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CURRICULUM VITAE (January 2018)

Place and Date of Birth

Rome, Italy, Sept., 24th, 1961.

Education

- April 1991: Ph.D, Department of Economics, Stanford University, Stanford, California, USA.
- October 1986: Master of Arts (Economics), New York University, New York, USA.
- January 1984: Laurea (Economics & Business), University of Genoa, Italy.
- Diploma 1982: Music Conservatory "Niccolò Paganini", Genoa, Italy (flute)

Academic Position

- 2004-today Professor, Department of Management & Technology, Bocconi University, Milan, Italy
- 2001-2004 Professor, Sant'Anna School of Advanced Studies, Pisa, Italy
- 1992-2001 Associate Professor, University of Urbino, Urbino, Italy

Research Interests

Economics of Innovation. Strategic Management. Technology Strategy. Entrepreneurship.

Other Relevant Positions

- Co-Editor: Strategic Management Journal (with Sendil Ethiraj and Connie Helfat)
- Director of the Department of Management & Technology, Bocconi University
- Fellow of the Strategic Management Society (SMS)
- Research Fellow of the Center for Economic Policy Research (CEPR)
- Chair ERC Starting Grants 2017-2019
- Vice President, Consortium for Competitiveness and Cooperation (CCC)
- Editorial Board Member Academy of Management Journal, Academy of Management Review, Industrial & Corporate Change, Research Policy
- Past Chair of the Business Policy and Strategy (BPS) Division of the Academy of Management
- Former Dean of Bocconi's PhD School (2008-2014)

Visiting Positions

- Visiting Professor, Sloan School of Management, MIT, Cambridge MA (2015-16)
- Visting Professor, Department of Economics, Stanford University (Winter 2005)
- Visting Professor, Department of Economics, Stanford University (Fall 2003)
- Visiting (Associate) Professor, Department of Economics, Stanford University (1995-96)

Main Books

- Gambardella, A., 2009, *Innovazione e Sviluppo: Miti da Sfatare, Realtà da Costruire*, Egea, Milano (in Italian)
- Arora, A. and Gambardella, A. (eds.), 2005, From Underdogs to Tigers: The Rise and Growth of the Software Industry in Some Emergent Regions, Oxford University Press, Oxford UK
- Bresnahan, T. and Gambardella, A. (eds.), 2004, Building High-Tech Clusters: Silicon Valley and Beyond, Cambridge University Press, Cambridge UK

- Arora, A., Fosfuri, A. and Gambardella, A., 2001, *Markets for Technology: The Economics of Innovation and Corporate Strategy*, The MIT Press, Cambridge MA
- Gambardella, A., 1995, Science and Innovation, Cambridge University Press, Cambridge UK

