technologies: The role of team-level recombinant capabilities. *Research Policy*, Volume 49, Issue 3, (CNRS Rank 1).
9. Miniaci R. and Pezzoni M. 2020. Social Connections and Editorship in Economics. *Canadian Journal of Economics*, (CNRS Rank 2).
10. Mairesse J. Pezzoni M. and Visentin F. 2019. Impact of family characteristics on the gender publication gap: Evidence for physicists in France. *Interdisciplinary Science Review*, Volume 44, Issue 2, Pages 204-220.
11. Ayoubi, C., Pezzoni, M., and Visentin, F. 2019. The important thing is not to win, it is to take part: What if scientists benefit from participating in research grant competitions? *Research Policy*, Volume 48, Issue 1, Pages 84–97, (CNRS Rank 1).
12. Sterzi V., Pezzoni M., and Lissoni F. 2019. Patent Management by Universities: Evidence from Italian Academic Inventions, Forthcoming, *Industrial and Corporate Change*, Volume 28, Issue 2, Pages 309–330, (CNRS Rank 1).
13. Mairesse J. and Pezzoni M. 2018. Novelty in Science: The impact of French physicists' novel articles. *Conference Proceedings STI2018*.
14. Coffano M., Foray D., and Pezzoni M. 2017. Does inventor centrality foster regional innovation? The case of the Swiss medical devices sector, *Regional Studies*, Volume 51, Issue 8, Pages 1206-1218, (CNRS Rank 2).
15. Ayoubi C., Pezzoni M., and Visentin F. 2017. At the origins of learning: Absorbing knowledge flows from within the team. *Journal of Economic Behavior and Organization*, Volume 134, Issue 2, Pages 374-387, (CNRS Rank 2).
16. Pezzoni M., Lane J., Mairesse J., and Stephan P. 2016. Gender and the Publication Output of Graduate Students: A Case Study *PLOS ONE*, Volume 11.
17. Bianchini S., Lissoni F., Pezzoni M., and Zirulia L. 2016. The economics of research, consulting, and teaching quality: theory and evidence from a technical university, *Economics of Innovation and New Technology*, Volume 25, Issue 7, Pages 668-691, (CNRS Rank 2).

18. Mairesse J. and Pezzoni M. 2015. Does Gender Affect Scientific Productivity? A critical review of the empirical evidence and a panel data econometric analysis for French physicists. *Revue Economique*, Volume 66, Issue 1, Pages 65-113 (CNRS Rank 2)
19. Pezzoni M., Lissoni F., and Tarasconi G. 2014. How to Kill Inventors: Testing The Massacrator Algorithm for Inventor Disambiguation. *Scientometrics*, Volume 101, Issue 1, Pages 477-504.
20. Garavaglia C., Malerba F., Orsenigo L., and Pezzoni M. 2014. Innovation and market structure in the evolution of the pharmaceutical industry: A history-friendly model. *Journal of Economics and Statistics (Jahrbuecher fuer Nationaloekonomie und Statistik)*, Volume 234, Issue 2-3, Pages 274-298.
21. Garavaglia C., Malerba F., Orsenigo L., and Pezzoni M. 2013. A Simulation Model of the Evolution of the Pharmaceutical Industry: A History-Friendly Model. *Journal of Artificial Societies and Social Simulation*, Volume 16, Issue 4, Page 5.
22. Bianchini S., Lissoni F., and Pezzoni M. 2013. Instructor Characteristics and Students' Evaluation of Teaching Effectiveness: Evidence from an Italian Engineering School. *European Journal of Engineering Education*, Volume 38, Issue 1, Pages 38-57.
23. Lissoni F., Pezzoni M., Poti B., and Romagnosi S. 2013. University autonomy, IP legislation and academic patenting: Italy, 1996-2007. *Industry and Innovation*. Volume 20, Issue 5, Pages 399-421, (CNRS Rank 3).
24. Pezzoni M., Sterzi V., and Lissoni F. 2012. Career progress in centralized academic systems: an analysis of French and Italian physicists. *Research Policy*, Volume 41, Issue 4, Pages 704–719, (CNRS Rank 1).
25. Garavaglia C., Malerba F., Orsenigo L., and Pezzoni M. 2012. Technological regimes and demand structure in the evolution of the pharmaceutical industry. *Journal of Evolutionary Economics*, Pages 1–33, (CNRS Rank 2).
26. Lissoni F., Montobbio F., Mairesse J., and Pezzoni M. 2011. Scientific Productivity and Academic Promotion: A Study on French and Italian Physicists. *Industrial and Corporate Change*, Volume 20, Issue 1, Pages 253-294, (CNRS Rank 1).

