

Curriculum Vitae

NICHOLAS S. VONORTAS

Scopus author ID: 6602487131

ORCID: <http://orcid.org/0000-0002-6745-4926>

ResearcherID: <http://researcherid.com/rid/O-6321-2015>

Google Scholar (August 12, 2024): citations 12495, h-index 49, i10-index 119

APPOINTMENTS

Primary:

Associate Dean Research, Elliott School of International Affairs
George Washington University (GW)
Director, Institute for International Science and Technology Policy (IISTP)
Professor, Department of Economics & IISTP
1957 E Street, N.W., Suite 403
Washington, D.C. 20052, USA
Tel: (1-202) 378-6230
E-mail: vonortas@gwu.edu

Secondary:

São Paulo Excellence Chair (SPEC)
Innovation Systems, Strategy and Policy
Departamento de Política Científica e Tecnológica
Universidade Estadual de Campinas (UNICAMP)
São Paulo, Brasil

Editor:

Science and Public Policy (Journal)

EDUCATION

Ph.D., 1989, New York University, U.S.A. (Economics)
M.Phil., 1987, New York University, U.S.A. (Economics)
M.A., 1983, Leicester University, U.K. (Economic Development)
B.A., 1981, National and Kapodistrian University of Athens, Greece (Economics)

FIELDS OF SPECIALIZATION

Applied Microeconomics / Economics of Technological Change and Innovation
Strategic Business Partnerships / Innovation Networks
Science, Technology, and Innovation Strategy and Policy / R&D Program Assessment

PROFESSIONAL EXPERIENCE

i. Academic Appointments

Professor of Economics and International Affairs, Department of Economics & Institute for International Science and Technology Policy (IISTP), George Washington University, 2004 - present; Associate Professor, 1996-2004; Assistant Professor 1990-1996.

São Paulo Excellence Chair (SPEC) “Innovation Systems, Strategy and Policy”, Department of Science and Technology Policy, University of Campinas (UNICAMP), State of São Paulo, Brazil, 2014-2024.

Instructor of Economics, Department of Economics, New York University, 1986-1988.

ii. Administrative Positions

Associate Dean for Research, Elliott School of International Affairs, George Washington University, 2023-2026.

Senior Associate Dean for Faculty Affairs and Research Initiatives, Elliott School of International Affairs, George Washington University, 2022-2023.

Director, Institute for International Science and Technology Policy (IISTP), George Washington University, 2019-2022; 2001–2012; Deputy Director, 1998-2001.

Director, Graduate Program on International Science and Technology Policy (ISTP), George Washington University, 2019-2022; 1998–2012; Spring 2018; 2019-2020.

Director, Ph.D. Candidacy, Department of Economics, George Washington University, 2014–2018; 2019-2022.

Dean’s Council, Elliott School of International Affairs (several terms).

GW Faculty Senate, Elliott School representative, 2019-current; Executive Committee 2020-2021.

Chair and member of faculty hiring committees, Elliott School of International Affairs.

Appointments, Promotion and Tenure Committee, Elliott School of International Affairs.

Advisory Council on Research, George Washington University.

Academic Excellence Committee, George Washington University.

Steering Committee for the doctoral Public Policy Program.

iii. Visiting Positions

Leading Research Fellow, Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics, Moscow, Russian Federation, 2015-2022.

Visiting Professor, Schwarzman College, Tsinghua University, Beijing, Republic of China, 2018-2019.

Visiting Professor, Graduate School of Management of Technology (MOT), Korea University, Seoul, Republic of Korea, Spring 2016 – 2018.

Visiting Professor, Centre for Innovation, Research and Competence in the Learning Economy (CIRCLE), University of Lund, Sweden, Spring 2013.

Visiting Scholar, Joint Institute for Innovation Policy (JIIP), Brussels, Belgium, Spring 2013.

Visiting Professor, Fundacao Getulio Vargas (FGV), Rio de Janeiro, Brazil, Fall 2012.
Visiting foreign lecturer summer 2014, 2015

Visiting Scholar, Centro Universitario de Brasilia (UniCEUB), Brasilia, Brazil, Sept. 2012.

Research Associate, CESPRI-KITeS, Luigi Bocconi University, Milano, Italy, 2001–2012.

Research Associate, Management Science Laboratory, Athens University of Economics and Business, Greece, 2001 – 2011.

Research Associate, Laboratory for Industry and Energy Economics, National Technical University of Athens, Greece, 1998 – present.

Visiting Scholar, Maastricht Economic Research Institute on Innovation and Technology (MERIT), University of Maastricht, Netherlands, Fall 1997.

Visiting Scholar, National Technical University of Athens, Greece, Spring 1998.

Research Associate, Center for Science and Technology Policy, New York University and Rensselaer Polytechnic Institute, 1985 – 1989.

Intern, United Nations Centre for Transnational Corporations, New York, 1984.

iii. Journal Editor / Editorial Board / Editorial Council

Editor, *Science and Public Policy*, 2010 – present

Editorial Board, *Asian Research Policy*, 2013 – present

Editorial Board, *Foresight and STI Governance*, 2015 – present

Editorial Board, *Annals of Science and Technology Policy*, 2017 - present

Advisory Board, *Research Evaluation*, 2010 – 2015

Advisory Board, *Innovations*, 2006 – 2010

iv. Book Series Editor

Editorial Board, *Science, Technology and Innovation Studies*, Springer Publishers, 2014-present

v. Research Funding - Consulting

U.S. National Science Foundation (NSF)

U.S. National Research Council, National Academies of Science (NRC/NAS)

U.S. Department of Commerce, Advanced Technology Program (ATP)

U.S. Department of Commerce, National Institute of Standards and Technology (NIST)

U.S. Small Business Administration (SBA)

U.S. Department of Energy, Office of Science (DOE/OS)

U.S. National Aeronautics and Space Administration (NASA)

European Commission, DG Research and Innovation

European Commission, DG Information Society and Media

European Commission, DG Enterprise

European Commission, Washington Delegation

Organization for Economic Cooperation and Development (OECD)

United Nations Conference on Trade and Development (UNCTAD)

United Nations, Economic and Social Commission for Western Asia (UN/ESCWA)
The World Bank, Private Sector Development, Middle East, Caucasus
Ministry of Economy, Trade and Industry, Japan (METI)
Science and Technology Policy Institute, Republic of Korea (STEPI)
Korea Institute of S&T Evaluation and Planning, Republic of Korea (KISTEP)
SRI International
General Secretariat for Research and Technology, Greece
National Statistical Agency, Greece

vi. Advisory Committees, Boards

Member, Science Advisory Committee, DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy (SciSTIP), Stellenbosch University, South Africa, 2021-2024.

Member, International Advisory Board, Seoul Institute of Technology, 2020-2021.

Innovation Policy Forum, National Research Council, US National Academies of Science, 2015-2019.

Chair, International Advisory Board, Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics, Moscow, Russian Federation, 2016-2022.

Academic Council, Master Program “Governance of Science, Technology and Innovation”, Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics, Moscow, Russian Federation, 2014-2022.

Advisory Committee for International Science and Engineering, U.S. National Science Foundation, 2006-2011.

- Acting Chair, Strategic Planning Panel, 2011

- Chair, Committee of Visitors, International Science & Engineering Programs, 2011

Chair, Evaluation Panel, “Industrial Clusters” Competition, General Secretariat for Research and Technology (GSRT), Ministry of Education and Continuous Learning, Greece, 2011-2012.

Chair, George Washington University Faculty Taskforce on Science Policy Institute, 2010.

International Advisory Board on Evaluation and Impact Analysis, VINNOVA, Sweden, 2007-2009.

Board of Directors, Korea-U.S. Science Cooperation Center, Korea National Research Foundation (NRF), 2006-2012.

vii. Expert Committees – Testimony

Member, Merit Review Panel, Science of Science and Innovation Policy Program, US National Science Foundation, 2015-2022.

Member of the Expert Panel advising on the Economic Development of Low Earth Orbit Activities and the International Space Station, US National Aeronautics and Space Administration (NASA), 2014-2015.

Member of the External Experts Committee evaluating the quality and progress of the Department of Economics of the National and Kapodistrian University of Athens, Greece (February-March 2014)

Chair of the High-Level Expert Panel developing a “Monitoring & Evaluation Roadmap” for the Directorate-Generale Information Society and Media (INFSO), European Commission (January-December 2006)

Member and Rapporteur of the High-level Expert Panel for the 5-Year Assessment of the EU Framework Programmes on Research and Technological Development, Directorate-Generale Research and Innovation, European Commission (May – December 2004)

Member of the Panel for the project “Innovation Models for Aerospace Technologies”, Board on Science, Technology and Economic Policy, US National Academies of Science (NAS), (Spring 2004 – Spring 2005)

Member of the Working Group on “Innovation Infrastructure and the Environment” for the “National Innovation Initiative”, organized by the US Council on Competitiveness (February – December 2004)

Member of the Subpanel of the Basic Energy Sciences Advisory Committee (BESAC) of the Department of Energy to examine DOE’s Office of Science approach to performance measurement in view of GPRA (Jan. 24-25, 2002)

Member of STRATA-ETAN Expert Group on Intellectual Property Rights in Publicly Funded Research & Development (European Commission – 2001-2003)

Member of STRATA-ETAN Expert Group on Intellectual Property Rights in International Collaboration (European Commission – 2000-2001)

Testified in joint hearings by the Federal Trade Commission and the Antitrust Division, US Department of Justice on the potential usefulness of guidelines on research joint ventures (May 1997)

LEADERSHIP IN PROFESSIONAL ORGANIZATIONS / INT’L EVENTS

Co-Organizer “São Paulo Advanced School on Technology & Innovation Strategies and Policies for Economic Development”, São Paulo Excellence Chair (SPEC) Innovation Systems, Strategy and Policy (InSySPo) and Institute of Economics, University of Campinas, Brazil, June 24 – July 5, 2024.

Co-Organizer “The Athens Roundtable on Artificial Intelligence and the Rule of Law: Fifth Edition”, George Washington University, November 30 – December 1, 2023.

Co-Organizer, University Seminar Series “Science Diplomacy”, George Washington University, 2023.

Organizer, International Symposium “Big Data and STI Policy Decision-Making”, University of Campinas, July 18, 2023.

Organizer, International Conference “From Local to Global: Global Value Chains and Ecosystems of Innovation and Entrepreneurship in the Post-COVID World”, University of Campinas, June 29-30; and University of São Paulo, Brazil, July 1, 2022.

Lead Organizer, series of 5 high level expert panels (online) on “The Challenges of Technology and Economic Catch-up in Emerging Economies”, George Washington University, University College London, University of Campinas, National Seoul University, National Research University Higher School of Economics, Fall 2020 – Spring 2021.

Organizer, Conference “Transforming Research”, The George Washington University, Washington, DC, September 26-27, 2019.

Organizer International Symposium “Technology Upgrading and Economic Catching-Up”, University of Campinas and FAPESP, São Paulo, Brazil, July 3-5, 2019.

Organizer, International Workshop “Regional Innovation Ecosystems, Entrepreneurship, and Challenges for Small Business”, Research Foundation of the State of São Paulo (FAPESP), São Paulo, Brazil, June 8, 2018.

Organizer International Symposium “Innovation Ecosystems, Technology Upgrading, and Regional Development”, University of Campinas and FAPESP, São Paulo, Brazil June 6-7, 2018.

Organizer International Workshop “Evaluation and Big Data for Science, Technology and Innovation”, co-sponsored by the Institute for International Science and Technology Policy (GW), Clarivate, and the Technology Interest Group of the American Evaluation Association, George Washington University, Washington, D.C., November 8, 2017.

