

## Francesco Lissoni

### Work 1

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## CURRICULUM VITAE (April 2010)

1. Biographical details/Appointments
2. Education
3. Research interests/Ongoing research
4. Teaching
5. PhD supervision
6. Main research grants & projects
7. Consultancy
8. Referee/Editor Activity
9. Publications

# 1. BIOGRAPHICAL DETAILS & APPOINTMENTS

Date of birth: 22-7-1964

Nationality: Italian

Family: married, 2 children

Languages: Italian, English

Current Appointments: - ASSOCIATE PROFESSOR of APPLIED ECONOMICS, *Department of mechanical engineering*, Università degli studi di Brescia (from 2001)  
- RESEARCH FELLOW, *KITeS - Knowledge, Internationalization and Technology Studies*, Università "L.Bocconi", Milan (1994-2002)

Former Appointments: - ASSISTANT PROFESSOR, *Department of mechanical engineering*, Università degli studi di Brescia (1998-2001)  
- DEPUTY DIRECTOR, *CESPRI - Centre for Research on Innovation & Internationalisation*, Università "L.Bocconi", Milan (2002-2008; RESEARCH FELLOW: 1994-2002)

Scholarships: - VISITING PROFESSOR, *GREThA - Groupe de Recherche en Économie Théorique et Appliquée*, Université Bordeaux 4 (April 2010)  
- FULBRIGHT VISITING SCHOLARSHIP 2004-05 (Italian Fulbright Commission; <http://www.fulbright.it/>), *Sloan School of Management*, Massachusetts Institute of Technology (Sept. 2004 – July 2005)  
- VISITING FELLOW, *CRIC-Centre for Research on Innovation and Competitiveness*, University of Manchester/UMIST (Feb-Jul 1999)

## Scientific committees:

from 2009 - OECD "KNOWLEDGE NETWORKS AND MARKETS" STEERING GROUP Member (The group acts as an advisory body for OECD, aimed at generating and validating new ideas for OECD research and data collection. It is a mix of individual experts and of country representatives)

from 2008 - SCIENTIFIC ADVISORY COMMITTEE member, DRUID-Danish Research Unit for Industrial Dynamics (Copenhagen Business School & Aalborg University - <http://www.druid.dk>)

from 2006 - TEACHING COMMITTEE member, *Economics & Management of Technology*", joint programme of the University of Bergamo, University of Brescia and Polytechnic of Turin

from 2003 - MANAGING DIRECTOR and BoD member, *European Summer School on Industrial Dynamics (ESSID)*, (<http://www.uni-bocconi.it/essid2008>)

from 2002 - TEACHING COMMITTEE member, *European Doctorate on "Economics of Production and Development"*, Università dell'Insubria, Varese (<http://eco.uninsubria.it/dipeco/Dottorati/>)

## 2. EDUCATION

May 1997 PhD, School of Economic Studies, University of Manchester (UK). Dissertation: *Adoption, Selection, and Entry in the Diffusion of Innovations: The Case of the Prepress Industry*

March 1990 Degree in "Discipline Economiche Sociali", Università Comm. "L. Bocconi", Milano (Italy).

## 3. RESEARCH INTERESTS

General interests:

- Adoption of new technologies (Role of Users and Incremental Innovations; Geography of Diffusion; Entry/Exit and Adoption)
- Geography of Knowledge Diffusion (Mobility of Scientists and Inventors; Localized Knowledge Spillovers)
- Science-Technology Interaction (University-Industry Technology Transfer; Academic Entrepreneurship; Intellectual Property Rights over Academic Research Results)

*Current research lines:*

1. Reclassification of all European Patent Office applications (1978-2006) by inventor, in order to produce statistics on inventors' mobility across firms and in the geographical space, and to support research line 2 (see below)
2. Identification of university-invented patents in Italy, France, Sweden, the Netherlands and Denmark. University-invented patents are identified by matching inventors' names (see above) to lists of academic scientists provided by government, universities, and learned associations
3. Conceptual analysis of Academic Entrepreneurship
4. Analysis of academic scientists' productivity (number/quality of publications) and careers, as influenced by the scientists' relationship with industry

