

# VINÍCIUS MURARO DA SILVA, Ph.D.

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Postdoctoral Researcher, Lund University

Design Sciences Department and Center for Innovation Research (CIRCLE), Lund, Sweden

[vinicius.muraro@design.lth.se](mailto:vinicius.muraro@design.lth.se); [murarosilva@gmail.com](mailto:murarosilva@gmail.com) | Phone: +46 79 3050606

## Academic Background

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- Ph.D. in Science and Technology Policy – University of Campinas, UNICAMP (2016 - 2021)
  - Thesis Title: “Futures Studies and Foresight for Science, Technology and Innovation: Trends of Using Big Data and Machine Learning” (Supervisor: Prof. Dr. Sérgio Salles-Filho)
  - São Paulo Research Foundation (FAPESP) fellow – InSySPo project - Innovation Systems, Strategies and Policy (Principal Researcher: Prof. Dr. Nicholas Vonortas)
  - Visiting Researcher at Seoul National University – Seoul, South Korea (January-February 2020 – Prof. Dr. Keun Lee)
- Bachelor’s in Mechanical Engineering – University of Campinas, UNICAMP (2007 - 2013)
  - Academic exchange at USACH, Santiago - Chile (March-July 2010), Peking University – Peking, China (July 2011) and Grenoble INP – Grenoble, France (August 2011-July 2012)

## Professional Background

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- Lund University (March 2022 – Present) Lund, Sweden
  - Position: Postdoctoral Researcher
  - Research and teaching activities in Strategy, Research Policy and Innovation division at the Department of Design Sciences at School of Economics and Management (LUSEM) and Lunds Tekniska Högskola (LTH). Full member of the Center for Innovation Research (CIRCLE) and the Sparbanken Skåne Centre for sustainable enterprising (SSCEN)
- LabGEOPI – Group for the Organization of Research and Innovation (2016 – 2022) Campinas SP, Brazil
  - Position: Ph.D. Researcher; Ad-hoc Consultant
  - Development of R&D impact evaluation models and foresight studies for public and private institutions; Teaching and organization of executive courses: “Evaluation of R&D and Innovation Impacts” and “Foresight and Beyond: prospection, prioritization and decision making in STI”.
- Inventta Consultoria (August, 2012 – January, 2016) Campinas – SP - Brazil
  - Position: Innovation Consultant
  - Corporate innovation strategies for several industries (health care, oil and gas, agribusiness) using Design Thinking approach, Technological Foresight and Technological Roadmap.

## Research Projects

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- Bibliometrics, Social Network Analysis and Futures Studies (2016 - present)
  - Development and application of methodologies for futures studies (foresight) in several sectors. Studies of techniques and methodologies based on AI technologies. Application of Big Data and Machine Learning tools in the collection, cleaning, analysis, and visualization for bibliometric, altimetric and social network analysis, with the objective of evaluating scientific and technological production in several knowledge fields
- Research Collaboration in the Context of Scientific Inequality (2022 – present)
  - This study aims to understand collaboration mechanisms between low and high-income affiliated researchers, motivations, agenda-setting, and division of labor, particularly impacting capacity building in low-income countries. Utilizing primary data from surveys, bibliometrics, and interviews with scientists, the research provides actionable insights for science governance. Collaboration with Dr. Pauline Mattson and Annika Ralfs.
- Assessing the Strengths and Challenges of Artificial Intelligence in Sweden (2022 – present)
  - This project aims to assess the current state of AI in Sweden, identify its strengths and challenges, and propose recommendations for future development. By using bibliometric methods, we aim to map the capacity of AI in Sweden, to investigate how Swedish universities and companies collaborate to generate new scientific

knowledge and to understand how they and the Swedish government stimulate and invest in AI research.  
Collaboration with Dr. Devrim Göktepe-Hultén

- PROFitos - Prospecting and Priorization for the Integration of Amazonian Plants Productive Chain (2022 – present)
  - Project funded by the São Paulo Research Foundation – FAPESP, Brazil
  - The project aims to map technical-productive competences and promote the strength of the value chain. of Amazonian plants by using foresight and prioritization methodologies. In Brazil, the production of herbal medicines is still timid compared to its high biodiversity and the national and international market demands.
- Impact Evaluation of the Common Bean Genetic Improvement Program (2020- 2022)
  - Project funded by the São Paulo Research Foundation – FAPESP, Brazil
  - The project's objective is to develop and apply a method for evaluating results and impacts for the “Common Bean Genetic Improvement Program”, carried out by the Agronomic Institute of Campinas (IAC), with a view to guiding R&D planning and management, technology transfer strategies and fostering innovation. Main Resarcher: Dr. Luiza Capanema (IAC – Campinas, Brazil)