Organizer International Symposium “Entrepreneurship and the Geography of Innovation”, and International Roundtable “System Innovation Axes: Universities & Entrepreneurship”, University of Campinas and FAPESP, São Paulo, Brazil July 5-7, 2017.

Organizer, International Workshop “Governance of System Innovation”, Research Foundation of the State of São Paulo (FAPESP), São Paulo, Brazil, July 7, 2017.

Organizer, International Symposium “Ex Ante Evaluation, Prioritization and STI Planning”, University of Campinas, Brazil, July 4-5, 2017.

Co-organizer (with University of Ottawa), D. Allan Bromley Memorial Lecture, annual, April, 2005-

Organizer, Workshop “The Geography of Innovation and Entrepreneurship”, The World Bank Group, Washington DC, April 26, 2016.

Co-organizer, special Globelics session “Lessons for priority setting and indicators relevant to the impact of research programmes in Europe and Emerging Economies: An evidence-based debate between the research and the policy-shaping community”,

STI Conference 2016 “Peripheries, Frontiers and Beyond”, Valencia, Spain, September 2016.

Co-Organizer, Workshop “Can Network Measures Serve as Indicators of Knowledge Creation and Flow?”, National Science Foundation NCSES, George Washington University, December 14, 2016.

Co-Organizer, GW Workshop on Context-Driven Technology Choice for Development (2015)

Organizer, International Workshop “Demand-Side Policies for Innovation / Public Procurement for Innovation”, University of Campinas, Brazil, May 28-29, 2015.

Co-Organizer, GW Conference on Developing Country Adaptation to Climate Change (2011)

Co-Organizer, Annual Conference, Technology Transfer Society (2010)

Co-Organizer, GW Conference on Science and Technology Policy (2010)

Co-Organizer, Science of Science Policy (SoSP) Conference on Best Practices in R&D Appraisal and Prioritization (2009)

Co-Organizer, first Science of Science Policy (SoSP) Conference on S&T Evaluation Roadmap (2008)

Organizing Committee, 5th International Industrial Organization Conference (2007)

Co-founder of the Washington Research Evaluation Network (WREN), a forum for informed discussion, research, and decision-making on R&D program evaluation. Co-Principal organizer of the first major international conference of WREN at the George Washington University, December 4-5, 2003. Co-organizer of the second international conference of WREN in collaboration with the European Commission, Brussels, June 17-18, 2004, and of the third international conference of WREN in Seoul, Republic of Korea, May 31 – June 1, 2005. Co-Principal organizer of the fifth year anniversary international conference of WREN at the George Washington University, December 3-4, 2008. Co-organizer of smaller workshops, especially as they relate to ex ante program evaluation (investment strategy).

PUBLICATIONS

i. Books

Intangible Assets, Productivity and Economic Growth: Micro, Meso and Macro Perspectives, editor, Routledge, 2024 (Co-editors, Carter Bloch, Aimilia Protopogerou)

The Challenges of Technology and Economic Catch-Up in Emerging Economies, editor, Oxford University Press, 2021 (Co-editors, Jeong-Dong Lee, Keun Lee, Dirk Meissner, Slavo Radosevic)

Public Procurement for Innovation, editor, Edward Elgar, 2016 (Co-editors, Jakob Edler, Charles Edquist, Jon Mikel Zabala-Iturriagoitia)

Innovation Policy: A Practical Introduction, editor, Springer, 2014 (Chinese version 2019) (Co-editors, Phoebe C. Rouge, Anwar Aridi)

Handbook on the Theory and Practice of R&D Program Evaluation, editor, Edward Elgar, 2013 (Co-editor, Al Link)

Innovation Networks in Industries, editor, Edward Elgar, 2009 (Co-editor, Franco Malerba)

The Innovation Imperative: National Innovation Strategies in the Global Economy, editor, Edward Elgar, 2009 (Co-editors, Goran Marklund, Charles Wessner)

Knowledge Flows in European Industry: Mechanisms and Policy Implications, editor, Routledge, 2006 (Co-editors, Yannis Caloghirou, Natasha Constantellou)

European Collaboration in Research and Development: Business Strategies and Public Policies, editor, Edward Elgar, 2004 (Co-editors, Yannis Caloghirou and Stavros Ioannides)

Cooperation in Research and Development, Kluwer Academic Publishers, 1997

Cooperative Research in R&D-Intensive Industries, Avebury Academic Publishers, 1991

Strategic Research Partnerships, editor, National Science Foundation, 2001 (Co-editors John E. Jankowski and Albert N. Link)

ii. Refereed Articles

- “Regional Diversification in Brazil: The role of Relatedness and Complexity”, *Growth and Change*, forthcoming 2024. (With Mariane Santos Francoso and Ron Boschma)
- “Global Value Chains and Regional Systems of Innovation: Towards a Critical Juncture?”, *Technological Forecasting and Social Change*, forthcoming 2024. (With Bruno Brandão Fischer, Dirk Meissner, and Ron Boschma)
- “Drivers of Entrepreneurial Performance: An Assessment of the PIPE Program in Brazil”, *Annals of Science and Technology Policy*, 2024, 8(1–2): 39–61. (With Gustavo Herminio Salati Marcondes de Moraes, Bruno Brandão Fischer, and Sergio Salles)
- “Korea Small Business Innovation Research (KOSBIR)”, *Annals of Science and Technology Policy*, 2024, 8(1–2): 62–76. (With Irineu de Souza Lima Júnior and Soo J. Sohn)
- “TFP, ICT and absorptive Capacities: Evidence from Colombia”, *The Journal of Technology Transfer*, published online 10/28/2023. (With Juan Carlos Castillo) (<https://doi.org/10.1007/s10961-023-10042-w>)
- “Biomedical Entrepreneurship in U.S. Regions”, *The Journal of Technology Transfer*, 2024, 49: 782-800. (With Sang-Min Park)
- “Barriers as Moderators in the Innovation Process”, *Science and Public Policy*, 2023, 50(4): 633-654. (With Diego R. de Moraes Silva and André T. Furtado)
- “Translational Research: From Basic Research to Regional Biomedical Entrepreneurship”, *Small Business Economics*, 2023, 60: 1761-1783. (With Sang-Min Park)
- “The Relationship Between Public Support and the Degree of Novelty of Innovation”, *Innovation and Development*, 2023, 13(3): 603-619. (With Suelene Mascarini and Renato Garcia)
- “Gatekeepers in Regional Innovation Networks: Evidence from an Emerging Economy”, *The Journal of Technology Transfer*, 2023, 48(3): 821-841. (With Mariane Santos Francoso)

- “Spatial Features of Entrepreneurial Ecosystems”, *Journal of Business Research*, 2022, 147: 27-36. (With Bruno Brandão Fischer, Dirk Meissner, and Maribel Guerrero)
- “A Multilayered Perspective on Entrepreneurial Universities: Looking into the Dynamics of Joint University-Industry Labs”, *Technological Forecasting and Social Change*, 2022, 178(3): 121573. (With Bruno Brandão Fischer, Dirk Meissner, and Yuan Zhou)
- “Innovation Barriers, Indicators and Policies: Coevolving Concepts in Innovation Studies”, *Annals of Science and Technology Policy*, 2022, 6(2): 100-227. (With Diego R. de Moraes Silva and André T. Furtado)
- “Ecosystems of Entrepreneurship: Configurations and Critical Dimensions”, *The Annals of Regional Science*, 2021, 67(1): 73-106. (With André Alves Cherubini and Bruno Brandão Fischer)
- “Mission-Oriented Policy and the Fuzzy Boundaries of Market Creation: The Brazilian Shipbuilding Case”, *Science and Public Policy*, 2021, 48(1):80-92. (With André Alves Cherubini and Paulo Antônio Zawislak)
- “Local Capacity, Innovative Entrepreneurial Places and Global Connections: An Overview”, *The Journal of Technology Transfer*, 2021, 46: 563-573. (With Jeong-Dong Lee, Keun Lee, Dirk Meissner, and Slavo Radošević)
- “Returnee Academic Entrepreneurship in China”, *Journal of Intellectual Capital*, 2021, 22(1): 8-23. (With Yanzhao Lai)
- “Microgravity Protein Crystallization for Drug Development: A Bold Example of Public Sector Entrepreneurship”, *The Journal of Technology Transfer*, 2021, 46(5): 1442-1461. (With Troy Scott)
- “Do-It-Yourself Laboratories and Attitude Towards Risk: The Effects of Self-efficacy and the Perception of Security and Privacy”, *Technological Forecasting and Social Change*, 2020, 159, October 2020. (With Jeewhan Yoon and SungWon Han)
- “Public Technology Transfer, Commercialization and Business Growth”, *European Economic Review*, 124, May 2020. (With Jae-Woong Min and YoungJun Kim)

- “Internal Barriers to Innovation and University-Industry Cooperation among Technology-based SMEs in Brazil”, *Industry and Innovation*, 2020, 27(3): 235-263. (With Diego R. de Moraes Silva and Luis Otávio Lucas)
- “Configurations of Knowledge-Intensive Entrepreneurial Ecosystems: An Assessment of the State of São Paulo, Brazil”, *Revista de Administração de Empresas*, 2019, 59(4): 242-257. (With André Alves Cherubini, Bruno Brandão Fischer and Sérgio Queiroz).
- “Regional Entrepreneurial Ecosystems in China”, *Industrial and Corporate Change*, 2019, 28(4): 875-897. (With Yanzhao Lai)
- “Evolution of University-Industry Collaboration in Brazil from a Technology Upgrading Perspective”, *Technological Forecasting and Social Change*, 2019, 145: 330-340. (With Bruno Brandão Fischer and Paola Rucker Schaeffer)
- “A Moderated Mediation Model of Technology Roadmapping and Innovation: Roles of Corporate Foresight and Organizational Support”, *Journal of Engineering and Technology Management*, 2019, 52: 61-73. (With Jeewhan Yoon, SungWon Han, and YoungJun Kim)
- “Smart Specialization as a Tool to Foster Innovation in Emerging Economies: Lessons from Brazil”, *Foresight and STI Governance*, 2019, 13(1): 35-47. (With Anna Bosch)
- “Commercialization of Transferred Public Technologies”, *Technological Forecasting and Social Change*, 2019, 138: 10-20. (With Jae-Woong Min and YoungJun Kim)
- “The Singular Economy: End of the Digital/Physical Divide”, *STI Policy Review*, 2019, 9(1): 1-25. (With Ann Mecedá)
- “Technology Transfer and Commercialization by Universities and PRIs: Benchmarking OECD Country Policy Approaches”, *Economics of Innovation and New Technology*, 2018, 27(5-6): 510-530. (With Sandrine Kergroach and Dirk Meissner)
- “Corporate Foresight and Innovation: The Effects of Integrative Capabilities and Organizational Learning”, *Technology Analysis and Strategic Management*, 2018, 30(6): 633-645. (With Jeewhan Yoon, YoungJun Kim and SungWon Han)

