Curriculum Vitae

Personal info

Brescia (Italy), October 2, 1985
Nationality: Italian
Status: Married, 2 children (Lorenzo and Arianna)
Bureau: BETA UMR 7522, Univ. de Strasbourg, 61 av. de la Foret Noire, Strasbourg, France
e-mail: s.bianchini@unistra.fr
Tel.: +33(0)695994190
Website here

CURRENT APPOINTMENT

Full Professor, BETA UMR 7522, Université de Strasbourg (2025)

RESEARCH INTEREST

Economics of science and innovation
Artificial intelligence in science (AI4Science)
Science of science

EDUCATION

PhD in Economics, Scuola Superiore Sant'Anna (Pise) and Université de Strasbourg, 2015. Dissertation: *Three essays on firm growth, innovation, and persistent performance.*

MA in Industrial Engineering, University of Brescia, 2011. Dissertation: *Quantitative methods for the assessment of teaching quality of academic instructors.*

PUBLICATIONS IN PEER-REVIEWED JOURNALS (from most recent)

Bianchini, S., Colombelli, A., Le Masle, B., Ravetti, C., & Tubiana, M. (2027). Finding green start-ups at scale: Automating selection through Natural Language Processing algorithms. *Technological Forecasting and Social Change*, 234, 124897. Link to article

Bianchini, S., Geuna, A., & Shermatov, F. (2026). Scientific discovery in the age of AI and supercomputing. *Scientific Reports*. 16, 33935 Link to article

Bianchini, S., Di Girolamo, V., Ravet, J., & Arranz, D. (2026). AI in science: When and where it makes a difference. *Research Policy*, 55(6). Link to article

Hambye-Verbrugghen, J., Bianchini, S., Brockway, P., Aramendia, E., Heun, M. K., & Marshall, Z. (2026). From twin transition to twice the burden: Digitalisation, energy demand, and economic growth. *Ecological Economics*, 239, 108747. Link to article

Bianchini, S., Muller, M., & Pelletier, P. (2025). Drivers and barriers of AI adoption and use in scientific research. *Technological Forecasting & Social Change*, 220, 124303. Link to article

Jurowetzki, R., Hain, D. S., Wirtz, K., & Bianchini, S. (2025). The private sector is hoarding AI researchers: What implications for science? *AI & Society*, 40, 4145–415. Link to article

Abbonato, D., Bianchini, S., Gargiulo, F., & Venturini, T. (2024). Interdisciplinary research in artificial intelligence: Lessons from COVID-19. *Quantitative Science Studies*, (4), 922–935. Link to article

Damioli, G., Bianchini, S., & Ghisetti, C. (2024). The emergence of a 'twin' transition scientific knowledge base in European regions. *Regional Studies*, 59(1). Link to article

Bianchini, S., Damioli, G. & Ghisetti, C. (2023). The environmental effects of the 'twin' green and digital transition in European regions. *Environmental and Resource Economics* 84, 877–918. Link to article

Bianchini, S., Moritz M., & Pelletier, P. (2022). Artificial intelligence in science: An emerging general method of invention. *Research Policy*, 51(10), 104604. Link to article

Bianchini, S., Llerena, P., Ozel, E. & Ocalan-Ozel, S. (2022). Gender diversity of research consortia contributes to funding decisions in a multi-stage grant peer-review process. *Humanities and Social Sciences Communications*, 9,195. Link to article

Bianchini S., Llerena, P., Patsali, S. (2019). Demand-pull innovation in science: Empirical evidence from a research university's suppliers. *Research Policy, 48, 100005*. Link to article

Bianchini, S., Pellegrino, G. (2019). Innovation persistence and employment dynamics. *Research Policy*, 48(5), 1171-1186. Link to article

Bianchini, S., Llerena, P, & Martino, R. (2019). The impact of R&D subsidies under different institutional frameworks. *Structural Change and Economics Dynamics*, 50, 65-78. Link to article

Bianchini, S., Pellegrino, G., & Tamagni, F. (2018). Innovation complementarities and firm growth. *Industrial and Corporate Change*, 27(4), 657-676. Link to article

Bianchini, S., Krafft, J., Quatraro, F., & Ravix, J. (2017). Corporate governance and innovation: Does firm age matter? *Industrial and Corporate Change*, 27(2), 349-370. Link to article

Bianchini, S., Bottazzi, G., & Tamagni, F. (2017). What does (not) characterize persistent corporate high growth? *Small Business Economics*, 48(3), 633-656. Link to article

Bianchini, S., Lissoni, F., Pezzoni, M., & Zirulia, L. (2016). The economics of research, consulting, and teaching quality: Theory and evidence from a technical university. *Economics of Innovation & New Technology*, 25(7), 668-691. Link to article

Bianchini, S., Llerena, P. (2016). Science policy as a prerequisite of industrial policy. *Economia e Politica Industriale*, 43(3), 273-280. Link to article

