



Curriculum Vitae

Europass

Personal information

First name/ Surname **Giorgio Vacchiano**

Current occupation Associate professor in silviculture and forest planning
Department of Agricultural and Environmental Science
University of Milan, Italy

Short bio I am a researcher, teacher, and communicator in forest science and climate change. My research is focused on **sustainable forest management** to support mitigation and adaptation to **climate change**, **biodiversity** conservation, and **resilience** to natural disturbances in European and global forests.

I have authored more than 70 international publications, and the book “La resilienza del bosco” (Mondadori, 2019). In 2018, I was included by the journal Nature among the 11 best emerging scientists globally.

I enjoy doing scientific communication on social and web media, radio and TV, and scientific education activities in schools. I coordinate the Communication workgroup of the Italian Society of Silviculture and Forest Ecology (SISEF). and I am a member of the Ecological Society of America (ESA).

Professional experience	
Dates	October 16th, 2016 – January 30th, 2018
Occupation or position held	Contract agent – Scientific project officer
Main activities and responsibilities	Maintaining and improving the European Forestry Dynamics model and develop the forest modeling framework of the EU JRC
Name and address of employer	EU JRC, Unit D1 Bioeconomy. Via E. Fermi 2749, TP 261, Ispra (VA), Italy
Type of business or sector	Scientific research, Policy, Forest management
Dates	January 1st, 2008 – March 30th, 2016
Occupation or position held	Postdoctoral grants
Main activities and responsibilities	Planning, coordination and development of national and international research projects (Interreg III, Alcotra, FP7 EU). Summarizing of bibliographic state-of-the-art, identifying knowledge gaps, planning data collection, field sampling campaign, data multivariate analysis, use of spatial information (GIS) and integration with historical documents, modeling of forest and landscape dynamics and programming of simulator software, dissemination of results to the scientific and professional communities, national and international conferences, technical manuals, accounting and reporting.
Name and address of employer	DISAFA – Università degli Studi di Torino. Via da Vinci 44, Grugliasco (TO) (Italy)
Type of business or sector	Scientific research, forest ecology and management
Dates	September 15th, 2005 – March 15, 2006
Occupation or position held	Fulbright grant: Visiting Graduate Student
Main activities and responsibilities	Research assistant (tutor: prof. J.N. Long), statistical analyses and large database management, use and programming of forest dynamics simulator models, presentation of results to state and federal employees, graduate school and classes, meetings with other international grantees.
Hosting institution	Dept. of Forest, Range and Wildlife Sciences, Utah State University. 5230 Old Main Hill – 84322 Logan UT (USA)
Dates	July 24th, 2003 – November 1st, 2007
Occupation or position held	Research annex / Graduate student grants
Main activities and responsibilities	Scientific collaboration and coordination of research projects at national and European level (EU-Interreg). Establishing permanent monitoring plots, field sampling of climate, site and dendroecological variables, statistical data analysis, database creation and management, collecting and managing spatially explicit data (GPS, GIS), metadata handling and reporting, financial accounting, dissemination of results to the scientific community and to the general public (academic publications, training courses, technical manuals).
Name and address of employer	Agroselviter – Università degli Studi di Torino. Via da Vinci 44, Grugliasco (TO) (Italy)
Type of business or sector	Scientific research, forest ecology and management