- “On the Location of Knowledge-Intensive Entrepreneurship in Developing Countries: Lessons from São Paulo, Brazil”, *Entrepreneurship & Regional Development*, 2018, 30(5-6): 612-638. (With Bruno Brandão Fischer and Sérgio Queiroz)
- “Quality Comes First: University-Industry Collaboration as a Source of Academic Entrepreneurship in a Developing Country”, *Journal of Technology Transfer*, 2018, 43(2): 263-284. (With Bruno Brandão Fischer, Paola Rücker Schaeffer, and Sérgio Queiroz)
- “University-Industry R&D Cooperation in Brazil: A Sectoral Approach”, *Journal of Technology Transfer*, 2018, 43(2): 285-315. (With Diego R. de Moraes Silva and André T. Furtado)
- “Determinants of Young Firms’ Innovative Performance: Empirical Evidence from Europe”, *Research Policy*, 2017, 46: 1312-1326. (With Aimilia Protogerou and Yannis Caloghirou)
- “Towards A Broad Understanding of Innovation - Implications for Innovation Policy”, *Journal of Technology Transfer*, 2017, 42(5): 1184-1211. (With Dirk Meissner and Wolfgang Polt)
- “Technology Foresight in Transition”, *Technological Forecasting and Social Change*, 2017, 119: 211-218. (With Ian Miles, Dirk Meissner, and Elias Carayannis)
- “Context Appropriate Technologies for Development: Choosing for the Future”, *Technological Forecasting and Social Change*, 2017, 119: 219-226. (With David Feige)
- “The Impact of Government R&D Subsidy on Firm Performance: Evidence from Korean SMEs”, *Small Business Economics*, 2017, 48(2): 345-360. (With Beom Cheol Cin and YoungJun Kim)
- “Does Exposure to University Research Matter? Evidence from Europe”, *Asian Research Policy*, 2016, 7(1). (With Yannis Caloghirou and Aimilia Protogerou)
- “Market, Firm and Project-Level Effects on the Innovation Impact of Collaborative R&D Projects”, *Journal of the Knowledge Economy*, 2015: 1-20. (With Konstantinos C. Kostopoulos, Yiannis Spanos, Klas Eric Soderquist, and Gregory Prastacos)

- “From Research Project to Research Portfolio: Meeting Scale and Complexity”, *Foresight and STI Governance*, 2015, 9(2): 38-43. (With Jonathan Linton)
- “Strategic Technology Alliances and Networks”, *Economics of Innovation and New Technology*, 2015, 24(5): 490-509. (With Lorenzo Zirulia)
- “Antecedents of Innovation Impacts in Publicly Funded Collaborative R&D Projects”, *Technovation*, 2015, 36-37: 53-64. (With Yiannis Spanos and Irimi Voudouris)
- “Managing Risk in the Formative Years: Evidence from Young Enterprises in Europe”, *Technovation*, 2014, 34(8): 454-465. (With YoungJun Kim)
- “Cooperation in the Formative Years: Evidence from Young Enterprises in Europe”, *European Management Journal*, 2014, 32(5): 795-805. (With YoungJun Kim)
- “Academic Entrepreneurship: An American (Individualistic) Perspective”, *Asian Research Policy*, 2013, 4(2). (With James D. Kettenhofen)
- “Network Structure and Robustness: Lessons for Research Programme Design,” *Economics of Innovation and New Technology*, 2013, 22(4): 392-411. (With Koichiro Okamura)
- “Social Networks in R&D Program Evaluation”, *Journal of Technology Transfer*, 2013, 38(5): 577-606.
- “Scale and Performance in Publicly Funded Collaborative Research and Development”, *R&D Management*, 2012, 42(5): 494-513. (With Yiannis E. Spanos)
- “The Value of Flexibility in Adapting to Climate Change: A Real Options Analysis of Investments in Coastal Defense”, *Climate Change Economics*, 2012, 3(2): 1-33. (With Peter Linquti)
- “Uncertainty, Networks and Real Options”, *Journal of Economic Behavior and Organization*, 2010, 75(3): 523-541. (With Isabelle Bajeux-Besnainou and Sumit Joshi)
- “Exclusivity in Licensing Alliances”, *Strategic Management Journal*, 2010, 32(2): 159-186. (With Deepak Somaya and Young-Jun Kim)
- “Networked Research: European Policy Intervention for Information & Communication Technologies”, *Technology Analysis and Strategic Management*, 2009, 21(7): 833-857. (With Stefano Breschi, Franco Malerba, Lorenzo Cassi)

- “Research Partners”, *International Journal of Technology Management*, 2009, 46(3/4): 280-306. (With Koichiro Okamura)
- “Research Networks as Infrastructure for Knowledge Diffusion in European Regions”, *Economics of Innovation and New Technology*, 2008, 17(7/8): 663-676. (With Nicolletta Corrocher, Franco Malerba, Lorenzo Cassi)
- “The Impact of EU-funded Research Networks on Knowledge Diffusion at the Regional Level”, *Research Evaluation*, 2008, 17(4): 283-293. (With Nicolletta Corrocher, Franco Malerba, Lorenzo Cassi)
- “Risk Financing for Knowledge-Based Enterprises: Mechanisms and Policy Options”, *Science and Public Policy*, 2007, 34(7): 475-488. (With Guy Ben-Ari)
- “Real options framework to assess public research investments”, *Science and Public Policy*, 2007, 34(10): 699-708. (With Chintal Desai)
- “S&T parks and business incubators in middle-sized countries: The case of Greece”, *Journal of Technology Transfer*, 2007, 32(5): 525-544. (With Evangelia Sofouli)
- “Intellectual property protection mechanisms in research partnerships”, *Research Policy*, 2006, 35(6): 825-38. (With Henry Hertzfeld and Al Link)
- “Determinants of technology licensing”, *Managerial and Decision Economics*, 2006, 27(4): 235-49. (With YoungJun Kim)
- “Technology licensing partners”, *Journal of Economics and Business*, 2006, 58(4): 273-89. (With YoungJun Kim)
- “European alliance and knowledge networks”, *Technology Analysis and Strategic Management*, 2006, 18(5): 535-60. (With Koichiro Okamura)
- “Managing large research partnerships”, *Technovation*, 2006, 26(10): 1101-10h. (With Richard N. Spivack)
- “Multiproject contact in research joint ventures: Evidence and theory”, *Journal of Economic Behavior and Organization*, 2005, 58(4): 459-86. (With Christopher Snyder)

- “Evaluating the European Union’s Research Framework Programmes: 1999-2003”, *Science and Public Policy*, 2005, 32(5): 399-406. (With Erkki Ormala)
- “Antitrust policy, interface compatibility standards, and information technology”, *Knowledge, Technology & Policy*, 2005, 18(2): 126-47. (With Thomas Hemphill)
- “Research joint ventures: A critical survey of theoretical and empirical literature”, *Journal of Economic Surveys*, 2003, 17(4): 541-70. (With Yannis Caloghirou and Stavros Ioannides.)
- “Strategic Research Partnerships: A Managerial Perspective”, *Technology Analysis and Strategic Management*, 2003, 15(2): 255-71. (With Thomas Hemphill.)
- “The performance of research partnerships”, *Managerial and Decision Economics*, 2003, 24(2-3): 85-99. (With Yannis Caloghirou and George Hondroyannis.)
- “Building competitive firms: Technology policy initiatives in Latin America”, *Technology in Society*, 24, 2002.
- “Science and technology policies towards research joint ventures”, *Science and Public Policy*, 2002, 29(2): 82-94. (With Yannis Caloghirou and Stavros Ioannides.)
- “Toward an integrated model of strategy formulation for strategic technical alliances”, *International Journal of Technology Transfer and Communications*, 1(3), 2002. (With Chung-Shing Lee.)
- "Convergence to symmetry in dynamic strategic models of R&D: The undiscounted case," *Journal of Economic Dynamics and Control*, 2001, 25(12): 1881-97. (With Sumit Joshi.)
- “University-industry cooperation in the context of the European Framework Programmes”, *Journal of Technology Transfer*, 2001, 26(1-2): 153-61. (With Yannis Caloghirou and Aggelos Tsakanikas.)
- “Apprentissage et cooperation a travers la recherche-developpement”, *Technologies, Ideologies, Pratiques*, XIV(1), 2000. (With Rigas Arvanitis.)
- “Technology Policy in the United States and the European Union: Shifting Orientation Towards Technology Users,” *Science and Public Policy*, 2000, 27(2): 97-108.

- “Research Partnerships,” *Research Policy*, 2000, 29(4-5): 567-86. (With John Hagedoorn and Albert Link.)
- “Multimarket contact and inter-firm cooperation in R&D,” *Journal of Evolutionary Economics*, 2000, 10(1-2): 243-71.
- “Participation of European Union Companies in US Research Joint Ventures”, *The IPTS Report*, 2000. (With Albert Link.)
- “Towards the knowledge-based economy: United States and its APEC partners”, *Journal of APEC Studies*, 1(2), 2000. (With Adam Tolnay)
- “How do participants in research joint ventures diversify?”, *The Review of Industrial Organization*, 1999, 15(3): 263-81.
- "R&D project selection in the public sector," *Journal of Policy Analysis & Management*, 1998, 17(4): 621-38. (With Henry R. Hertzfeld.)
- “Strategic alliances in information technology and developing country firms: Policy perspectives,” *Science, Technology and Society*, 3(1), 1998.
- “Research joint ventures: The use of databases”, *The IPTS Report*, May 1998.
- "Research joint ventures in the United States", *Research Policy*, 1997, 26(4-5): 577-95.
- "Process innovation in small firms: Case studies on CNC machine tools," *Technovation*, 1997, 17(8): 427-38. (With Lan Xue.)
- "Strategic alliances in information technology and developing country firms I: Recent evidence," *World Development*, 1997, 25(5): 657-80. (With Stratos P. Safioleas.)
- "Two-stage R&D competition: An elasticity characterization," *Southern Economic Journal*, 1996, 62(4): 930-37. (With Sumit Joshi.)
- "New directions for U.S. science and technology policy: The view from the R&D assessment front," *Science and Public Policy*, 22(1), 1995.
- "Inter-firm cooperation with imperfectly appropriable research," *International Journal of Industrial Organization*, 1994, 12(3): 413-35.

"Cournot equilibrium with imperfectly appropriable R&D," *Journal of Industrial Economics*, 1994, 42(1): 79-92. (With R. David Simpson.)

"Emerging patterns of multinational enterprise operations in developed market economies: Evidence and policy," *Review of Political Economy*, 1990, 2(2): 188-220.

iii. Refereed Paper Series

"Partnerships and Networking in Science and Technology for Development", Technology for Development Paper Series, United Nations Conference on Trade and Development, Geneva: UNCTAD, 2002 (UNCTAD/ITE/TEB/11).

iv. Book Chapters

"A Monitoring and Evaluation System for Complexity: A Case Study of the Brazilian Innovation Policy" (With Sergio Salles-Filho, Ana Maria Carneiro, Ana Carolina Spatti, Vinicius Muraro, and Gabriel Falcini)
In J. Kuusisto, S. Flowers, L. Kunttu, H. Kalliomaki, and Martin Meyer (eds) The Evolving Innovation Space: Policy and Impact Evaluation in a Changing World, De Gruyter, forthcoming.

"Introduction: Setting the Stage, Linking Intangible Assets to Productivity" (With Carter Bloch and Aimilia Protogerou)
"Promoting Intangible Investments and Productivity: The Role of Policy" (With Carter Bloch and Aimilia Protogerou)
In C. Bloch, A. Protogerou, and N. S. Vonortas (eds) Intangible Assets, Productivity and Economic Growth: Micro, Meso and Macro Perspectives, Routledge, 2024.

"Digital Transformation and Complex Events in Organizations and Supply Chains" (With Susana C. F. Pereira, Larissa A. Sincora, Maciel M. Queiroz, and Andre Cherubini Alves)
In G. Prastacos and N. Pouloudi (eds) Leading and Managing in the Digital Era, Springer Nature, 2024.