Journal Articles

- Gambardella, A., Harhoff, D. and B. Varpsagen, 2017, "The Economic Value of Patent Portfolios,"
 Journal of Economics and Management Strategy, Vol. 26 (4), 735-756
- Gambardella, A., Raasch, C. and E. Von Hippel, 2017, "The User Innovation Paradigm: Implications for Markets and Welfare," *Management Science*, Vol. 63 (5), 1450-1468 (open access http://pubsonline.informs.org/doi/pdf/10.1287/mnsc.2015.2393)
- Torrisi, S., Gambardella, A., Giuri, P., Harhoff, D., Hoisl, K. And Mariani, M., 2016, "Using, blocking, and sleeping patents: empirical evidence from a large inventor survey," *Research Policy*, Vol. 47 (7), 1374-1385
- Birhanu, A., Gambardella, A. and Valentini, G., 2016, "Bribery and Investment: Firm-level Evidence from Africa and Latin America," *Strategic Management Journal*, Vol. 37 (9), 1865-1877 (*video abstract* www.youtube.com/watch?v=CeWi9BYUl4s)
- Gambardella, A., Ganco, M. and F. Honorè, 2015, "Using What You Know: Patented Knowledge and Incumbent Fims in Employee Entrepreneurship," *Organization Science*, Vol. 26 (2), 456-474
- Bertocchi, G., Gambardella, A., Jappelli, T., Nappi, C. and F. Peracchi, 2015, "Bibliometric Evaluation vs Informed Peer Review: Evidence from Italy," *Research Policy*, Vol. 44(2), 451-466
- Gambardella, A., Panico, C. and G. Valentini, 2015, "Strategic Incentives to Human Capital," *Strategic Management Journal*, Vol.36 (1), 37-52 (video abstract www.youtube.com/watch?v=y1s3veAmMIY)
- Gambardella, A. and Panico, C., 2014, "On the Management of Open Innovation," *Research Policy* (Special Issue on Open Innovation), Vol. 43 (5), 903-913
- Conti, R., Gambardella, A. and M. Mariani, 2014, "Learning to Be Edison: Inventors, Organizations and Breakthrough Inventions," *Organization Science*, Vol. 25 (3), 833-849
- Gambardella, A., 2013, "The Economic Value of Patented Inventions: Thoughts and Some Open Questions," *International Journal of Industrial Organizations*, Vol. 31 (5), 626-633
- Conti, R., Gambardella, A. and E. Novelli, 2013, "Research on Markets for Inventions and Implications for R&D Allocation Strategies," *Academy of Management Annals*, Vol. 7 (1), 715-772
- Gambardella, A. and Giarratana, M., 2013, "General Technological Capabilities, Product Market Fragmentation, and Markets for Technology," *Research Policy*, Vol. 42, 315-325
- Di Stefano, G., Gambardella, A. and G. Verona, 2012, "Technology Push and Demand Pull Perspectives in Innovation Studies: Current Findings and Future Research Directions," *Research Policy*, Vol. 41, 1283-1295
- Gambardella, A. and Giarratana, M., 2010, "Localized Knowledge Spillovers and Skill-Biased Performance," *Strategic Entrepreneurship Journal*, Vol. 4, 323-339
- Arora, A. and Gambardella, A., 2010, "Ideas for Rent: An Overview of Markets for Technology," *Industrial and Corporate Change*, Vol. 19 (3), 775-803
- Gambardella, A. and McGahan, A., 2010, "Business-Model Innovation, General Purpose Technologies, Specialization and Industry Change," *Long Range Planning*, Vol.43, 262-271
- Gambardella, A., Giarratana, M., 2010, "Organizational Attributes and the Distribution of Rewards in a Region: Managerial Firms vs Knowledge Clusters," *Organization Science*, Vol. 21 (2), 573–586
- Gambardella, A., Giarratana, M., Panico, C., 2010, "How and When Should Companies Retain their Human Capital? Contracts, Incentives, and Human Resource Implications," *Industrial and Corporate Change*, Vol. 19 (1), 1-24
- Arora, A., Gambardella, A., Magazzini, L., Pammolli, F., 2009, "A Breadth of Fresh Air? Firm Type, Scale, Scope and Selection Effects in Drug Development," *Management Science*, Vol. 55 (10), 1638-1653
- Gambardella, A., Mariani, M., Torrisi, S., 2009, "How 'Provincial is Your Region? Openness and Regional Performance in Europe," *Regional Studies*, Vol. 43 (7), 935-947
- Dosi, G., Gambardella, A., Grazzi, M., Orsenigo, L., 2008, "Technological Revolutions and the Evolution of Industrial Structures. Assessing the Impact of New Technologies on the Size and Boundaries of the Firms," *Capitalism & Society*, Vol. 3 (1), Article 6