Scientific activity	
International papers published	78
H-Index	26
Citations	3153
Full publication record	https://scholar.google.com/citations?user=Cnm5o88AAAAJ&hl=it
Most cited publications	<p><i>Forest disturbances under climate change</i> R Seidl, D Thom, M Kautz, D Martin-Benito, M Peltoniemi, G Vacchiano, ... Nature Climate Change 7 (2017), 395-402 [943 citations]</p> <p><i>Driving factors of a vegetation shift from Scots pine to pubescent oak in dry Alpine forests</i> A Rigling, C Bigler, B Eilmann, E Feldmeyer-Christe, U Gimmi, C Ginzler, ... Global Change Biology 19 (2013), 229-240 [287 citations]</p> <p><i>Generalized biomass and leaf area allometric equations for European tree species incorporating stand structure, tree age and climate</i> DI Forrester, IHH Tachauer, P Annighoefer, I Barbeito, H Pretzsch, ... Forest Ecology and Management 396 (2017), 160-175 [171 citations]</p> <p><i>A walk on the wild side: Disturbance dynamics and the conservation and management of European mountain forest ecosystems</i> D Kulakowski, R Seidl, J Holeska, T Kuuluvainen, TA Nagel, M Panayotov, ... Forest Ecology and Management 388 (2017), 120-131 [140 citations]</p>
Publications in top journals	<p><i>Is there tree senescence? The fecundity evidence</i> T Qiu, MC Aravena, R Andrus, D Ascoli, Y Bergeron, R Berretti, ... Proceedings of the National Academy of Sciences 118 (2021)</p> <p><i>The ecology and evolution of synchronized reproduction in long-lived plants</i> MB Pesendorfer, D Ascoli, M Bogdziewicz, A Hackett-Pain, IS Pearse, ... Philosophical Transactions of the Royal Society B 376 (2021), 20200369</p> <p><i>Nutrient scarcity as a selective pressure for mast seeding</i> M Fernández-Martínez, I Pearse, J Sardans, F Sayol, WD Koenig, ... Nature Plants 5 (2019), 1222–1228</p> <p><i>Inter-annual and decadal changes in teleconnections drive continental-scale synchronization of tree reproduction</i> D Ascoli, G Vacchiano, M Turco, M Conedera, I Drobyshhev, J Maringer, ... Nature Communications 8 (2017), 2205</p>

Education	
Dates	September 23th, 2017
Title of qualification awarded	Abilitazione Scientifica Nazionale settore 07/B2 - Seconda fascia
Name and type of organisation	Ministero dell'Università e della Ricerca
Dates	July 23th, 2015
Title of qualification awarded	Certificated High School Teacher in Biology, Chemistry and Earth Science
Name and type of organisation	Università degli Studi di Milano
Dates	February 5th, 2007
Title of qualification awarded	Ph.D. in Forest management and planning (Tutor: prof. Renzo Motta) Dissertation: <i>Modeling stand dynamics in Scots pine (Pinus sylvestris L.) forests of SW Alps.</i>
Name and type of organisation	Università degli Studi di Torino
Dates	May 31st, 2004
Title of qualification awarded	Certified Forester and Agronomist (178/240)
Occupational skills covered	As in National Acts no. 3/1976 and 152/1992 (Italy)
Name and type of organisation	Ordine dei dottori agronomi e forestali della provincia di Torino
Dates	July 11th, 2003
Title of qualification awarded	MS degree in Forestry and Environment (110/110 <i>cum laude</i>)
Name and type of organisation	Università degli Studi di Torino – Facoltà di Agraria
Dates	July 6th, 1998
Title of qualification awarded	Classical studies - High school diploma (60/60)
Name and type of organisation	Liceo Ginnasio "C. Cavour", Torino (Italy)

Language skills

Mother tongue(s) Italian
 Other language(s) English, French
 Certifications TOEFL (computer based) 283/300, Certificate of Advanced English (2013)

Self-assessment <i>European level (*)</i>	Understanding		Speaking		Writing
	Listening	Reading	Interaction	Production	
English	C2	C2	C2	C2	C2
French	B1	B2	B1	A2	A1