"On the Foundations of Entrepreneurial Ecosystems' Dimensions: Sources of Heterogeneous Configurations" (With Bruno Brandao Fischer and Andre Alves Cherubini)

- In J. A. Cunningham, M. Menter, C. O’Kane, and M. Romano (eds) Research Handbook on Entrepreneurial Ecosystems, Edward Elgar, 2024.
- “Proximity in Innovation Networks” (With Mariane Santos Francoso and Matheus Leite Campos)
In T. K. Das (ed) Managerial Practice Issues in Strategy and Organization, Information Age Publishing, 2023.
- “Barriers to Innovation” (With Diego Moraes da Silva)
“Entrepreneurial Ecosystems”
In Cristiano Antonelli (ed) Elgar Encyclopedia on the Economics of Knowledge and Innovation, Edward Elgar, 2022.
- “An Institutional Perspective on the Development of the Venture Capital Market in Brazil” (With Irineu de Souza Lima Júnior and Sérgio Robles Reis de Queiroz)
In Duc Khuong Nguyen, Vi Dzung Ngo, and Ngoc Thang Nguyen (eds) Entrepreneurial Finance, Innovation and Development: A Research Companion, Routledge/Taylor & Francis Group, November 2021.
- “Technology Upgrading and Knowledge Triangle in Brazil” (With Bruno Brandão Fischer and Paola Rucker Schaeffer)
in Dirk Meissner, Leonid Gokhberg, Yaroslav Kuzminov, Mario Cervantes, and Silvia Schwaag-Steger (eds) The Knowledge Triangle, Springer, 2021.
- “United States of America” (With Brennan Hoban and Connor Rabb)
In UNESCO Science Report 2021, Geneva: UNESCO, June 2021.
- “Technology Upgrading and Economic Catch-Up: A Context, Overview and Conclusions” (With Jeong-Dong Lee, Keun Lee, Dirk Meissner, and Slavo Radosevic)
“Macro and Micro Foundations for Technology Upgrading and Innovation: The Case of Shipbuilding and Offshore Industry in Brazil” (With André Cherubini Alves and Paulo Antônio Zawislak)
In Jeong-Dong Lee, Keun Lee, Dirk Meissner, Slavo Radosevic and Nicholas S. Vonortas (eds) The Technology and Economic Catch-Up Challenges in Emerging Economies, Oxford University Press, June 2021.
- “Internal Barriers to Innovation and University-Industry Cooperation among Technology-based SMEs in Brazil” (With Diego R. de Moraes Silva and Luis Otávio Lucas)
In Pedro de Faria, Florian Noseleit, and Bart Los (eds) The Influence of Internal Barriers on Open Innovation, Routledge, 2021.

“The Value of Flexibility in Adapting to Climate Change: A Real Options Analysis of Investments in Coastal Defense” (With Peter Linquiti)
in Sam Fankhauser (ed) The Economics of Climate Resilience and Adaptation, Edward Elgar, 2019. [Previously published in *Climate Change Economics*, 3(2): 1-33]

“Corporate Foresight and Innovation: The Effects of Integrative Capabilities and Organizational Learning” (With Jeewhan Yoon, YoungJun Kim, and SungWon Han)
in David Sarpong and Dirk Meissner (eds) Corporate Foresight and Innovation Management, Routledge, 2019.

“Effects of University Research Exposure on Young Company Behavior and Performance” (With Yannis Caloghirou and Aimilia Prorogerou)
in Erkan Erdil, Dirk Meissner, and Joanna Chataway (eds) Innovation and the Entrepreneurial University, Springer, 2018.

“Protein Crystallization for Drug Development: A Prospective Empirical Appraisal of Economic Effects of ISS Microgravity”
in Patrick Besha and Alexander MacDonald (eds) Economic Development of Low Earth Orbit, NASA, 2016.

“Innovation Systems of Ethanol in Brazil and the United States: Making a New Fuel Competitive” (With Luciano Cunha de Sousa, Inaiê Takaes Santos, and Demétrio Florentino de Toledo Filho)
in Sergio L. M. Salles-Filho, J. M. J. Silveira, S. Trindade, and M. G. D. Fonseca (eds) Futures of Bioethanol: A Global Perspective, Elsevier, 2016.

“Managing Risk in New Entrepreneurial Ventures” (With YoungJun Kim)
in Yannis Caloghirou, Franco Malerba, Maureen McKelvey, and Slavo Radosevic (eds), Dynamics of Knowledge-Intensive Entrepreneurship: Business Strategy and Public Policy, Routledge, 2016.

“Research and Technology Alliances”
in David Audretsch, Christopher Hayter, and Albert N. Link (eds.) Concise Guide to Entrepreneurship, Technology and Innovation, Edward Elgar, 2015.

- (a) “Introduction” (with Charles Edquist and Jon Mikel Zabala)
- (b) “Conclusions” (with Jacob Edler, Charles Edquist and Jon Mikel Zabala)
- (c) “Innovative Public Procurement in the United States”

in Jacob Edler, Charles Edquist, Nicholas S. Vonortas and Jon Mikel Zabala (eds), Public Procurement for Innovation, Edward Elgar, 2015.

- (a) “Introduction”
 - (b) “University Entrepreneurship” (with Cherilyn E. Pascoe)
 - (c) “Strategic Alliances / Knowledge-Intensive Partnerships” (with Timothy Williams)
- in Nicholas S. Vonortas, Phoebe C. Rouge and Anwar Aridi (eds), Innovation Policy: A Practical Introduction, Springer, 2014.

“The Value of Flexibility in Adapting to Climate Change: A Real Options Analysis of Investments in Coastal Defense” (With Peter Linquiti)
in David I. Stern, Leo Dobes, and Frank Jotzo (eds) Climate Change and the World Economy, part of the book series The International Library of Critical Writings in Economics, Edward Elgar, May 2014.

- (a) “Introduction” (with Albert N. Link)
 - (b) “Network Analysis”
- in Albert N. Link and Nicholas S. Vonortas (eds), The Theory and Practice of R&D Program Evaluation, Edward Elgar, February 2013.

“Knowledge-Intensive Entrepreneurship in Europe: Some Policy Implications”, in Franco Malerba (ed), Knowledge-Intensive Entrepreneurship and Innovation Systems, Routledge, 2010.

“Scale and Scope in Research”, in Henri Delanghe, Ugur Muldur, and Luc Soete (eds), European Science and Technology Policy: Towards Integration or Fragmentation?, Edward Elgar, 2009.

- (a) “Innovation Networks in Industries and Sectoral Systems: An Introduction” (with Franco Malerba);
 - (b) “Partnership Networks and Knowledge Networks in Five Sectors” (with Koichiro Okamura);
 - (c) “Innovation Networks in Industries”; “European Policy Favoring Networks in ICT” (with Stefano Breschi, Lorenzo Cassi, and Franco Malerba);
 - (d) “Evaluating the Links Between Research and Deployment Networks of Innovation in Information Society in Europe” (with Lorenzo Cassi, Nicoletta Corrocher, and Franco Malerba);
- in Franco Malerba and Nicholas S. Vonortas (eds), Innovation Networks in Industries, Edward Elgar, 2009.

(a) “Introduction” (with Goran Marklund and Charles Wessner);
(b) “Conclusion” (with Goran Marklund and Charles Wessner);
(c) “European Research Framework Programmes in a Global Context: Targets, Impacts, Lessons for the Future”;
in Goran Marklund, Nicholas S. Vonortas and Charles Wessner (eds), The Innovation Imperative: National Innovation Strategies in the Global Economy, Edward Elgar, 2009.

(a) “Introduction” (with Yannis Caloghirou and Anastasia Constantellou);
(b) “Theoretical Foundations and Key Concepts” (with Yannis Caloghirou and Anastasia Constantellou);
(c) “An Operational Framework for the Study of Knowledge Flows” (with Yannis Caloghirou and Anastasia Constantellou);
(d) “Knowledge Flows in European Industry: An Overview of Evidence from Surveys and Case Studies” (with Yannis Caloghirou and Anastasia Constantellou);
(e) “Overview of Innovation Policy Affecting Knowledge Flows in EU Member States” (with Yannis Caloghirou and Anastasia Constantellou);
(f) “Towards a New Agenda for Enhancing Knowledge Flows in Europe” (with Yannis Caloghirou and Anastasia Constantellou);
in Yannis Caloghirou, Anastasia Constantellou, and Nicholas S. Vonortas (eds.) Knowledge Flows in European Industry: Mechanisms and Policy Implications, Routledge, 2006. (With Yannis Caloghirou and Anastasia Constantellou.)

“Collaborate to collude? Multimarket and multiproject contact in R&D”, chapter in Peter Grossman (ed.) How Cartels Endure and How They Fail: Studies of Industrial Collusion, Edward Elgar, 2004. (With Yongsuk Jang.)

“Business model innovation in the digital economy”, in Georgios I. Doukidis, Nikolaos Mylonopoulos and Nancy Pouloudi (eds.), Social and Economic Transformation in the Digital Era, IDEA Group Publishing, 2004. (With Chung-Shing Lee.)

“Real options for public sector R&D investments”, in Stephan Kuhlmann and Philip Shapira (eds.), Learning from Science and Technology Policy Evaluation: Experiences from the United States and Europe, Edward Elgar, 2004. (With Matthew Lackey.)

“US policy towards research joint ventures”, in Yannis Caloghirou, Stavros Ioannides and Nicholas S. Vonortas (eds.), Industrial Collaboration in Research and Development, Northampton, MA: Edward Elgar, 2004.

“Towards the knowledge-based economy: United States and its APEC partners”, in Albert N. Link and Maryann Feldman (eds.) *Technology Policy for the Knowledge-Based Economy*, Kluwer Academic Publishers, 2001. (With Adam Tolnay.)

“Multimarket contact and inter-firm cooperation in R&D”, in D. C. Mueller and U. Cantner (eds.) *Capitalism and Democracy in the 21st Century*, Heidelberg: Physica-Verlag, 2001.

"Dynamic cooperation in R&D with research externalities," in J. Poyago-Theotoky (ed.) *R&D Cooperation: Theory and Policy*, Macmillan, 1997. (With Sumit Joshi.)

v. Edited Paper Collections in Journals

“Global Value Chains and Regional Systems of Innovation: Towards a Critical Juncture?”, editor, *Technological Forecasting and Social Change*, 183, October 2022. (Co-editors Ron Boschma, Bruno Brandão Fischer, Dirk Meissner)

“Local Capacity, Innovative Entrepreneurial Places and Global Connections”, editor, *The Journal of Technology Transfer*, July 2020. (Co-editors Keun Lee, Jeong-Dong Lee, Dirk Meissner, Slavo Radosevic)

“Innovation in State-Owned Enterprises: Implications for Technology Management and Industrial Development”, editor, *Industry and Innovation*, 2019, 26(2). (Co-editors Dirk Meissner and David Sarpong)

“International Perspectives on Innovation”, editor, *Journal of Technology Transfer*, 2018, 43(2).

“Technology Foresight in Developing and Transition Countries”, editor, *Technological Forecasting and Social Change*, 2017, 119. (Co-editors Ian Miles, Dirk Meissner, and Elias Carayannis)

“Evidence Never Lies: New Frontiers in Evaluation”, editor, *Science and Public Policy*, 34(10), 2007. (Co-editors, Klaus Zinoecker and Michael Stampfer)

“Evaluation of European Union Framework Programmes: The 2004 Five-Year Assessment”, editor, *Science and Public Policy*, 32(5), 2005. (Co-editor S. Hinze).

“Technology Alliances: Strategy, Evolution, Knowledge Management”, editor, *International Journal of Technology Management*, 2004, 27(8): 689-93. (Co-editor B. Bowonder)

“Strategic Research Partnerships: Economic, Managerial, and Policy Implications”, editor, *Technology Analysis and Strategic Management*, 2003, 15(2): 155-57. (Co-editors John Hagedoorn and Albert N. Link.)

“Technology Transfer and Learning Through Strategic Technical Alliances: International Experiences”, editor, *Journal of Technology Transfer*, 2000, 25(1): 9-12. (Co-editor Rigas Arvanitis.)

vi. Invited Articles

“Korea. Small Business Innovation Research (KOSBIR)”, *Annals of Science and Technology Policy*, forthcoming 2024. (With Irineu de Souza Lima Júnior and Soo J. Sohn)

“Introduction”, Special Issue “Innovation in State-Owned Enterprises: Implications for Technology Management and Industrial Development”, *Industry and Innovation*, 2019, 26(2). (With Dirk Meissner and David Sarpong)

“The Role of Universities in the Knowledge Triangle”, *Foresight and STI Governance*, 2017, 11(2): 6-9.