- Gambardella, A., Harhoff, D., Verspagen, B., 2008, "The Value of European Patent," *European Management Review*, Vol. 5 (2), 69-84
- Gambardella, A., Giuri, P., Luzzi, A., 2007, "The Market for Patents in Europe," *Research Policy*, Vol. 36 (8), 1163-1183¹
- Giuri, P., Mariani, M., Brusoni, S., Crespi, G., Francoz, D., Gambardella, A., Garcia-Fontes, W., Geuna, A., Gonzales, R., Harhoff, D., Hoisl, K., Lebas, C., Luzzi, A., Magazzini, L., Nesta, L., Nomaler, O., Palomeras, N., Patel, P., Romanelli, M., Verspagen, B., 2007, "Inventors and Invention Processes in Europe. Results from the PatVal-EU Survey," *Research Policy*, Vol. 36 (8), 1107-1127
- Gambardella, A. and Hall, B.H., 2006, "Proprietory vs Public Domain Licensing of Software and Research Products," *Research Policy*, Vol.35, 875-892
- Arora, A. and Gambardella, A., 2005, "The Impact of NSF Support for Basic Research in Economics,"
 Les Annales d'Economie et des Statistiques, Special Issue in Honor of Zvi Griliches, No 79/80
- Gambardella, A., 2005, "Patents and the Division of Inventive Labor," *Industrial and Corporate Change*, Vol.14 (6), 1223-1233 (Comment to Arora and Merges, *ICC*, 2004)
- Gambardella, A., 2002, "Successes and Failures in Markets for Technology," *Oxford Review of Economic Policy*, Vol.18 (1), 52-62
- Bresnahan, T., Gambardella, A., Saxenian, A., 2001, "Old Economy Inputs for New Economy Outputs: Cluster Formation in the New Silicon Valleys," *Industrial and Corporate Change*, Vol.10 (4), 835-860
- Arora, A., Fosfuri, A., and Gambardella, A., 2001, "Markets for Technology and their Implications for Corporate Strategy," *Industrial and Corporate Change*, Vol.10 (2), 417-449
- Arora, A., Fosfuri, A., and Gambardella, A., 2001, "Specialized Technology Suppliers, International Spillovers and Investments: Evidence from the Chemical Industry," *Journal of Development Economics*, Vol. 65 (1), 31-54
- Arora, A., David, P., and Gambardella, A., 1998, "Reputation and Competence in Publicly Funded Science: Estimating the Effects on Research Group Productivity," Les Annales d'Economie et des Statistiques, No 49/50, 163-198
- Gambardella, A. and Torrisi, S., 1998, "Does Technological Convergence Imply Convergence in Markets? Evidence from the Electronics Industry," *Research Policy*, Vol.27, 445-463
- Arora, A., Gambardella, A., and Rullani, E., 1997, "Division of Labour and the Locus of Inventive Activity," *Journal of Management and Governance*, Vol.1 (1), 123-140
- Arora, A. and Gambardella, A., 1997, "Public Policy Towards Science: Picking Stars or Spreading the Wealth?," *Revue d'Economie Industrielle*, N.79, 63-75
- Arora, A. and Gambardella, A., 1997, "Domestic Markets and International Competitiveness: Generic
 and Product Specific Competencies in the Engineering Sector," *Strategic Management Journal*, Vol. 18
 (Summer Special Issue), 53-74
- Gambardella, A. e Garcia, W., 1996, "Research Linkages through European Research Funding," *Economics of Innovation and New Technology*, Vol.4, 123-138
- Arora, A. and Gambardella, A., 1994, "The Changing Technology of Technical Change: General and Abstract Knowledge and the Division of Innovative Labour," *Research Policy*, Vol.23, 523-532²
- Arora, A. and Gambardella, A., 1994, "Evaluating Technological Information and Utilizing it," *Journal of Economic Behavior and Organization*, Vol.24, 91-114
- Della Valle, F. and Gambardella, A., 1993, "Biological Revolution and Strategy for Innovation in Pharmaceutical Companies," *R&D Management*, Vol.23 (4), 287-301³
- Gambardella, A., 1992, "Competitive Advantages from In-house Basic Research," *Research Policy*, Vol.21, 391-407⁴
- Arora A. e Gambardella A., 1990, "Complementarity and External Linkages: The Strategies of the Large Firms in Biotechnology," *Journal of Industrial Economics*, Vol.XXXVIII, N.4 (June), 361-379

¹ Winner of the Richard Nelson Award for the best paper by younger scholars in *Research Policy* 2005-2008. See *Research Policy* website.

² 12th most cited Research Policy article in 1990-1999. See Research Policy, December 1999, Special Issue.

³ Winner of the Epton Prize for best 1993 article in *R&D Management*. See *R&D Management*, 1994, Vol.24 (3), pp.295-6.

⁴ 6th most cited *Research Policy* article in 1990-1999. See *Research Policy*, December 1999, Special Issue.