(*) *Common European Framework of Reference for Languages*

<p>Technical skills and competences</p>	<p>Project and research management:</p> <ul style="list-style-type: none"> ▪ Design and supervision of research projects ▪ Finding sources of funding for scientific research ▪ Supervision of work packages in national and European research projects ▪ Summarizing state-of-the-art and identifying knowledge gaps ▪ Production of summary reports and academic papers (ISI journals) ▪ Financial accounting of national and European projects (Interreg) ▪ Dissemination of results in international conferences, technical manuals and meetings with other professionals and research partners <p>Professional skills:</p> <ul style="list-style-type: none"> ▪ Experimental design and sampling strategies ▪ Collection of field data, use of forest sampling equipment ▪ Collection of plant and soil samples, identification of plant species ▪ Collecting and analyzing dendroecological and tree health data ▪ Collecting and analyzing climate, soil and site data ▪ Collecting and managing spatially explicit data (GPS and GIS, cartography, cadastral) ▪ Statistical data analysis (descriptive, inferential, spatial, multivariate statistics) ▪ Creating and managing relational databases ▪ Use and calibration of computer models for forecasting forest dynamics <p>Teaching skills:</p> <ul style="list-style-type: none"> ▪ Production of teaching aids (handouts, presentations, exercises) ▪ Environmental education (university-level class, continuing education for professionals, field weeks, non-profit organizations) ▪ Supervision of undergraduate and graduate student research and dissertations
<p>Computer skills and competences</p>	<ul style="list-style-type: none"> ▪ Windows, MS Office and database (Access, FoxPro) ▪ Image analysis and editing (Adobe Photoshop) ▪ Programming (HTML, Fortran, Python) ▪ Design of institutional and personal websites ▪ OS setup and management, data recovery <p>Professional software:</p> <ul style="list-style-type: none"> ▪ GIS packages: ESRI ArcView 3.x/ArcGIS 10.x, Qgis 3.x ▪ Analysis of remotely sensed imagery (IDRISI, ER Mapper, ENVI, PCI Geomatica) ▪ Landscape ecology (Fragstats, eCognition) ▪ Statistics packages (R, SPSS, SAS, S+), multivariate and sensitivity analysis (Canoco, PC-Ord, SimLab) ▪ Growth and yield models, simulators of forest and landscape dynamics

Organizational skills and competences	<ul style="list-style-type: none"> ▪ Teaching plans, high school education and university-level classes ▪ Preparation of seminars and lectures for university students and faculty ▪ Organizing committee in national and international conferences ▪ Preparation and supervision of field training for students and academics ▪ Managing project meetings and interacting with national and international scientific partners ▪ Planning and carrying out field sampling campaigns ▪ HR Management and training of voluntary personnel ▪ Creation and management of shared databases ▪ Collection and management of bibliographic sources
Social skills and competences	<ul style="list-style-type: none"> ▪ Participation in national and international research teams ▪ Dissemination of academic results, extension and scientific ▪ Interaction with local administrations and funding bodies ▪ Management of field teams ▪ Student mentorship, collaboration fellow academics ▪ Summer tourist activities in National Parks ▪ Activities for children and teens (in city parish, from 1994 to 2002) ▪ Regional coordinator of an international youth movement (2001 to 2008)
Other skills and competences	<ul style="list-style-type: none"> ▪ Photography with digital and film cameras in small and medium format ▪ Amateur astronomical observation, use of optical instruments ▪ Playing musical instruments, reading music, theory and history of music
License, patents and memberships	<p>International driving license (passenger cars) Certified Forester Certified high school teacher</p> <p>Membership: Pro Silva Italia, It. Soc. Silviculture and Forest Ecology, Ecological Society of America</p>
References	<p>Prof. Renzo Motta – Full professor in Forest ecology and Silviculture Università degli Studi di Torino, DISAFA Largo Braccini 2 – 10095 Grugliasco (TO) Italy. Email: renzo.motta@unito.it</p> <p>Dr. John D. Shaw – FIA Researcher and data analyst United States Forest Service, Rocky Mountain Research St. 507 25th Street – 84401 Ogden, UT (USA). Email: jdshaw@fs.fed.us</p> <p>Prof. Andreas Rigling – Head of Forest dynamics research unit Swiss Federal Institute for Forest, Snow and Landscape Research WSL Zürcherstrasse 111 CH-8903, Birmensdorf (CH). Email: andreas.rigling@wsl.ch</p>

Signature

I authorize the treatment of my personal data according to the Italian D. Lgs 196/03.