“Innovation als Resultat der EU-Rahmenprograme fr Forschung und Technologische Entwicklung? Eine Untersuchung der Effekte auf die Forschungs und Innovationsaktivitäten der Teilnehmer” *Forschung: Politik-Strategie-Management*, 2009: 2: 31-34. (With Wolfgang Polt and Robbert Fisher.)

"Risk Financing for Knowledge-Based Enterprises", Featured Story, Management Science Laboratory, Athens University of Economics and Business, July-August 2007. (<http://www.msl.aueb.gr>)

“Strategic innovation alliances and science and technology policy”, *Encyclopedia of Life Support Systems* (UNESCO), 2003. (With Patrick Murphy)

“Information technology: Developing country firms enter the global network”, *iMP*, March, 2000. (<http://www.cisp.org>) (With Rebecca Dodder)

“Intellectual property rights and knowledge dissemination in research joint ventures,”
Commentary, *Science Communication*, 19(1), 1997.

vii. Conference Proceedings

“The Use of Research Portfolios in Science Policy”, Conference Proceedings Austrian EU Council Presidency Conference “Impact of R&D Policy at the Crossroads: Policy Design, Implementation, Evaluation”, Vienna, Austria, 2019. (With Ismael Ràfols)

“International Research-based University Collaboration”, Conference Proceedings XVI April International Academic Conference on Economic and Social Development, Section Science and Innovation, National Research University Higher School of Economics, Moscow, Russian Federation, 2015. (With Antonina Gromyko)

“Technology Foresight in Developing Countries”, Conference Proceedings Science, Technology and Innovation Policy: Foresight, Growth, Roadmaps, Sectoral Impact Assessment and Alliances, Indian National Science Academy, New Delhi, 2015.
(With David Feige)

“A Text Mining Model for Strategic Alliance Discovery”, 45th Hawaii International Conference on System Sciences (HICSS), Hawaii, USA, 2011.

“Trends and Perspectives in the Era of Globalization”, Conference Proceedings “Greek Manufacturing: Towards the Knowledge Society”, Technical Chamber of Greece, Athens, Greece, 2006.

“Determinants of technology licensing”, in D. H. Nagao (ed.) Academy of Management Best Paper Proceedings of the Sixty-fourth Annual Meeting, 2004, A1-A6. (With Young Jun Kim)

“Technology Licensing”, in Patents, Innovation and Economic Performance: OECD Conference Proceedings, Directorate for Science, Technology and Industry, Organization for Economic Cooperation and Development, Paris: OECD, 2004.

“Technology Policy in the United States and the European Union”, in Science and Technology Policies for the 21st Century, Conference Proceedings, Economic and Social Commission for Western Asia (ESCWA), United Nations, 1999.

"Effective use of technical resources: Electromechanical engineering," in Herbert I. Fusfeld (ed.) *Effective Use of Global Technical Resources*, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1993.

"Inter-firm cooperation in imperfectly appropriable research," in S. Okamura, K. Murakami and I. Nonaka (eds.) *Science and Technology Policy Research: What Should Be Done? What Can Be Done?*, National Institute of Science and Technology Policy (STA - Japan), 1992.

"Economic interdependence among developed market economies and multinational enterprises," in Herbert I. Fusfeld, ed., *Changing Global Patterns of Industrial Research and Development*, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1989.

"The role of small and medium size enterprises in collective activities," in Herbert I. Fusfeld and Richard R. Nelson, eds., *Cooperation and International Competitiveness*, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1988. (With Sigvard Tomner).

viii. Reports

A General Assessment of Policies for Science, Technology and Innovation (STI) in Highly Developed Economies, Science Foundation of the State of Sao Paulo (FAPESP), Brazil, April 2022. (With Juan Carlos Castillo)

Planning and Reorienting Funding Agencies: International Evidence and Trends: United States, Science Foundation of the State of Sao Paulo (FAPESP), Brazil, March 2022. (With Ruth Cooper, Hanwen Fan, and Frank Spellman)

Israel Innovation System Supporting Entrepreneurship, background report for project "Strengthening the Innovation Ecosystem in Slovenia" (REFORM/SC2020/100), KPMG-VVA-OIKOS, N-ABLE for the European Commission, April 2021.

Analyzing the Deployment of Blockchain and Distributed Ledger Technologies in the Financial Sector, prepared as background document for the World Bank flagship report "Europe 4.0: Addressing the Digital Dilemma", September 2019. (With Pierre Padilla, Veronica Belousova, Yury Dranev, and Emmanuel Boudard)

- Transformação Digital de Campinas*, Projeto BR-T1374, Interamerican Development Bank, November 2018. (With Giancarlo Nuti Stefanuto and Camila Zeitoum)
- The Use of Research Portfolios in Science Policy*, Science Policy Research Report, US National Science Foundation, January 2018. (With Ismael Ràfols)
- An Economic Appraisal of Microgravity Protein Crystallization for Drug Development*, US National Aeronautics and Space Administration (NASA), June 2017. (With Troy J. Scott)
- Protein Crystallization for Drug Development: A Prospective Empirical Appraisal of Economic Effects of ISS Microgravity*, US National Aeronautics and Space Administration (NASA), 2015.
- Fostering Entrepreneurship in Armenia*, Directions in Development, core contributor, Smita Kuriakose (ed.), Washington, DC: The World Bank, 2013.
- Fostering Entrepreneurship in Azerbaijan*, Directions in Development, core contributor, Smita Kuriakose (ed.), Washington, DC: The World Bank, 2013.
- Fostering Entrepreneurship in Georgia*, Directions in Development, core contributor, Smita Kuriakose (ed.), Washington, DC: The World Bank, 2013.
- “Promoting Strategic Alliances for Innovation Capacity”, chapter contribution to the Technology and Innovation Report 2012 *Exploring the South for Technology and Innovation Capacity*, United Nations Conference on Trade and Development (UNCTAD).
- Innovation Policy Handbook*, Washington DC: The World Bank, 2012. (With Anwar Aridi et al.)
- ICT Network Impact on Structuring a Competitive European Research Area*, European Commission, DG Information Society and Media, 2011. (With Stefano Breschi, Robbert Fisher, Franco Malerba, Koichiro Okamura, Siemon Smid)
- Public Procurement and Innovation in the United States*, Embassy of Finland, 2011.
- Strategic Plan to Establish the George Washington University Science Policy Institute*, Report to the Vice President for Research, The George Washington University, 2010. (Panel Chair)

Scale and Scope as Drivers of the European Research Area, European Commission, DG Research, 2010. (With Wolfgang Polt, Robbert Fisher, Yiannis Spanos, Michael Dinges, Babis Ipektsides, Maria Pateraki)

Trends and Evolution of the EU ICT Research and Deployment Landscape, European Commission, DG Information Society and Media, 2010. (With Franco Malerba, Nicoletta Corrocher, Lucia Cusmano)

The Contribution of the Athens International Airport to the Greek Economy, Athens University of Economics and Business, Athens, Greece, 2009. (In Greek) (With Gregory Prastacos, Costas Costopoulos, and Nicholas Stroblos)

Evaluation Manual for ICT Research in FP7: Joint Technology Initiatives, European Commission, DG Information Society and Media, 2009. (With Michael Dinges and Wolfgang Polt)

Participation in the Sixth Framework Programme for Research, European Commission, DG Research, 2008. (FP6 Evaluation Panel)

Analysing and Evaluating the Impact on Innovation of Publicly Funded Research Programmes: Lot 1 – Evaluation of the Impact on Innovation of Projects of Community 5th and 6th Framework Programmes”, European Commission, DG Enterprise, 2008. (With Robbert Fisher and Wolfgang Polt.)

Real Options for Research Investment Portfolio Analysis at the U.S. Department of Energy, Office of Science, US Department of Energy, 2008.

Research on the Factors of Success of Public Policies Regarding Science, Technology and Innovation, Special Secretariat for Competitiveness, Greek Ministry of Development, May 2007.

Biodefense and Homeland Security Technology Development: Analysis of U.S. Policies and Process of Selection, International Access Corporation for the Ministry of Economics, Trade and Industry, Japan, March 2007.

Networks of Innovation in Information Society: Development and Deployment in Europe, Final Report, European Commission, DG Information Society and Media, 2007. (With Franco Malerba, Nicoletta Corrocher, Lorenzo Cassi, and Caroline Wagner.)

IST Evaluation and Monitoring, Final Report, European Commission, DG Information Society and Media, forthcoming 2007. (With Wolfgang Polt)

Innovation Models for Aeronautics Technologies, National Research Council of the National Academies, Washington, DC:National Academies Press, 2006 (Panel Report)

Evaluation of Progress Towards a European Research Area for Information Society Technologies, Final Report, European Commission, DG Information Society and Media, January 2006. (With Franco Malerba, Stefano Breschi, and Lorenzo Cassi)

Developing a Methodological Framework for High Quality Assessment of the IST-RTD Effects (Results and Impacts) at the “Strategic Objective” Level, Final Report, European Commission, DG Information Society and Media, Contract 29000, November 2005. (Group report led by Technopolis)

Five-Year Assessment of the Community Research Framework Programme 1999-2003, Final Report of the High-Level Panel to Evaluate the European Union’s Framework Programme for RTD, European Commission, DG Research, February 2005. (Panel member and Rapporteur)

“Assessment of the Impact of Actions Completed under the 5th Community Research Framework Programme: Survey for the Five-Year Assessment of Community Research Activities 1999-2003”, European Commission, DG Research, 2004. (With Atlantis Research, Joanneum Research, Ken Guy, and Wolfgang Polt)

The Emergence of New Industrial Activities: Fusing Services and Manufacture, Final Report of the TENIA Project, European Commission, DG Research, July 2004. (With Yannis Caloghirou and Stavros Ioannides)

Management of Intellectual Property in Publicly-Funded Research Organizations: Towards European Guidelines, co-author, Expert Group (ETAN) Report, European Commission, DG Research, 2004 (EUR 20915 EN).

Technology Licensing, Organization for Economic Cooperation and Development, Paris: OECD, October 2003.

Information Infrastructure for Healthcare: Case Studies from a Focused Program, Advanced Technology Program, National Institute for Standards and Technology, Gaithersburg: NIST, June 2003. (With Richard Spivack.)

Paradigm Shifts in Science, Technology and Innovation Policy of Leading and Catching-up Countries: The case of the United States and Korea, Science and Technology Policy Institute (STEPI), Seoul, Korea, 2003. (With Yongsuk Jang)

Performance Measurement for Government R&D Programs: In Search of Best Practices, Korea Institute for Science and Technology Evaluation and Planning (KISTEP), Seoul, Korea, December 2002. (With Yongsuk Jang)

Trends in Life Sciences – U.S. Market, Report to the Japan External Trade Organization (JETRO), International Access Corporation, with the collaboration of the Center for International Science and Technology Policy, Washington, D.C. October 2002.

The U.S. Biotechnology Industry, Report to Japan Industrial Policy Research Institute (JIPRI), International Access Corporation, with the collaboration of the Center for International Science and Technology Policy, Washington D.C., May 2002.

Role and Strategic Use of Intellectual Property Rights in International Research Collaborations, co-author, Expert Group (ETAN) Report, European Commission, DG Research, EUR 20230, April 2002.

Assessing the Socio-economic Impacts of the Framework Programme, chapter author, Report coordinated by the Policy Research in Engineering, Science and Technology (PREST) Unit, the University of Manchester, for the European Commission, DG Research, March 2002.