## 4. TEACHING

from 2008-09	<u>Intellectual Property Rights and Technology Transfer</u> , Corso di Laurea Specialistica in "Economics and Management of Innovation and Technology" (EMIT), Università Bocconi, Milano (in English) – joint with F.Montobbio
a.y. 2008-09	<u>The Economics and Organization of Inter-firm Networks</u> , Corso di Laurea Specialistica in "Economics and Management of Innovation and Technology" (EMIT), Università Bocconi, Milano (in English) – joint with S.Breschi
a.y. 2008-09	<u>Economics and Management of Innovation</u> , Executive Master Programmes, Hanoi Open University and National Economics University (Ho Chi Minh City) [joint with Solvay Business School, Université Libre de Bruxelles], December 2008 (in English)
from 2006	<u>Economics of Innovation</u> , joint <i>PhD programme on Economics &amp; Management of Technology</i> (Università di Bergamo, Università di Brescia, Politecnico di Torino)
from a.y. 2005-06	<u>Econometrics</u> , Corso di Laurea Specialistica in Ingegneria Gestionale ( <i>MA Engineering&amp;Management</i> ), Università degli studi di Brescia
from a.y. 2000-01	<u>Economics of Innovation</u> , Corso di Laurea Specialistica in Ingegneria Gestionale ( <i>MA Engineering&amp;Management</i> ), Università degli studi di Brescia. [from 2007-08: in English]
a.y. 2005-06 / a.y. 2006-07	<u>Innovation and Industrial Dynamics</u> , Corso di Laurea in Mercati Internazionali e nuove Tecnologie (CLEMIT – BA in <i>Economics of International Markets and New Technologies</i> ), Università Bocconi, Milano (in English)
a.y. 2003-04 / a.y. 2005-06	<u>International Competitiveness and Technological Change</u> , Manchester School of Management - Singapore Programme (2003) and Hong Kong Programme (2005) (in English)
from 2000-01 to 2003-04	<u>Macro-Microeconomics I</u> , degree in Ingegneria Gestionale ( <i>Engineering&amp;Management</i> ), Università degli studi di Brescia
1998-2001	<u>Indicators &amp; Methods for the Study of Innovation</u> , (2-day intensive workshop), European Summer School on Industrial Dynamics, Cargese (FR) <a href="http://www.dauphine.fr/imri/essid2001/welcome.html">http://www.dauphine.fr/imri/essid2001/welcome.html</a>

a.y. 1999-2000, 2000-01	<u>Microeconomics I</u> degrees in: Economia Aziendale ( <i>Business Studies</i> ); Economia Politica ( <i>Economics</i> ) Università Bocconi, Milano
a.y. 1996-97, 97-98 (teaching ass.)	
from 1996-97 to 1999-2000	<u>Economics for Engineers</u> , degree in Ingegneria Meccanica ( <i>Mechanical Engineering</i> ), Università degli studi di Brescia
a.y. 2000-01 - 2002-03	<u>Economics of Innovation</u> , degrees in: Economia Aziendale ( <i>Business Studies</i> ); Economia Politica ( <i>Economics</i> ). Università Bocconi (joint with Prof. Franco Malerba)
a.y. 1994-95 - 1996-97	
1991-92, 1994-95, 1995-96	<u>Industrial Economics</u> , degree in Ingegneria Meccanica ( <i>Mechanical Engineering</i> ), Università degli studi di Brescia
a.y. 1995-96	
a.y. 1994-95 (teaching assistant)	<u>Macro-Microeconomics I</u> , degrees in: Economia Aziendale ( <i>Business Studies</i> ); Economia Politica ( <i>Economics</i> ). Università Bocconi, Milano
a.y. 1993-94 (teaching assistant)	<u>Micro-Macroeconomics I</u> , BA Economics, Università di Manchester, Faculty of Economic and Social Studies

## 5. PhD SUPERVISION

2008-ongoing	F.Caviggioli, <i>European companies' patent extension strategy in Asia</i> , Joint doctoral programme in the economics and management of technology, Universities of Bergamo, Brescia and Turin-Polytechnic
2007-ongoing	M.Pezzoni, <i>Scientific productivity and academic labour market in specific institutional settings: an analysis of French and Italian physicists</i> , Joint doctoral programme in the economics and management of technology, Universities of Bergamo, Brescia and Turin-Polytechnic
2006-2008	V.Sterzi, <i>Knowledge networks in scientific productivity and international spillovers</i> , Joint doctoral programme in the economics and management of technology, Universities of Bergamo, Brescia and Turin-Polytechnic
2004-2006	F.Laforgia, <i>Knowledge workers' mobility: the productivity of research and the dimension of knowledge flows</i> , European doctoral programme in the economics of production and development, Università dell'Insubria, Varese