## **Publications, Conferences presentations and On-going papers**

- Salles-Filho, S., Carneiro, A., Spatti, A., **Muraro, V.**, Vonortas, N. & Falcini, G. (2025). Chapter 5 A Monitoring and Evaluation System for Complexity: A Case Study of the Brazilian National Innovation Policy. In J. Kuusisto, M. Meyer, S. Flowers, L. Kunttu & H. Kalliomäki (Ed.), The Evolving Innovation Space: Policy and Impact Evaluation in a Changing World (pp. 71-100). Berlin, Boston: De Gruyter. <https://doi.org/10.1515/978311188218-005>
- **Muraro, V.** and Salles-Filho, S. (2024), "Big data, machine learning and uncertainty in foresight studies", Foresight, Vol. 26 No. 3, pp. 436-452. <https://doi.org/10.1108/FS-12-2022-0187>
- Lepsch-Cunha N, **Muraro V**, Nascimento HEM, Mazoni A, Nunez CV and Bonacelli MBM (2024) Technical-scientific production and knowledge networks about medicinal plants and herbal medicines in the Amazon. Front. Res. Metr. Anal. 9:1396472. <https://doi.org/10.3389/frma.2024.1396472>
- **Muraro, V.** (2023). The impact of ChatGPT in Pedagogical Contexts: Reflections and Recommendations [Conference article]. Teaching and Learning in Higher Education, Lund University, Sweden.
- **Muraro, V.**, Göktepe-Hultén, D. (2023). Assessment of academic work in AI using bibliometrics: The case of Lund University [preprint]. 27th International Conference on Science, Technology and Innovation Indicators (STI 2023). <https://doi.org/10.55835/6442a2612e5bbccb9a78fe1e>
- Spatti, A. C., **Muraro, V.**, Bezerra, L. M. C., Campos, M. L., & Fredo, C. E. (2022). The common bean: A comparison between the world's main producers of scientific knowledge [Conference article]. 26th International Conference on Science, Technology and Innovation Indicators (STI 2022), Granada, Spain. <https://doi.org/10.5281/zenodo.6951656>
- **Muraro, V.**; Silva Neto, V. J.; Navarro, A. (2021). Can science lead the green transition? STRN as an epistemic community [Conference article]. The Network for Early Career Researchers in Sustainability Transitions (NEST) Conference, Sofia, Bulgaria.
- Bermúdez-Rodríguez, T.; **Muraro, V.** ; Spatti, A. C.; Abreu Sampaio Leme Monaco, C. (2020). O impacto do acesso aberto na produção e difusão de conhecimento sobre a Covid-19. Liinc Em Revista, V. 16, N. 2, P. E5296, 2020. Doi: 10.18617/Liinc.V16i2.5296. Available at: <https://Revista.Ibict.Br/Liinc/Article/View/5296>

## **Teaching Experience**

### **Lund University, Lund, Sweden**

- **Bachelor of International Business:**  
Course: IBUA10 - Introduction to International Business (2022, 2023)

### **University of Campinas, Campinas, Brazil**

- **Master and Ph.D in Science and Technology Policy:**

**Course:** CT264 - Management and Policy Tools: Prospective, Prioritization, and Decision-Support (2022, 2023)

- **Bachelor's in business and public administration:**

**Course:** GL702 - Project Design (2019)

- **Bachelor's in engineering (various):**

**Course:** GT001 - Science, Technology, and Society (2017)

## Events and Courses Organization

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- Monthly Research Policy Seminars (Lund, Sweden – 2022)
- InSySPo International Symposium: The Challenges of Technology and Economic Catching-up in Emerging Economies (Campinas-SP, Brazil – 2019).
- Foresight and Beyond – Prospective, Prioritization and Decision-Making in Science, Technology and Innovation (Campinas-SP, Brazil – 2018, 2019).
- Impact Evaluation of R&D and Innovation - Executive Course (Campinas-SP, Brazil – 2018, 2019).

## Interests and Competences

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| • Qualitative tools: QCA, MAXQDA | • Quantitative tools: Vantage Point, R, SPSS, Python, Stata |
| • Technology Foresight           | • Scientometrics  |
| • STI policy                     | • Social Network Analysis                                   |
| • Evaluation of R&D projects     | • Natural Language Processing                               |
| • Digitalization                 | • Statistics  |

## Language Skills

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- Portuguese, English, French, Spanish - Fluent
- Swedish, Italian, Chinese Mandarin – Basic