Bianchini, S. (2014). Feedback effects of teaching quality assessment. *Assessment & Evaluation in Higher Education*, 39(3), 380-394. Link to article

Bianchini, S., Lissoni, F., & Pezzoni, M. (2013). Instructor characteristics and students' evaluation of teaching

effectiveness: Evidence from an Italian engineering school. *European Journal of Engineering Education*, 38(1), 38-57. Link to article

ONGOING RESEARCH (submitted papers)

Bianchini, S. & Coroama, G. I. LLMs and the organization of scientific work. Link to article

Ghisetti, C., Bianchini, S., Compagnoni, M., & Damioli, G. How does heterogeneous technological change shape EU dependence on critical raw material imports? [3rd round *Research Policy*]

POLICY PAPERS and REPORTS (from most recent)

European Commission: Directorate-General for Research and Innovation. Mutual learning exercise on national policies for artificial intelligence in science – Final report, Bianchini, S. (editor), Publications Office of the European Union, 2025. Link to article

European Commission: Directorate-General for Research and Innovation. Framework conditions and funding for AI in science – Mutual learning exercise on national policies for AI in science – First thematic report, Montgomery, J. (editor), Publications Office of the European Union, 2025. Link to article

European Commission: Directorate-General for Research and Innovation. Infrastructures for AI in science – Mutual learning exercise on national policies for AI in science – Second thematic report, King, R. (editor), Publications Office of the European Union, 2025. Link to article

European Commission: Directorate-General for Research and Innovation. Talent for AI in science – Third thematic report, Groznik, V. (editor), Publications Office of the European Union, 2025. Link to article

European Commission, Directorate-General for Research and Innovation, Arranz, D., Bianchini, S., Di Girolamo, V. et al., Trends in the use of AI in science – A bibliometric analysis, Publications Office of the European Union, 2023. Link to article

Bianchini, S., Bottero, P., Colagrossi, M., Damioli, G., Ghisetti, C. and Michoud, K., Mapping the Scientific Base for SDGs and Digital Technologies, Publications Office of the European Union, Luxembourg, 2023. Link to article

Bianchini, S., Bottero, P., Colagrossi, M., Damioli, G., Ghisetti, C. and Michoud, K., Sustainable Development Goals and Digital Technologies: Mapping Scientific Research, Publications Office of the European Union, Luxembourg, 2023. Link to article

TEACHING ACTIVITY

Mathématiques II (24h , Bachelor, *taught in French*): Vectors; matrix algebra; optimization; constrained optimization

Économétrie appliqué (45h, Master, *taught in French*): OLS; instrumental variables; maximum likelihood estimation; limited dependent variables; coding in R

Impact evaluation (20h, Master, *taught in English*): Policy evaluation strategies; impact evaluation techniques (randomized trails, regression discontinuity design, difference-in-difference, propensity score matching; coding in R

Data science (40h, Master, *taught in English*): Supervised learning; regression and classification; coding in Python

Deep learning (40h, Master, *taught in English*): Neural networks (NNs); Convolutional NNs; Recurrent NNs; transformers and LLMs; coding in Python

Conversation on "Artificial Intelligence" (8h, Magistère, *taught in English*): History of AI; AI and labor; AI and the environment; AI in science.

In the past: Industrial economics (72h, Master, Univ. of Brescia); Economics of innovation (36h, Master, Univ. of Brescia); Economics of science (8h, Univ. of Strasbourg and Scuola Superiore Sant'Anna).

Founder and coordinator of the MA Programme Data Science pour l'Économie et l'Entreprise (Data Science for Economics and Business, DS2E), FSEG Université de Strasbourg. Details here

PUBLICLY FUNDED PROJECTS

As Principal Investigator:

MANTRA (MApping the iNnovation landscape: Towards Responsible Ai), 2025–2030. *Objectives*: Mapping the landscape of AI core and applied research and investigate the responsible use of AI in scientific practices. In partnership with Faculty of Law, Université de Strasbourg (Co-PI Prof. Jean-Marc Deltorn). *Sponsor*: France 2030. *Budget*: 205 000 €. Details here

SEED (Sustainable Economies in the Era of Digital transformation), 2022–2025. *Objectives*: The project aims to understand the interlinkages between digitalization and sustainable development, and the contextual factors that can maximize the benefits and minimize the risks of the digital transformation. *Sponsor*: Agence Nationale de la Recherche (ANR). *Budget*: 366 000 €. Details here

DInnAMICS (Demand-driven Innovation Assessment in Medical and unIversity eCo-Systems), 2019–2021. *Objectives*: Evaluating the role of public procurement in promoting the development of AI and computer-assisted technologies in the domain of health. *Sponsor*: Agence Nationale de la Recherche (ANR). *Budget*: 165 000 €. Details here

ARISE (ARtificial Intelligence in the Science systEm), 2020–2022. *Objectives*: Analysing socio-economic transformations triggered by Artificial Intelligence (AI) through an in-depth assessment of the diffusion and the impacts of AI in the science system. *Sponsor*: CNRS. *Budget*: 120 000 €.