Main Essays in Books

- Gambardella, A. and Panico, C., 2016, "Alliances and Markets for Technology," in Mezquita, L., Ragozzino, R. and Reuer, J. (eds.) *Collaborative Strategy: Critical Issues for Alliances and Networks*, Elgar, Cheltenham UK, forthcoming
- Arora, A. and Gambardella, A., 2010, "Markets for Technology," in Hall. B. and Rosenberg, N. (eds) *Handbook of Economics of Innovation*, Elsevier, Amsterdam
- Cassiman, B. and Gambardella, A., 2009, "Strategic Organization of R&D," in Nickerson, J. and Silverman, B. (eds.) *Economic Institutions of Strategy*, Emerald Press, London
- Arora, A., Fosfuri, A. and Gambardella, A., 2006, "Markets for Technology: 'Panda's Thumbs', 'Calypso Policies' and Other Institutional Considerations," in Antonelli, C., Foray, D., Hall, B. and Steinmueller, W.E. (eds.) *New Frontiers in the Economics of Innovation and New Technology: Essays in Honour of Paul A. David*, Edward Elgar, Cheltenham UK
- Arora, A. and Gambardella, A., 2006, "Emerging Issues in the New Economy and Globalization," in Bianchi, P. and Labory, S. (eds.) *Handbook of Industrial Policy*, Edward Elgar, Cheltenham UK
- Arora, A., Fosfuri, A. and Gambardella, A., 2005, "Markets for Technology, Intellectual Property Rights and Development," in Maskus, K. and Reichman, J. (eds.) *International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime*, Cambridge University Press, Cambridge UK
- Arora, A. and Gambardella, A, 2005, "The Globalization of the Software Industry: Perspectives and Opportunities for Developed and Developing Countries," in Jaffe, A., Lerner, J. and Stern, S. (eds.) Innovation Policy and the Economy (Volume 5), MIT Press, Cambridge MA
- Gambardella, A., Garcia-Fontes, W., and Petit, G., 2000, "R&D, Innovation and Corporate Performance in the Chemical Industry: A Case Study," in Buigues, P., Jacquemin, A. and Marchipont, J.F. (eds.) *Competitiveness and the Value of Intangible Assets*, Edward Elgar Publisher, Cheltenham UK
- Arora, A. and Gambardella, A., 1999, "The Chemical Industry," in Mowery, D. (ed.) *US Industry in 2000*, National Academy Press, Washington DC
- Bresnahan, T. and Gambardella, A., 1998, "The Division of Inventive Labor and the Extent of the Market," in Helpman, E. (ed.) *General-Purpose Technologies and Economic Growth*, MIT Press, Cambridge
- Arora, A. and Gambardella, A., 1998, "Evolution of Industry Structure in the Chemical Industry," in Arora, A., Landau, R., and Rosenberg, N. (eds.) *Dynamics of Long-Run Growth in the Chemical Industry*, John Wiley & Sons, New York
- Arora, A. and Gambardella, A., 1995, "Division of Innovative Labour in Biotechnology," in Rosenberg, N. and Geijins, A. (eds.) *University-Industry Interface and Medical Innovation*, National Academy of Sciences, Washington DC

Seminars, Invited Lectures and Keynote Speeches

I have given seminars on my research in several institutions in Europe and the US, including leading institutions such as Harvard Business School, INSEAD, London Business School, Sloan School MIT, Wharton. I have also been invited to give lectures or keynote speeches. For example, in 2015-16 I have been invited to give lectures or keynotes at the Aspen Institute (Hebrew University of Jerusalem, April 17, 2015), the Israeli Strategy Conference (Jerusalem, December 20-22, 2015), Singapore Management University (Lee Kong Chian Fellowship, January and May 2016), and the Winter Strategy Conference (University of Utah, March 2-4, 2016).

Op-Ed Articles (in English & Italian)

- "The Value of Precision for Entrepreneurial Decisions" *Vox*, January 6, 2018 (with Arnaldo Camuffo and Alessandro Cordova) (voxeu.org/article/value-precision-entrepreneurial-decisions)
- "Tutti pazzi per I dati. Ma servono investimenti," La Voce, November 4, 2016 (www.lavoce.info)
- "Esiste la Scienza del Management?", *Management Notes*, March 16, 2015 (www.managementnotes.it)
- "La Corruzione Non Paga", *Management Notes*, February 4, 2015 (with Giovanni Valentini) (www.managementnotes.it)
- "Avere i Dati e Riutilizzarli per la Ripresa", *Il Sole 24 Ore*, October 3, 2014, 12 (with Aura Bertoni)

- "Assessing Italian Research Quality: A Comparison between Bibliometric Evaluation and Informed Peer Review", *Vox*, July 28, 2014 (with Graziella Bertocchi, Tullio Jappelli, Carmen Nappi, Franco Peracchi) (voxeu.org/article/research-quality-assessment-tools-lessons-italy)
- "Servono Infrastrutture per il Nuovo Stato Digitale", *Il Sole 24 Ore*, June 22, 2014, 1 (with Guido Tabellini)
- "Bibliometria o Peer-Review per Valutare la Ricerca?", *La Voce*, Novmber 7, 2013 (with Graziella Bertocchi, Tullio Jappelli, Carmen Nappi, Franco Peracchi) (www.lavoce.info)
- "Regole Snelle e Incentivi all'Innovazione", Il Sole 24 Ore, March 8, 2013, 15
- "Ma Chi Controllerà i Controllori?", *Corriere della Sera*, July 31, 2011, 24 (with Fabio Pammolli)
- "Innovazione e Sviluppo", *Il Sole 24 Ore*, Inserto *Nova 24*, May 7, 2009, 9
- "La Guerra Sbagliata di Mediaset", Corriere della Sera, August 6, 2008, 35
- "Caccia All'Idea che Vale Oro", *Il Sole 24 Ore*, Inserto *Nova 24*, October 4, 2007, 7
- "Brevetti Regole Oltre l'Antitrust", *Il Sole 24 Ore*, September 22, 2007, 10 (with Fabio Pammolli)
- "Brevetti da Battere All'Asta", Il Sole 24 Ore, Inserto Nova 24, June 14, 2007, 6
- "Alla Ricerca di Nuove Specializzazioni", La Voce, January 5, 2006 (<u>www.lavoce.info</u>)
- "Licenza d'innovare", *La Voce*, February 14, 2005 (<u>www.lavoce.info</u>)
- "Vogliamo Combattere la Povertà? Diamo Farmaci al Terzo Mondo", *Il Riformista*, January 8, 2003, 2 (with Fabio Pammolli)
- "Docenti Universitari Vecchi? Cambiamo i Corsi di Dottorato", *Corriere della Sera*, August 22, 2002, 5 (with Giovanni Dosi).