Methodology for the Assessment of Performance of Selected Existing Industries, Sectoral Issues and Policy Division, United Nations Economic and Social Commission for Western Asia, United Nations, June 2001.

Innovation-Related Knowledge Flows in European Industry: Extent, Mechanisms, Implications, Final Report of the KNOW Project, Targeted Socio-Economic Research Programme (TSER), European Commission, DG Research, August 2001. (With Yannis Caloghirou and Natasha Constantelou.)

European Presence in US-Based Research Joint Ventures, European Commission, DG Research, Improving Human Research Potential and the Socio-Economic Research Base, July 2001.

Priority Research Areas and Operational Systems of Major Public Research Institutes in the United States, Science and Technology Policy Institute (STEPI), Seoul, Republic of Korea, July 2001. (With Yongsuk Jang.)

Strategic Research Partnerships: Results of a Workshop, Science Resource Studies Division, US National Science Foundation, October 2000. (With John Hagedoorn and Albert Link.)

Technology and Innovation Policy Initiatives in the Americas, Sectoral Issues Policy Division (SIPD), Economic and Social Commission for Western Asia (ESCWA), United Nations, Beirut, August 2000.

Science and Technology Policy Towards Research Joint Ventures, Final Report of the STEP-TO-RJVs Project SOE1-CT97-1075, Targeted Socio-Economic Research Programme (TSER), European Commission, DG Research, March 2000. (With Yannis Caloghirou.)

Participation of European Corporations in US-Based Research Joint Ventures, European Commission, June 1999. (With Albert Link.)

Business Diversification Through Research Joint Ventures: Advanced Technology Program, National Institute of Standards and Technology, March 1999.

A Survey of High-Technology Small Firms, U.S. Small Business Administration, Fall 1999. (With Joseph Cordes and Henry Hertzfeld.)

Indicators for Science, Technology and Innovation in Europe and in Greece: Organization of Statistical Information, National Statistical Agency of Greece, Fall 1998. (In Greek.)

Inter-Firm Strategic Alliances in Information Technology: The Case of Developing Countries, Private Sector Development Department, The World Bank, September 1995. (With Stratos P. Safioleas.)

The Implementation of Process Innovation in Small Firms: Case Studies on CNC Machine Tools, Dilthey Fellowship Committee, The George Washington University, November 1994. (With Sotiris Papantonopoulos and Lan Xue.)

Factors Affecting Demand for NIST Calibration Services, National Institute of Standards and Technology, September 1994. (With Joseph J. Cordes.)

The Changing Economic Context: Strategic Alliances Among Multinationals, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1989.

Export Controls and the International Technical System: The U.S. Semiconductor Industry, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1988. (With Carmela S. Haklisch.)

Export Controls and the International Technical System: The U.S. Machine Tool Industry, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1987. (With Carmela S. Haklisch.)

ix. Book Reviews

“Public Accountability: Evaluating Technology-Based Institutions” by Albert N. Link and John Scott (Kluwer Academic Publishers), The Journal of Technology Transfer, 2000.

UNPUBLISHED PAPERS

“Do Peer Schools Affect Patenting and Licensing? Evidence from Chinese Research Universities”, research paper, 2019. (With Yanzhao Lai)

“Personal and Social Proximity: Shaping Leadership in a Free Software Project”, Basic Research Program working paper, WP BRP84/STI/2018, Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics, Moscow, Russian Federation, September 2018. (With Clement Bert-Erboul)

“Networks and Strategic Options for Innovative performance in Knowledge-Intensive Enterprises”, George Washington University, April 2012. (With Molly K. McPherson)

“Networks and Knowledge-Intensive Entrepreneurship in Practice II: Technology-based Strategic Alliances in Industry”, George Washington University, April 2012.

“Partnerships for Growth”, Center for International Science and Technology Policy, George Washington University, December 2005.

“Strategic alliance formation in the business cycle”, Center for International Science and Technology Policy, George Washington University, 2004. (With John Hagedoorn)

"Assessing industrial performance", Center for International Science and Technology Policy, George Washington University, May 2002. (With Robin Auger)

"Asymptotic behavior of dynamic strategic models of R&D: The discounted case," Department of Economics, The George Washington University, February 2000. (With Sumit Joshi.)

"Characterization of Markov perfect equilibria in a dynamic model of R&D," Department of Economics, The George Washington University, January 1997. (With Sumit Joshi.)

"Strategic alliances in information technology and developing country firms," Occasional Paper #29, Private Sector Development Department, *The World Bank*, February 1997. (With Stratos P. Safioleas.)

"Structural change and competitiveness: Manufacturing in Spain, Portugal and Greece," Center for International Science and Technology Policy, The George Washington University, March 1996. (With Yannis Caloghirou, Angeliki Mourtzikou and Lefteris Papayannakis.)

"Disconnected: Economics and the process of technological advance," Center for International Science and Technology Policy, The George Washington University, October 1996.

"Dynamic competition and cooperation with research externalities," Department of Economics, The George Washington University, 1993. (With Sumit Joshi.)

"Small and medium size enterprises in the context of cooperative industrial research and international competitiveness," GEA working paper #87-02, Department of Economics, New York University, 1987.

"Jumping over national borders: a partial equilibrium model of the multinational corporations decision to invest," mimeo, Department of Economics, New York University, 1986.

"Technological aspects of transnational corporations' involvement in South-South trade," paper prepared for the South-South Trade Project, United Nations, 1984.

IN PROGRESS

i. Papers / Reports / Manuscripts

- “An Attention-augmented Real Options Approach to Public R&D Investments”, research paper (submitted). (With Stephanie Francis Grimbert and Jon Mikel Zabala-Iturriagoitia)
- “Interactions among Innovation Obstacles in Emerging Economies: Evidence from Chile”, research paper (submitted). (With Juan Carlos Castillo)
- “Foundations of Entrepreneurial Ecosystem Configurations”, research paper (submitted). (With Andre Alves Cherubini and Bruno Brandao Fischer)
- “Regional Technological Capabilities and Co-Invention Networks in the Technological Diversification Process: Evidence from Brazil”, research paper (submitted). (With Mariane Francoso, Vanessa de Lima Avanci, and Alysson Fernandes Mazoni)
- “Servification and Manufacturing Innovation in the Age of Global Value Chains: Evidence from Europe”, research paper. (With Petros Dimas, Aggelos Tsakanikas, and Yannis Caloghirou)
- “Determinants of Manufacturing Exports Sophistication: Do Intangible Inputs and Global Value Chain Participation Matter?”, research paper (submitted). (With Aggelos Tsakanikas, Yannis Caloghirou, and Petros Dimas)
- “Brazilian Science, Technology and Innovation; A Historical Recount”, research paper. (With Sergio Salles, Carlos Pacheco, Fernanda de Negri).
- “The Process of Innovation Capabilities Building”, research paper. (With Nathalia Pufal and Paulo Antônio Zawislak)
- “Planning and Orienting Funding Agencies: International Evidence and Trends”, research paper. (With Sergio Salles, Kleinsy Bonilla, Adriana Bin, Laurent Bach, Marie-Louise Eriksson, Carlos Henrique de Brito Cruz, and Yohanna Juk)

(Selected) RESEARCH GRANTS, CONTRACTS (1998-2024)

- “University Seminar Series: Science Diplomacy & Technology Sovereignty”, George Washington University, Fall 2024 – Spring 2025. [Co-Principal Investigator]
- “Entrepreneurial Ecosystems: Configurations and Critical Success Factors”, U.S. National Science Foundation EAGER Award, Sept 2024 – Dec 2026. [Principal Investigator]
- São Paulo Advanced School “Technology & Innovation Strategies and Policies for Economic Development”, Science Foundation of the State of São Paulo (FAPESP), Brazil, June 24 – July 5, 2024. [Co-Principal Investigator]
- “University Seminar Series: Science Diplomacy”, George Washington University, Fall 2022 – Spring 2023. [Co-Principal Investigator]
- “Identification of Innovation Projects – Regional Smart Specialization in Mexico”, European Joint Research Center (JRC) Directorate B – Growth and Innovation. Contract, N-Able, Fall 2021. [Co-Principal Investigator]
- “Israel STI Policies: A Case”, project “Strengthening the Innovation Ecosystem in Slovenia”, European Union Structural Reform Support Programme, Contract REFORM/SC2020/100, N-Able, VVA lead contractor, 2021. [Sub-contractor]
- “Strategic Assistance for Designing Innovation Policies, Innovation Surveys, and Global Innovation Index (GII) Roadmap”, N-Able, project “European Union for Private Sector in Libya (EU-PSL)”, Expertise France 2020-2021. [Sub-contractor]
- “Framework Agreement to Support the Advisory Activities of the European Investment Bank”, N-Able, Roland Berger lead contractor EIB, 2020-2022. [Sub-contractor]
- “São Paulo Excellence Chair” (SPEC) System Innovation: Organizational Strategy, Research and Innovation Policy Governance, University of Campinas (UNICAMP), Science Foundation of the State of São Paulo (FAPESP), Brazil, 2020-2024. [Holder of Chair and Principal Investigator]
- “Returnee Academic Entrepreneurship in China”, Confucius Institute, The George Washington University, 2019-2021. [Principal Investigator]
- “UNESCO Science Report 2020: United States of America”, UNESCO, Geneva, 2019-2020. [Principal Investigator]

- “Artificial Intelligence: Critical Industrial Applications”, Executive Agency for Small and Medium-Sized Enterprises (EASME/COSME/2018/12), European Commission, McKinsey&Co and N-Able, Jan-Dec. 2019. [Investigator]
- “Opportunities and Risks of Blockchain Applications in the Financial Sector”, Background report for Europe Industry 4.0 Flagship Report, The World Bank, Jan-June 2019. [Principal Investigator]
- “Capturing the Value of Intangible Assets in Micro Data to Promote the EU's Growth and Competitiveness” (GLOBALINTO), SC6 Transformations, European Commission, DG Research and Innovation, 2019-2021. [Co-Principal Investigator]
- “Catching-up Along the Global Value Chain” (CATCHAIN), European Commission, Marie Kłosowska-Curie Programme, 2018-2022. [Co-Principal Investigator]
- “Strategy for the Digital Transformation of (the City of) Campinas (Brazil)”, Inter-American Development Bank (IDB), BR-T1374, 2018. [Co-Principal Investigator]
- “Science Policy Research Report: The Use of Research Portfolios in Science Policy”, Science for Science and Innovation Policy (SciSIP), National Science Foundation (NSF), 2017. [Principal Investigator]
- “Obstacles to Innovation and Firm Innovativeness in Brazil”, Brazil Initiative, Elliott School of International Affairs, George Washington University, 2017.
- “Centre for Europe-Brazil Business and Innovation Cooperation” (CEBRABIC), European Commission, DG Research and Innovation, 2017-2021. [Co-Principal Investigator]
- “Protein Crystallization for Drug Development: An Empirical Appraisal of Economic Effects of Microgravity”, National Aeronautics and Space Administration (NASA), AMES Research Center (ARC), Emerging Space Office (ESO), 2016-2017. [Co-Principal Investigator]
- “Increasing International Science, Technology and Innovation Cooperation between Brazil and the European Union” (INCOBRA), European Commission, DG Research and Innovation, 2016-2018. [Co-Principal Investigator]
- “Economic Development of Low Earth Orbit Activities”, US National Aeronautics and Space Administration (NASA), 2014-2015. [Co-Principal Investigator]