Robotisation, environmental impacts, and the dynamics of wages and employment, 2019–2020. *Objectives*: Analysing the interrelationship between innovations (AI and robots), wages and employment at the firm- and industry-level. *Sponsor*: PUD-PROGEDO. *Budget*: 10 000 €

As partner:

GIGA (Gender bias In Grant Allocation), 2019–2021. Coordinated by P. Llerena (Université de Strasbourg). *Sponsor*: Agence Nationale de la Recherche (ANR).

UTTO (University Technology Transfer and its Optimization), 2016–2018. Coordinated by N. Carayol (Université de Bordeaux) and P. Llerena (Université de Strasbourg). *Sponsor*: Agence Nationale de la Recherche (ANR).

ASTRAL (Assessment of Science and Technology Research in Alsace), 2014–2015. Coordinated by J. Lane (NYU) and P. Llerena (Université de Strasbourg). *Sponsor*: Gutenberg Chair, Region Alsace.

STARMETRICS (Science and Technology for America's Reinvestment: Measuring the EffecTs of Research on Innovation, Competitiveness and Science), 2014–2015. Coordinated by J. Lane (NYU). *Sponsors*: NIH, NSF, the U.S. Department of Agriculture, and the Environmental Protection Agency.

REFEREE ACTIVITY

Reviewer for: Economic Geography; Economics of Innovation and New Technology; Energy Strategy Reviews; Eurasian Business Review; Industrial and Corporate Change; Industry and Innovation; Journal of Economic Behavior and Organization; Journal of Small Business and Enterprise Development; Journal of Evolutionary Economics; npj Artificial Intelligence; PLOS ONE; Quantitative Science Studies; Research Policy; Research Evaluation; R&D Management; Science and Public Policy; Scientific Reports; Scientometrics; Small Business Economics; Studies in Higher Education; Technovation; Technology in Society.

External reviewer (evaluator), Agence Nationale de la Recherche (ANR), France [since 2019]

External reviewers for "Campagne de qualification MCF, section 05/06" [since 2024]

SUPERVISIONS

PhDs:

Pierre Pelletier (2019–2023). Artificial intelligence in science: Diffusion and impact. Link to thesis

Kevin Wirtz (2019–2023). Scientific collaboration and mobility : A creativity perspective. Link to thesis

Diletta Abbonato (2020–2024). The role of artificial intelligence for societal challenges. Link to thesis

Baptiste Le Masle (2022–2026). Networks and culture as antecedents of green entrepreneurship. Link to thesis

Kévin Michoud (2023–ongoing). Mapping the scientific base for SDGs and digital technologies.

Fazliddin Shermatov (2024–ongoing). Science in the age of AI and super computers.

Georgiana-Ioana Coroama (2025–ongoing). AI and division of labour.

PhD committee:

Eva Jacob (Université de Strasbourg, June 2025). Unconditional basic income challenged by social justice. History, concept, experiment.

Sylvain Fontaine (Sorbonne University, December 2024). The diffusion of Artificial Intelligence into neuroscience: A multiscale approach to the genericity of a research-technology.

Francesca Isola (University of Siena, May 2024). Three essays on intrahousehold inequality and separation outcomes: A European perspective.

Olimpija Hristova Zaevska (Copenhagen Business School, June 2024). Industry 4.0 ecosystems – Design, value creation, and impact across European regions.

OTHER & RESPONSABILITIES

Director of the Chair "Data Science for Economics and Business", Fondation Université de Strasbourg
(active budget 205 000 € - 2019-2021, supported by *Crédit Agricole* and *Mazars*)
(active budget 120 000 € - 2022-2024, supported by *Crédit Agricole*)
(active budget 50 000 € - 2025-2026, supported by *Crédit Agricole*)

Winner of the "Guy Ourisson Prize 2020" (Gutenberg Circle). The prize is awarded each year to up to five most promising researchers under 40 in the Alsace region in any field. Details here

Member of the Editorial Review Board: Industry and Innovation, Small Business Economics

Member of the Board of Management for "The International Schumpeter Society" (2020–2022)

Member of the Scientific and Organizing Committee for the Workshop on "The Organization, Economics and Policy of Scientific Research" (Strasbourg, 2025)

Editorial Board (guest editor with A. Coad and R. Brown), special issue "High growth firms" in Cuaderno de Economia (2018). Details here

Expert groups / consulting activities for:
- European Commission: DG-JRC-Modelling, Indicators and Impact Evaluation
- European Commission: DG-RTD-Research and Innovation
- OECD: Structural Policy Analysis Division, Economics Department
- Private sector [data analytics, AI/ML]

Rapporteur of the Mutual Learning Exercise on *National Policies for AI in Science* (2024-2025). Details here

Last update 03/11/2026