Participation in Research Projects

- Innovation Growth Lab (IGL) 2017-2019 "A Scientific Approach to Entrepreneurial Experimentation: Evidence from a Randomized Control Trial" [Principal Investigator]
- Italian Ministry of University and Research (MIUR) (PRIN 2012), Market and Non-Market Mechanisms for the Exchange and Diffusion of Innovation: When Do They Work, When Do They Not Work, and Why Should We Care, MIUR, Protocol N.2010H37KAW_001 (February 2013-February 2016) [Co-ordinator of the Project]
- European Commmission, *The Changing Nature of Internationalization of Innovation in Europe: Impact on Firms and the Implications for Innovation Policy in the EU*, Contract N.217296 (May 2008-April 2011)
- European Commmission, Innovative S&T Indicators Combining Patent Data and Surveys: Empirical Models and Policy Analyses, Contract N. 217299 (April 2008-March 2011) [Co-ordinator of the Project]
- European Science Foundation, Program European Collaborative Research Project in the Social Sciences (ECRPSS) 4th Call, *Science and Technology Research in a Knowledge-Based Economy*, (March 2006-March 2009)
- Italian Ministry of University and Research (MIUR), Survey of Italian Inventors. The Determinants of the Value of the Italian Patents and of the Scientific Productivity. Empirical Models and Policy Implications, MIUR, Protocol N.2003133821 (March 2007-March 2009) [Co-ordinator of the Project]
- European Commission, DG Internal Market and Services, *Study on Evaluating the Knowledge Economy What Are Patents Actually Worth? The Value of Patents for Today Economy and Society*, Contract No ETD/2004/IM/E3/77 (December 2004-March 2006) [Co-ordinator of the Project]
- European Commission, DG Science and Technology, The Value of European Patents: Empirical Models and Policy Implications Based on a Survey of European Inventors, Contract N. HPV2-2001-00013 (January 2002-June 2004) [Co-ordinator of the Project]
- European Commission, DG Enterprise, *The Competitiveness of the European Pharmaceutical Industry*, (April-June 2000)
- Stanford Institute for Economic Policy Research (USA), *Sylicon Valley and its Imitators*, (February 1999-February 2001)
- European Commission, DG XII, Targeted Socio-Economic Research (TSER), Growth, Inequality and Training, Contract N. SOE2-CT98-3073 (December 1998 – December 2000)

- European Commission, DG XII, Targeted Socio-Economic Research (TSER), The Relationships between Science and Technology Policies and Broad Industrial Policy, Contract N. SOE1-CT97-1053 (December 1997 - February 2000)
- European Commission, DG XII, Targeted Socio-Economic Research (TSER), From Science to Products, Contract N. SOE1-CT97-1059 (December 1997 - May 2000)
- European Commission, DG XII, Targeted Socio-Economic Research (TSER), *Innovation*, *R&D*, *and Productivity*, Contract N. SOE1-CT96-1020 (June 1996-June 1999)
- Sloan Foundation and Center for Economic Policy Research (Stanford), *Strategies for Growth: Lessons from the Chemical Industry*, (January1993-July 1996)
- European Commission, DG XII, Human Capital & Mobility (HCM), *The Economics of Scientific and Technological Research in Europe*, Contract N. CHRXT920002 (July 1993 February 1995)
- Various research programmes of the Italian Research Council (CNR), the Italian Ministry of Scientific and Technological Research (MURST), and other institutions (e.g. European Patent Office, EPO)