## 6. MAIN RESEARCH GRANTS & PROJECTS

2009-2012	- SCIENTIFIC COORDINATOR, <i>Academic Patenting in Europe: Database Sharing, Applications and Extensions (A.P.E.- INV)</i> , ESF Research Networking Programme, European Science Foundation (2009-2013). Budget: €380.000
2007-2009	- WORKPACKAGE COORDINATOR, <i>Cultural and Innovation Dynamics: Explaining the Uneven Evolution of Human Knowledge</i> (CID), Specific Targeted Research or Innovation Project (Activity code addressed: NEST-2005-Path-CUL), VI Framework Programme, European Commission-DG XII / Scientific coordination: Prof. Stefano Brusoni (CESPRI-Bocconi)
2004-2006	- WORKPACKAGE COORDINATOR, <i>Universities, Entrepreneurship and Knowledge Exchange Networks</i> (WP1.3), DIME Network of Excellence, 6th Framework Programme of the European Union ( <a href="http://www.dime-eu.org/">http://www.dime-eu.org/</a> )
2004-06	- COORDINATOR'S ASSISTANT, <i>Knowledge-Based Entrepreneurship: Innovation, Networks and Systems</i> (KEINS), Specific Targeted Research or Innovation Project (Priority 7), VI Framework Programme,

European Commission-DG XII / Scientific coordination: Prof. Franco Malerba (CESPRI-Bocconi) – Budget: € 1.000.000

- 2003-05 - HEAD OF RESEARCH UNIT, *Open science and university patenting: a bibliometric and sociometric analysis*, Programma di Ricerca Scientifica di Rilevante Interesse Nazionale 2003, Italian Ministry of Education, / Scientific coordination: Prof. Alfonso Gambardella (Scuola Superiore S. Anna, Pisa, IT) - Budget: € 15.500
- 2002-04 - HEAD OF RESEARCH UNIT, *Innovation, Networks and the Creation of Knowledge (iNeck)*, Thematic Network, “Improving Human Research Potential and the Socio-Economic Knowledge Base” programme, V Framework Programme, European Commission--DG XII / Scientific coordination: Prof. Robin Cowan (University of Maastricht, NL) - Budget: € 15.000
- 2000-02 - COORDINATOR’S ASSISTANT, *Sistemi Settoriali: Teoria ed Analisi del Caso Italiano (Sectoral Systems: Theory and an Application to the Italian Case)* Ministero dell’Università e Ricerca Scientifica e Tecnologica / Scientific coordination: prof. F. Malerba (Cespri, Univ. Bocconi)

Other research projects, with significant involvement in management:

- 1999-2001 *Sectoral Systems in Europe: Innovation, Competitiveness, and Growth (ESSY)*; <http://www.cespri.it/ricerca/ESSY.htm>, TSER Project (Targeted Socio-Ec. Research), IV Framework Programme, European Commission-DG XII / Scientific coordination: prof. F. Malerba (Cespri, Univ. Bocconi)
- 1998-2000 *Technology Infrastructure Policy in the Knowledge-based economy; the impact of the tendency towards codification of knowledge (TIPIK)*, TSER Project (Targeted Socio-Economic Research), IV Framework Programme, European Commission-DG XII. 7 Scientific coordination: Prof. P. Cohendet (BETA-Strasbourg Univ.)
- 1995-97 *Cambiamenti nella struttura industriale lombarda e politiche regionali per l’innovazione*, Regione Lombardia - Direzione Generale Attività Produttive. [*Structural change in Lombardy and regional policies for innovation*, Lombardy Regional Council, Directorate for Industry] / Scientific coordination: prof. F. Malerba (Cespri, Univ. Bocconi)