- “Country Case Chile: Public Research Centres”, Organization for Economic Cooperation and Development (OECD), 2015. [External Advisor.]
- “São Paulo Excellence Chair” (SPEC) Innovation Systems, Strategy and Policy, University of Campinas (UNICAMP), Science Foundation of the State of São Paulo (FAPESP), Brazil, 2014-2019. [Holder of Chair and Principal Investigator]
- “Impact Assessment of Greek Research, Development and Innovation Programs 2000-2009”, General Secretariat of Research and Technology, Ministry of Education, Greece, 2014-2016. [Co-Principal Investigator and Scientific Director]
- “Choosing Emerging Technologies for Development”, Elliott School of International Affairs, The George Washington University, 2014. [Co-Principal Investigator]
- “Review of Korea’s Industrial Policy and Innovation Policies”, Organization for Economic Cooperation and Development (OECD), 2013. [Expert Support]
- “Fostering Entrepreneurship in the Southern Caucasus”, The World Bank, 2012-2013. [Co-Principal Investigator]
- “R&D Investment and Structural Change in Sectors” (RTDS), European Commission, DG Research and Innovation, 2010-2013. [Co-Principal Investigator]
- “Advancing Knowledge-Intensive Entrepreneurship and Innovation for Economic Growth and Social Well-Being in Europe” (AEGIS), European Commission, DG Research, 2009-2012. [Co-Principal Investigator]
- “Innovation Policy Handbook”, The World Bank, 2011-2012. [Principal Investigator]
- “Innovative Procurement in the United States”, TEKES and Washington Embassy, Finland, 2010-2011. [Principal Investigator]
- CIP ICT-PSP Final (Second Interim) Evaluation Support Study, European Commission, DG Information Society and Media, 2010-2011. [Co-Principal Investigator]
- “ICT Network Impact in Structuring a Competitive ERA”, European Commission, DG Information Society and Media, 2009-2011. [Co-Principal Investigator]

- “Using Performance Indicators in Monitoring the Implementation of ICT Research in FP6 and FP7”, European Commission, DG Information Society and Media, 2009-2010. [Co-Principal Investigator]
- “Trends in the Evolution of the EU ICT Research and Deployment Landscape”, European Commission, DG Information Society and Media, 2009-2010. [Co-Principal Investigator]
- “Economies of Scale at the Research Project Level”, European Commission, DG Research, 2008-2010. [Co-Principal Investigator]
- “Evaluation Manual for ICT Research in FP7: Joint Technology Initiatives”, European Commission, DG Information Society and Media, 2009. [Co-Principal Investigator]
- “Manual for Monitoring and Evaluating ICT Research in FP7”, European Commission, DG Information Society and Media, 2008-2009. [Co-Principal Investigator]
- “Research and Technology Partnerships: Quantifying Strategic Relationships”, Science of Science and Innovation Policy Program, U.S. National Science Foundation, 2007-2010. [Principal Investigator]
- “Analysing and Evaluating the Impact on Innovation of Publicly Funded Research Programmes: Lot 1 – Evaluation of the Impact on Innovation of Projects of Community 5th and 6th Framework Programmes” (INNO-IMPACT), European Commission, DG Enterprise, 2006-2007. [Co-Principal Investigator]
- “Analysing and Evaluating the Impact on Innovation of Publicly Funded Research Programmes: Lot 2 – Benchmarking Strategies and Methodologies of National, European and International R&D Programmes to Assess and Increase their Impact on Innovation”, European Commission, DG Enterprise, 2006-2007. [Co-Principal Investigator]
- “Research on the Factors of Success of Public policies Regarding Science, Technology and Innovation”, Greek Ministry of Development, 2006. [Principal Investigator]
- “IST Evaluation and Monitoring”, European Commission, DG Information Society, 2006. [Co-Principal Investigator]

- “Networks of Innovation in Information Society: Development and Deployment in Europe”, European Commission, DG Information Society, 2006. [Co-Principal Investigator]
- “Real Options for Research Investment Portfolio Analysis at the U.S. Department of Energy”, DOE Office of Science, 2004-2006. [Principal Investigator]
- “Knowledge-Based Entrepreneurship: Innovation, Networks, and Systems” (KEINS), European Commission, DG Research, 2004-2006. [Co-Principal Investigator]
- “Assessment of the Small Business Innovation Research (SBIR) Program”, National Research Council, National Academies of Science, 2002-2005. Study mandated by US Congress, HR 5667 Section 108. [Investigator]
- “Evaluation of Progress towards a European Research Area in Information Society Technologies”, European Commission, DG Information Society, 2005. [Co-Principal Investigator]
- “IST-RTD Monitoring and Evaluation: Results and Impact Indicators”, European Commission, DG Information Society, 2004-2005. [Co-Principal Investigator]
- “Five-Year Assessment of the Community Research Framework Programme 1999-2003”, member of and rapporteur for the High-Level Panel to Evaluate the European Union’s Framework Programme for RTD, European Commission, DG Research, 2005. [Panel Member and Rapporteur]
- “Innovation Networks”, GW Research Enhancement Fund Award, 2002-2005. [Co-Principal Investigator]
- “Assessment of the Impact of Actions Completed under the 5th Community Research Framework Programme: Survey for the Five-Year Assessment of Community Research Activities 1999-2003”, European Commission, DG Research, 2004. [Co-Principal Investigator]
- “Patent Licensing Contracts in the OECD”, Organization for Economic Cooperation and Development (OECD), 2002-2003. [Principal Investigator]
- “Network Indicators and Globalization: Public Policy Implications”, GW Center for the Study of Globalization, 2002-2003. [Co-Principal Investigator]

- “Networks and Globalization”, GW Center for the Study of Globalization, 2001-2002. [Co-Principal Investigator]
- “Network Indicators”, Science Resources Studies, U.S. National Science Foundation, 2001-2003. [Co-Principal Investigator.]
- “Network Indicators: Science, Technology and Innovation”, European Commission, DG Research, Improving the Human Research Potential and the Socio-Economic Research Base, Common Basis of Science, Technology and Innovation Indicators Programme, 2001-2004. [Co-Principal Investigator.]
- “Performance Measurement for Government R&D Programs: in Search of Best Practice”, Korea Institute for Science and Technology Policy (KISTEP), Republic of Korea, 2002. [Principal Investigator].
- “Paradigm Shifts in Science, Technology and Innovation Policy of Leading and Catching-up Countries: The case of the United States and Korea”, Science and Technology Policy Institute (STEPI), Republic of Korea, 2001-2002. [Principal Investigator]
- “The Emergence of New Industrial Activities: Fusing Services and Manufacture (TENIA)”, Commission of the European Union, DG Research, 2001-2003. [Co-Principal Investigator]
- “The Assessment of the Socio-economic Impact of the Framework Program (ASIF)”, Commission of the European Union, DG Research, 2001-2002. [Co-Principal Investigator]
- “European Presence in US-Based Research Joint Ventures”, European Commission, DG Research, Improving Human Research Potential and the Socio-Economic Research Base, 2001.
- “Evaluation of United States government programs under GPRA”, Korea Institute for Science and Technology Policy (KISTEP), Republic of Korea, 2001. [Co-Principal Investigator]
- “Strategic Partnerships for Developing Countries”, Division on Investment, Technology and Enterprise Development (DITE), United Nations Conference on Trade and Development, 2001. [Principal Investigator]

- “Methodology for the Assessment of Performance of Selected Existing Industries”, Sectoral Issues and Policy Division, Economic and Social Commission for Western Asia (ESCWA), United Nations, 2001. [Principal Investigator]
- “Priority Research Areas and Operational Systems of Major Public Research Institutes in the United States”, Science and Technology Policy Institute (STEPI), Seoul, Republic of Korea, 2001. [Principal Investigator]
- “Succeeding in Collaborative R&D: Three Case Studies of ATP-sponsored Research Joint Ventures”, Advanced Technology Program, National Institute of Standards and Technology, 2000-2001. [Co-Principal Investigator]
- “Economic Analysis of Intellectual Property Protection Mechanisms for Research Partnerships,” Directorate for Social, Behavioral and Economic Sciences, U.S. National Science Foundation, 1999-2001. [Co-Principal Investigator.]
- “Innovation-Related Knowledge Flows in European Industry: Mechanisms and Policy (KNOW)”, Targeted Socio-Economic Research Programme (TSER), Commission of the European Union, DG Research, 1999-2001. [Co-Principal Investigator]
- "Science and Technology Policies Towards Research Joint Ventures (STEP-TO-RJVs)", Targeted Socio-Economic Research Programme (TSER), Commission of the European Union, DG Research, 1998-2000. [Co-Principal Investigator]

TEACHING

i. Full-Term Courses, GW (2019-2024)

A. *Department of Economics*

Econ 6255.10 / IAFF 6158.80 “Economics of Technological Change”, graduate course

B. *Science, Technology and Public Policy Program*

IAFF 6141.10 “International Science and Technology Policy”, graduate course

IAFF 6143.10 “Science and Technology Policy Analysis Seminar” graduate course

ii. Full-Term Courses Offered Regularly in Earlier Years, GW

A. *Department of Economics*

“Managerial Economics”, MBA course

“Intermediate Microeconomics”, undergraduate course

Econ 4198 “Proseminar in Economics”, undergraduate course

B. *Science, Technology and Public Policy Program*

IAFF 6142 “Technology Creation and Diffusion”, graduate course

“Multidisciplinary Seminar in Science, Technology and Global Affairs”, graduate course

“Technology Collaboration: Incentives and Policy for Strategic Alliances”, graduate course

“Technology and International Economic Competitiveness”, graduate course

“Science, Technology, and International Affairs”, graduate course, team-taught with Professor Robert Rycroft

“Technology and Globalization”, graduate seminar (capstone), team-taught with Professor Robert Rycroft.

ii. Short Courses, GW

“Microeconomics”, 8-lecture series, Minerva Program, Center for Latin American Issues, School of Business, The George Washington University, Washington, D.C. (Delivered semi-annually 2003 – 2013).

“Strategic Business Partnerships”, 2-lecture series, Certificate Program for the University of Chile (EMBA), The George Washington University, Washington, D.C. (Delivered 2014).

iii. Full-Term Courses, non-GW

“Introduction to International Science and Technology Policy”, Schwarzman College, Tsinghua University, Beijing, Republic of China, April-June 2019, May 2020.

“R&D Program Evaluation”, Fundacao Getulio Vargas (FGV), Rio de Janeiro, Brazil, Fall 2012.

iv. Short Courses, non-GW

“Strategic Business Partnerships”, 8-meeting course delivered for the graduate program in Science and Technology Policy and Governance, Institute for Statistical Studies and Economics of Knowledge (ISSEK), National Research University Higher School of Economics (HSE), Moscow, Russian Federation, (Annually since Fall 2019).

“Strategic Management of Technology and Innovation”, “Technology Management Economics”, and “Doctoral Seminar”, three 4-meeting course series delivered for the graduate program in Management of Technology (MOT), Korea University, Seoul, Republic of Korea, (Annually 2016 – 2018).

“Strategies in STI Management” and “Economics of Innovation”, two 4-meeting course series delivered for the graduate program in Science and Technology Policy and Governance, Institute for Statistical Studies and Economics of Knowledge (ISSEK), National Research University Higher School of Economics (HSE), Moscow, Russian Federation, Fall 2018.

“R&D Program Evaluation”, 10-lecture series, Fundacao Getulio Vargas (FGV), Rio de Janeiro, Brazil, Summer 2014.

“Strategic Business Partnerships”, 5-lecture series, Centro Universitario de Brasilia (UniCEUB), Brasilia, Brazil, Fall 2012.

“R&D Program Evaluation”, 5-lecture series, Centro Universitario de Brasilia (UniCEUB), Brasilia, Brazil, Fall 2012.

“Incentives and Policy for Strategic Technical Partnerships”, 6-lecture series, MIEM Program, SDA, Luigi Bocconi University, Milan, Italy. (Annually 1999 – 2004).