### Papers under review

Pezzoni M. and Visentin F. “Gender bias in team formation: The case of the European Science Foundation’s grants”

Kalash B., Guillou S., Nesta L., and Pezzoni M. “Does lab funding matter for the technological application of scientific research? An empirical analysis of French labs”

Patsali S., Pezzoni M., and Visentin F. “Research independence: Drivers and impact on PhD students’ careers”

Corsini A. and Pezzoni M. “Does grant funding foster research impact? Evidence from France”

## **Selected working papers and conferences**

### *Working papers*

Mairesse J., Pezzoni M., and Visentin F. Does Gender Matter for Promotion in Science? Evidence from Physicists in France, Working Paper no. 27789, National Bureau of Economic Research. 2020

Pezzoni M., Veugelers R., and Visentin F. How fast is this novel technology going to be a hit? London, Centre for Economic Policy Research. 2019

Lissoni F., Mairesse J., Montobbio F., and Pezzoni M. Scientific Productivity and Academic Promotion: A Study on French and Italian Physicists. Working Paper no. 16341, National Bureau of Economic Research. 2010

### *Conferences*

National Bureau of Economic Research (NBER) Summer Institute, US. 2018. Paper presented: “The important thing is not to win, it is to take part: What if scientists benefit from participating in research grant competitions?”

National Bureau of Economic Research (NBER) Summer Institute, US. 2019. Paper presented: “What Matters in Funding: The Value of Research Coherence and Alignment in Evaluators’ Decisions”

National Bureau of Economic Research (NBER) Investments in Early Career Scientists: Data and Research Gaps, March 19, 2021. Papers presented: “What Makes a Productive Ph.D. Student?” and “The impact of research independence on PhD students’ careers: Large-scale evidence from France”

Druid 2021 Copenhagen Business School, Denmark, October 18-20, 2021. Paper presented, “What Matters in Funding: The Value of Research Coherence and Alignment in Evaluators’ Decisions”

Seminar at Center for International Development at Harvard University. 2019. Papers presented: “How fast is this novel technology going to be a hit? Antecedents predicting follow-on inventions” and “Does it Pay to Do Novel Science? The Selectivity Patterns in Science Funding”

## **Research results’ dissemination**

- Research Highlights, Choose your supervisor—and peers—wisely, 2022, Science, <https://www.science.org/doi/10.1126/science.adg3734>
- Female supervisors ‘have more productive PhD students.’ 2022, July 7. Times Higher Education (THE).
- Study pinpoints secrets to a successful PhD. 2022, August 3. Research Professional News.
- Podcast, InnoTechCast, “How fast novel technologies become a hit”, Episode 88, The European House Ambrosetti 2022.
- Science Magazine, Brainard, Jeffrey. “Funding Agency’s Reviewers Were Biased against Scientists with Novel Ideas.” 2021.
- TheMetaNews, La nouveauté, ça se mesure comment ?, 18 juin 2021.
- Mairesse, J. Pezzoni M. and Visentin F. When gender is not a discrimination factor for promotion 2020. VoxEU.org.

- Pezzoni M., Veugelers R., and Visentin F. Technology diffusion trajectories: New evidence. 2019, September 3. VoxEU.org.
- Ayoubi C., Pezzoni M., and Visentin F. It's not the winning but the taking part that counts: how the process of applying for competitive grants is of benefit to researchers. 2018. LSE Impact Blog, October 8
- Ayoubi C., Pezzoni M., and Visentin F. Taking part, not winning, counts most in grant applications. 2018. Research Europe. October 11
- Ayoubi C., Pezzoni M., and Visentin F. Simply applying for a competitive grant is a win. 2018. Social Science Space. October 17
- The Subtle Ways Gender Gaps Persist in Science, by P. Voosen, The Chronicle of Higher Education, March 06, 2016