## 7. CONSULTANCY

1. ARTI (Regional Agency for Technology and Innovation of Puglia, Italy) – Assessment of scientific productivity of local universities (selected disciplines), 2008
2. Danish Board of Technology’s report on “Intellectual Property Rights: improving the patent system”, to be delivered to the STOA (Science&Technology Option Assessment) Panel of the European Parliament in May 2007 – Member of scientific panel
3. Confartigianato (Confederation of Craft Enterprises), Brescia, Statistical office - Member of scientific panel, 2004

## 8. EDITOR/REFeree ACTIVITY

*Referee (journals)*: Annals of Regional Science, Economia e Politica Industriale, Economics of Innovation and New Technology, L’Industria, Industrial & Corporate Change, Industry & Innovation, Journal of Biomedical Discovery & Collaboration, Journal of Economic Behavior & Organization, Journal of Economic Geography, Journal of Evolutionary Economics, Management Science, Organization Studies, Papers in Regional Science, Rivista di Politica Economica, Research Policy, Science & Public Policy, Structural Change & Economic Dynamics

*Referee (scientific institutions)*: National Science Foundation (Science of Science & Innovation Policy Program)

*Editor*: NEP-tid mailing list (<http://lists.repec.org/pipermail/nep-tid/>) (from 2003 to 2005)

*Associate editor*: Economia e Politica Industriale

## 9. PUBLICATIONS

### Ongoing Drafts

- i. "Inventorship and Authorship in Patent-Publication Pairs: An Enquiry in the Economics of Scientific Credit", CESPRI Working Paper 224 (2008), Università "L.Bocconi", Milano (Revise and resubmit: *Journal of Economic Behavior and Organization*) (<http://www.cespri.unibocconi.it/workingpapers>) – with F. Montobbio
- ii. "Career progress in centralized academic systems : an analysis of French and Italian physicists", KITES Working Paper 26 (2009), Università "L.Bocconi", Milano – with M.Pezzoni and V.Sterzi ([http://portale.unibocconi.it/wps/wcm/connect/Centro\\_KITES/Home/Working+Papers/](http://portale.unibocconi.it/wps/wcm/connect/Centro_KITES/Home/Working+Papers/))
- iii. "Institutional Change and Academic Patenting: French Universities and the Innovation Act of 1999", KITES Working Paper 29 (2010), Università Bocconi, Milano – with A.Della Malva and P.Llerena [Submitted: *J. Evolut.Economics*] ([http://portale.unibocconi.it/wps/wcm/connect/Centro\\_KITES/Home/Working+Papers/](http://portale.unibocconi.it/wps/wcm/connect/Centro_KITES/Home/Working+Papers/))

### Articles in refereed journals (international)

1. "Academic inventors as brokers", *Research Policy* (forthcoming in 2010)
2. "Scientific Productivity and Academic Promotion: A Study on French and Italian Physicists", *Industrial and Corporate Change* (forthcoming in 2010) – with J. Mairesse, F. Montobbio and M. Pezzoni
3. "Academic Patenting and the Professor's Privilege: Evidence on Denmark from the KEINS database", *Science and Public Policy* 36/8, 2009, pp. 595-607 - with P.Lotz, J. Schovsbo, A. Treccani
4. "Mobility of skilled workers and co-invention networks: an anatomy of localized knowledge flows", *Journal of Economic Geography* 9, 2009, pp. 439 - 468 – with S. Breschi
5. "University patenting and scientific productivity. A quantitative study of Italian academic inventors" - *European Management Review* 5(2), 2008, pp.91-109 - with S. Breschi and F. Montobbio
6. "Academic Patenting in Europe: New Evidence from the KEINS Database", *Research Evaluation* 16(2), 2008, pp 87-102 - with P.Llerena, M.McKelvey, and B.Sanditov. Reprinted in: M. McKelvey and M.Holmén (eds.), *European Universities Learning to Compete: From Social Institution to Knowledge Business*, Edward Elgar, Cheltenham
7. "The scientific productivity of academic inventors: new evidence from Italian data", *Economics of Innovation and New Technology* 16/ 2, 2007, pp.101-118 - with S. Breschi and F. Montobbio
8. "Cross-Firm Inventors and Social Networks: Localised Knowledge Spillovers Revisited", *Annales d'Economie et de Statistique* 79-80, 2005 (special issue from the Zvi Griliches Conference, edited by Jacques Mairesse and Manuel Trajtenberg)- with S. Breschi
9. "From publishing to patenting: Do productive scientists turn into academic inventors?", *Revue d'Economie Industrielle* 110, 2005, pp.75-102, 2005 - with S. Breschi and F. Montobbio
10. "The reaper and the scanner: indivisibility-led incremental innovations and the adoption of new technologies", *Cambridge Journal of Economics* 29, 2005, pp. 359 - 379
11. "Networks of inventors and the role of academia: an exploration of Italian patent data" , *Research Policy* 33/1, 2004, pp. 127-145 - with M. Balconi and S. Breschi
12. "Knowledge Relatedness in Firm Technological Diversification", *Research Policy* 32/1, 2003, pp. 69-87 - with F. Malerba and S. Breschi
13. "Knowledge Spillovers and Local Innovation Systems: A Critical Survey", *Industrial and Corporate Change* 10/4, 2001, pp. 975-1005 - with S. Breschi [2nd most highly cited article in the history of the journal, as of April 2010: <http://icc.oxfordjournals.org/reports/mfc1.dtl>]
14. "Knowledge codification and the geography of innovation: the case of Brescia mechanical cluster", *Research Policy* 30/9, 2001, pp.1479-1500
15. "Localised Knowledge Spillovers vs. Innovative Milieux: Knowledge 'Tacitness' Reconsidered", *Papers in regional science* 80/3, 2001 - with S. Breschi
16. "Technological expectations and the diffusion of 'intermediate' technologies", *Economics of Innovation and New Technology* 9, 2000