“Strategic Business Partnerships”, 5-lecture series, International MBA Program, Athens University of Economics and Business, Athens, Greece. (Annually 2001 – 2012).

v. Executive Training Seminars

Developed a professional training course on the **R&D program evaluation**. The course (8 days long) has been delivered to foreign groups at the George Washington University

and at other locations (including abroad).

Co-developed with Prof Sergio Salles-Filho two professional training courses on **R&D program evaluation** (ex ante and ex post) at the University of Campinas. These courses are being offered at UNICAMP through the institute GEOPI to mixed audiences of industry and government representatives at regular time intervals.

Developed an executive training seminar on **crafting strategic partnerships**. Versions of the seminar (1-3 days long) have been delivered during the past few years to both industry and government audiences in the US and abroad. Longer, more traditional educational versions are being delivered to business schools such as Luigi Bocconi University and the Athens University of Economics and Business (see above).

Developed a professional training seminar on the **knowledge-based economy**. The seminar (1 day long) has been delivered repeatedly to US government audiences.

OTHER PROFESSIONAL ACTIVITIES

vi. Seminar Series

Organizer of the **Technology and Innovation** Seminar Series at GW. Seminars held once a month at the Center for International Science and Technology Policy. Average attendance: 30 strategy and policy scholars, advisers, and professionals from the greater Washington metropolitan area. (2001 – 2011)

Co-organizer of the joint **S&T Research** Seminar Series. Seminars organized collaboratively by GW's Center for International Science and Technology Policy and GMU's School of Public Policy. Seminars held once a month at the George Washington University and at George Mason University. Average attendance: 15 strategy and policy scholars and graduate students. (2006 – 2011)

vii. R&D Program Evaluation

Co-organizer of the Washington Research Evaluation Network (2000-2009)

Engaging in various initiatives relating to R&D program evaluation in the United States, Europe, Japan, South Korea, Mexico and Brazil for several years. Such initiatives

include evaluation studies, relevant conference presentations, and advisory work. Examples of collaborating organizations over the years have included:

United States: National Institute of Standards and Technology, Advanced Technology Program, Department of Energy (Office of Science), NASA, National Research Council.

Europe: European Commission (DG Research and Innovation, DG Information Society and Media), Vinnova (Sweden), National Statistical Agency of Greece.

Japan: METI, Mitsubishi Research Institute.

South Korea: Korea Institute of S&T Evaluation and Planning (KISTEP), Science and Technology Policy Institute (STEPI).

Mexico: Centro de Investigacion y Asistencia en Tecnologia y Diseno del Estado de Jalisco (CIATEJ).

Brazil: Universidade Estadual de Campinas (UNICAMP), Fundacao Getulio Vargas (FGV), Centro Universitario de Brasilia (UniCEUB).

viii. Referee for:

Strategic Management Journal
International Journal of Industrial Organization
Journal of Industrial Economics
Journal of Economic Behavior and Organization
Review of Industrial Organization
R&D Management
Zeitschrift Fur Nationaloekonomie
Economica
World Development
Journal of Policy Analysis and Management
Journal of Policy Reform
Journal of Small Business Economics
Science and Public Policy

ix. Reviewer and Referee for:

National Science Foundation.
Oxford University Press.
Cambridge University Press.
Springer.
McGraw-Hill, Inc.
Scott, Foresman & Co.
South-Western College Publishing
General Administration of Research and Development (GGET, Greece).

STUDY AWARDS/DISTINCTIONS

Fellowship, New York University, 1986-1988
Scholarship, New York University, 1984-1986
Developmental Fellowship, New York University, 1983-1984
M.A. degree awarded with *distinction*, Leicester University (U.K.), 1983

OTHER ACTIVITIES

Media communications (Wall Street Journal, U.S. News, Sky, Korean Herald, Greek Voice of America, ERT 1 (Greek public radio), Kerdos (Gain, a Greek financial weekly), etc
Faculty mentor for the Hellenic Club KOSMOS at the George Washington University, 1993 – 2010.
Member of the Board, Hellenic Society PROMETHEAS, Washington, D.C., 1992 – 1996, 2011 – 2012.
President, Graduate Economics Student Association, New York University, 1984 - 1986

LANGUAGES

Fluent in Greek and English. Limited knowledge of French and Spanish

PERSONAL

Born May 6, 1958 in Athens Greece

MILITARY SERVICE

Greek Navy, 1989 – 1990

NATIONALITY

United States of America & Greece

(Select) PRESENTATIONS January 2023 – July 2024

“Technology Sovereignty”, session presentation, & moderator roundtable “Innovation and Sustainability”, Winter School “São Paulo Advanced School on Technology & Innovation Strategies and Policies for Economic Development”, organized by the São Paulo Excellence Chair (SPEC) Innovation Systems, Strategy and Policy (InSySPo), and the Institute of Economics, University of Campinas, Brazil, June 24 – July 5, 2024.

“Welcome” & “Closing Ceremony”, Winter School “São Paulo Advanced School on Technology & Innovation Strategies and Policies for Economic Development”, organized by the São Paulo Excellence Chair (SPEC) Innovation Systems, Strategy and Policy (InSySPo), and the Institute of Economics, University of Campinas, Brazil, June 24 – July 5, 2024.

“Servification and Manufacturing Innovation in the Age of Global Value Chains: Evidence from Europe”, paper presentation, International Joseph A. Schumpeter Society Conference, Gothenburg, Sweden, June 9-11, 2024.

“Regional Capabilities and Co-invention Networks for Technological Diversification: Evidence from Brazil”, paper presentation, International Joseph A. Schumpeter Society Conference, Gothenburg, Sweden, June 9-11, 2024.

“Drivers of Biotechnology Investment Across Emerging Economies: The Case of Colombia”, paper presentation, International Joseph A. Schumpeter Society Conference, Gothenburg, Sweden, June 9-11, 2024.

Panelist “EU Industrial Policy 2.0”, Hellenic Foundation for European and Foreign Policy (ELIAMEP), online, May 28, 2024.

Panelist “Entrepreneurial university and the new interfaces of university-industry cooperation”, VIII Encontro Nacional de Economia Industrial e da Inovação (ENEI) [8th Brazilian Meeting on Industrial Economy and Innovation], May 21, 2024.

Core presentation, Workshop “Big Data Analytics and AI for STI Policy”, SiSTIP, Stellenbosch University, coo-organized with the University of Campinas, Stellenbosch, South Africa, April 17-19, 2024.

Welcome & closing remarks, Allan Bromley Memorial Lecture event, co-organized by the University of Ottawa and the IISTP, George Washington University, Ottawa,

Canada, March 27, 2024.

“Putting Good Ideas to Use: Linking Science and Entrepreneurship”, guest speaker (online), Discussion Series for Eastern Europe and South Caucasus, ETIN Innovation Circle, EESC, United Nations Economic Commission for Europe (UNECE), February 22, 2024.

“Firm-level Determinants of Eco-Innovation Strategies in Colombia”, and “Putting Intangible Inputs and Global Value Chains into Work: New Sources of Comparative Advantage in Global Markets”, paper(s) presentation, final CatChain conference, UNU-Merit, University of Maastricht, Netherlands, February 20, 2024.

“The Atlantic in the Era of Industry 4.0: Charting the Course of Global Manufacturing Innovation Amid the Rebirth of Industrial Policy”, Panelist, Conference “Atlantic Dialogues”, organized by the Policy Center for the New South, Mohammed VI Polytechnic University, Marrakesh, Morocco, December 14-16, 2023.

“Welcome & Opening Remarks”, Conference “Data Governance in the Era of Generative AI”, George Washington University, Washington D.C., USA, December 7-8, 2023.

“Welcome”, opening of “The Athens Roundtable on Artificial Intelligence and the Rule of Law: Fifth Edition”, George Washington University, Washington D.C., November 30 – December 1, 2023.

“Regional Revitalization through S&T: American Perspectives”, presentation, and reply to keynote speech, IASP Asia-Pacific Conference “STPs and AoLs: The Past 50 Years and the Next 50 Years”, Innopolis, Daejeon, Republic of Korea, November 2, 2023.

“U.S. Innovation & Industrial Policy: Continuity and Evolution”, seminar, Department of Science Studies, Seoul National University, Seoul, Republic of Korea, October 31, 2023.

“U.S. Innovation & Industrial Policy: Continuity and Evolution”, faculty express lecture, Elliott School of International Affairs, George Washington University, Washington, DC, USA, September 30, 2023.

“Writing for peer reviewed journals”, 4.POINT.0 training workshop, Universite de Montreal (Polytechnique), Canada, September 14, 2023.

“Science Diplomacy Successes and Challenges: A Critical Approach”, panel presentation,

Innovation and Science Diplomacy School InnSciD 2023, University of São Paulo, Brazil, July 25, 2023.

“Welcome” & “Closing Panel on Lessons Learned”, Conference “Big Data and STI Policy Decision-Making”, organized by the São Paulo Excellence Chair (SPEC) Innovation Systems, Strategy and Policy (InSySPo), University of Campinas, Brazil, July 18, 2023.

“Resilience and Innovation: Digital Transformation Enabling Organizations and Supply Chains to Respond to Complex Events”, paper presentation international conference “Leading and Managing in the Digital Era”, organized by the Athens University of Economics and Business and the Stephens Institute of Technology, Athens, Greece, June 19-23, 2023.

“Biomedical Entrepreneurship in US Regions” and “Technological Capabilities and Co-Invention Networks for Regional Diversification: Evidence from Brazil”, 9th Biennial Atlanta Conference on Science and Innovation Policy, Georgia Institute of Technology, Atlanta, GA, May 24-26, 2023.

“The Challenges of Technological and Economic Catch-up in Emerging Economies”, Expert Forum on Science, Technology and Innovation Policy Transformation in a New Era, (online participation), Department of Industrial Technology (DoIT), Ministry of Economic Affairs, and Industrial Technology Research Institute (ITRI), Taipei, Taiwan, May 19, 2023.

“Biomedical Entrepreneurship in US Regions”, “ICT, Innovation and Absorptive Capacity: Evidence from Colombia”, “Regional Technological Capabilities and Co-invention networks in the technological diversification Process: Evidence from Brazil”, Paper(s) presentation, IAMOT, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, May 1-4, 2023.

Panelist, “Editors Panel”, “Smart Policy Panel”, IAMOT, Porto Alegre, Brazil, May 1-4, 2023.

Panelist, Cambridge University Babbage Forum / ITIF Roundtable Discussion on “Industrial Innovation Policy”, ITIF, Washington, D.C., April 13, 2023.

“Decision Making for Innovative Ventures” (MBE 5302), 6-day intensive graduate training course (online), University of Crete, Greece, March 27-31, 2023.

“US S&T Landscape and Canada-US STI Interaction”, paper presentation and introduction to Keynote, Allan Bromley Memorial Lecture event, co-organized by the University of Ottawa and the IISTP, George Washington University, Washington, D.C., USA, March 21, 2023.

“The Challenges of Technological and Economic Catch-up in Emerging Economies”, seminar of book publication, Mohammed VI Polytechnic University, Rabat, Morocco February 24, 2023.

“Translational Research and Regional Biomedical Entrepreneurship”, research paper presentation, AIRESS Seminar, Mohammed VI Polytechnic University, Rabat, Morocco February 23, 2023.

Panelist “Space Exploration Investing Uncertainties”, Workshop “Space Exploration Investments: Turning Uncertainty into Measurable Risks and Benefits”, organized by the Space Policy Institute, SDA Bocconi, and SEE Lab, GW Elliott School of International Affairs, Washington, D.C., February 9, 2023.

Workshop (online) on chapters of forthcoming book *Intangible Assets, Productivity and Economic Growth: Micro, Meso and Macro Perspectives*, editor, Routledge, January 17-18, 2023. [GlobalInto project]