### **Articles in refereed journals (Italian)**

17. "L'attività brevettuale dei docenti universitari: L'Italia in un confronto internazionale", *Economia e Politica Industriale* 34/2, 2007 - with A. Della Malva, S. Breschi, F. Montobbio
18. "Brevetti universitari e economia della ricerca in Italia, Europa e Stati Uniti. Una rassegna dell'evidenza recente", *Politica Economica* 2, 2006, pp.259-381 - with F. Montobbio
19. "Selezione avversa e trasferimento tecnologico: un'analisi dei centri di servizio alle imprese della Regione Lombardia", *Economia e Politica Industriale* 105, 2000 - with L. Cusmano and M. Sironi
20. "Adozione, standardizzazione ed entrata nei processi di diffusione delle innovazioni: il caso delle tecnologie elettroniche per la pre-stampa", *L'Industria* 3/XVII, 1996
21. "La diffusione delle innovazioni di processo: un esempio tratto dall'industria grafica-editoriale", *Economia e Politica Industriale* 71, 1991.

### **Book chapters**

22. "Academic patents, spin-offs and beyond: the many faces of scientific entrepreneurship", in: F. Malerba (ed.), *Knowledge Intensive Entrepreneurship and Innovation Systems*, Routledge, 2010 – with C. Franzoni
23. "Brokerage roles in academic patenting: An analysis of Italian inventors" in: F. Malerba (ed.), *Knowledge Intensive Entrepreneurship and Innovation Systems*, Routledge, 2010
24. "University research and public-private interaction", in: Rosenberg N., Hall B. (eds.), *Handbook of Economics of Innovation*, North Holland/Elsevier, 2010 – with D. Foray
25. "The geography of knowledge spillovers: the role of inventors' mobility across firms and in space", in: Boschma R. and Martin R. (eds.), *Handbook of Evolutionary Economic Geography*, Edward Elgar, 2009 – with S. Breschi, C. Lenzi and A. Vezzulli
26. "What do you mean by 'mobile'? Multi-applicant inventors in the European Biotechnology Industry", in: Malerba F., Vonortas N. (eds.), *Innovation Networks in Industries*, Edward Elgar, 2009 – with F. Laforgia
27. "Academic entrepreneurs: critical issues and lessons for Europe", in: Varga A. (ed.), *Universities, Knowledge Transfer And Regional Development: Geography, Entrepreneurship and Policy*, Edward Elgar, 2009 – with C. Franzoni
28. "Open science and university patenting: a bibliometric analysis of the Italian case", in: de Meyer A., van Pottelsberghe B. (eds), *Economics and Management Perspectives on Intellectual Property Rights*, Applied Econometrics Association Series, Palgrave-MacMillan, 2005 - with S. Breschi and F. Montobbio
29. "The geography of knowledge spillovers: conceptual issues and measurement problems", in: Breschi S., Malerba F. (eds.), *Clusters, networks and innovation*, Oxford University Press, 2005 - with S. Breschi and F. Montobbio
30. "Knowledge networks from patent data: Methodological issues and research targets", in: Glänzel W., Moed H., Schmoch U. (eds), *Handbook of Quantitative S&T Research*, Kluwer Academic Publishers, 2004 - with S. Breschi
31. "The empirical assessment of firms' technological coherence: data and methodology", in: Cantwell J., Gambardella A., Grandstand O. (eds), *The Economics and management of Technological Diversification*, Routledge, 2004 - with S. Breschi and F. Malerba
32. "Il trasferimento di conoscenze tecnologiche dall'università all'industria in Italia: nuova evidenza sui brevetti di paternità dei docenti", in: Bonaccorsi A. (ed.), *Il sistema della ricerca pubblica in Italia*, Franco Angeli, 2003 - with M. Balconi and S. Breschi
33. "How Many Networks in a Local Cluster? Textile Machine Production and Innovation in Brescia" in: Brenner T., Fornahl D. (eds.), *Cooperation, Networks and Institutions in Regional Innovation Systems*, Edward Elgar Pub., London, 2003 - with M. Pagani
34. "Le caratteristiche fondamentali del sistema innovativo italiano" in: Quadrio Curzio A., Fortis M., Galli G. (eds.), *Rapporto sulla competitività dell'Italia: scienza, ricerca, innovazione*, Edizioni del Sole24Ore, Milano, 2002 - with F. Malerba

35. "Success and failure in the development of biotechnology clusters: the case of Lombardy", in: Fuchs G. (ed.), *Comparing the development of biotechnology clusters*, Harwood Academic Publishers, 2001 - with S. Breschi and L. Orsenigo
36. "Diffusion of Innovation Ancient and Modern: A Review of the Main Themes", in: M.Dodgson, R.Rothwell (ed.), *Handbook of Industrial Innovation*, Edward Elgar Pub., Londra, 1995. Reprinted in: Lall S. (ed.), *The Economics of Technology Transfer (The International Library of Critical Writings in Economics-vol.XXX)*, Edward Elgar Pub., Londra, 2001 - with J.S.Metcalf
37. "L'intervento del Governo Britannico nella Scienza e nella Tecnologia", in: F. Malerba (ed.), *Sistemi innovativi regionali a confronto. Lombardia, Baden-Württemberg e West Midlands*, Franco Angeli, Milano, 1993 - with M.Maralla
38. "La struttura economica regionale del Regno Unito: le West Midlands", *ibid.*
39. "L'attivit  innovativa delle West Midlands", *ibid.*

#### **Conference papers / Working papers (unpublished)**

40. "The Keins Database on Academic Inventors: Methodology and Contents", CESPRI working paper 181, Universit  "L.Bocconi", Milano, October 2006 (<http://www.cespri.unibocconi.it/workingpapers>) – with B.Sanditov and G. Tarasconi
41. "Computer and Office Machinery.", proceedings from the conference on *"Innovation measurement and policies"*, Plateau du Kirchberg, Luxembourg, 20-21 May 1996, pp. 188-194; Official Publications of the European Communities, Luxembourg, 1997 - with F. Malerba and S. Torrissi
42. "Deindustrialization in Lombardy: An Empirical Assessment"
  - CESPRI WP n.88, ,Universit  Commerciale L. Bocconi, Milano, 1996
  - 36th congress of the European Regional Science Association, 26-30 Agosto 1996, Zurich

#### **Course Materials**

43. "Economics of Innovation", Master degree in Business Engineering, Universit  di Brescia, various years [<http://elearning.ing.unibs.it/bin> → Corso di laurea specialistica in Ingegneria Gestionale → ECONOMICS OF INNOVATIONS]
44. "La diffusione delle innovazioni", in F.Malerba (ed.), *Economia dell'Innovazione*, Carocci, Roma, 2000
45. "Tecnologie concorrenti e rendimenti crescenti da adozione", *ibidem*