



Curriculum Vitae Europass

Personal information

First name/ Surname

Giorgio Vacchiano

Desired employment / Occupational field

Scientific research
Forest ecology and management
Statistics and modeling
Environmental monitoring and planning
Science and environmental education

Summary of research

I have been a post-doc at the Department of Agricultural, Forest and Food Sciences, University of Turin (Italy), from 2008 to 2016. My research focused on modeling forest dynamics as a tool to understand ecosystem processes and forecast the provision of ecosystem services by Alpine forests.

In 2016-17 I have been working at the Joint Research Centre of the European Commission, Directorate D, Unit Bio-economy, to characterize future biomass available from EU forests in the context of the EU Biomass Mandate and Bioeconomy Strategy.

In the framework of the current scenarios of change, I strive to use quantitative analysis and simulation of forest dynamics at the individual, population, and landscape level to help develop timely adaptations for management strategies by local stakeholders and policymakers.

Current occupation

Dates
Occupation or position held
Main activities and responsibilities

February 1st, 2018 – ongoing
Associate professor in silviculture and forest planning
Research and teaching

Name and address of employer Type of business or sector	DISAA, Università di Milano, via Celoria 2, 20123 Milano, Italy Scientific research, Academia, Forest management
Recent occupation Dates Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector	October 16 th , 2016 - January 30 th , 2018 Contract agent - Scientific project officer Maintaining and Improving the European Forestry Dynamics model and develop the forest modeling framework of the EU JRC EU JRC, Unit D1 Bioeconomy, Via E. Fermi 2749, TP 261, Ispra (VA), Italy Scientific research, Policy, Forest management

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, It. Soc. Landscape Ecology, It. Soc. Silviculture and Forest Ecology, Italian Alpine Club, AAAS, 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>Dott. 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	<p>I authorize the treatment of my personal data according to the Italian D. Lgs 196/03.</p>



<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 9x/XP/NT/Vista, MS Office and database (Access, FoxPro) ■ Image analysis and editing (Adobe Photoshop) ■ Programming (HTML, Fortran) ■ 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, GPS Pathfinder ■ Analysis of remotely sensed imagery (IDRISI, ER Mapper, ENVI, PCI Geomatica) ■ Landscape ecology (Fragstats, eCognition) ■ General statistics packages (R, SPSS, SAS, S+), multivariate and sensitivity analysis (Canoco, PC-Ord, SimLab) ■ Growth and yield models, simulators of forest and landscape dynamics (FVS, LANDIS)

Extension activities	
May 2017	Seminar on modelling wind damage risk in forests (Università degli Studi di Torino)
April 2016	Ambiente Italia (Interview as environmental expert, Rai TV Italy)
February 2016	Citizen seminar on climate change (Università degli Studi di Torino)
April 2015	Scienzattiva (web-based scientific information for teachers and students)
April 2015	Citizen Seminar on disturbance ecology (Orto Botanico, Torino Italy)
February 2015	Citizen seminar on tropical deforestation (Università degli Studi di Torino)
October 2009	Alpi 365 (science fair on mountain environments, Torino)

Training courses	
28-29 June 2017	Sensitivity analysis for modellers (JRC Ispra)
14 June 2017	Introduction to Google Earth Engine (JRC Ispra)
9-12 March 2017	The Canadian Carbon Budget Model (Victoria, BC)
1-4 February 2017	Bayesian analysis in R (JRC Ispra)
July - August 2015	CERN High School teacher training (Geneva)
November 2011 - March 2012	Master in European project writing (Torino)
December 2011 - February 2012	Geographic information Systems (GIS) ECDL
28 November - 2 December 2011	Introduction to object-oriented programming in C# (Grugliasco, TO)
21-25 November 2011	Microsoft SQL Server
7-15 November 2011	Statistics and data analysis in R (Grugliasco, TO)
12-18 September 2011	Denroecological fieldweek (Engelberg, CH)
9-23 July 2011	iPromo, natural risk management in mountain areas (Ormea, CN)
19-20 April 2011	Writing to communicate science (Torino)
19-22 April 2010	Impacts of climate change on forests in Europe (Freiburg, D)
11-13 January 2010	LANDIS meeting and workshop (Madison, USA)
1-3 July 2009	Silviculture in direct protection forestss (Serrayer, CH)
23 March 2008	Data analysis with SPSS (Milano)
9-12 March 2006	Civic participation in environmental problem solving (San Francisco, USA)
6-8 May 2005	Sustainable development (Castelgandolfo, Roma)

Language skills

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

Self-assessment
European level (*)
English
French

Understanding		Speaking		Writing
Listening	Reading	Interaction	Production	
C2	C2	C2	C2	C2
B1	B2	B1	A2	A1

(*) Common European Framework of Reference for Languages

Teaching experience	
Dates	April 23, 2018 to June 21, 2018
Occupation or position held	Assistant professor in forest planning (50 teaching hours)
Main activities and responsibilities	Chair of forest planning within the Bsc major in Conservation and sustainable development of mountain areas (http://www.unimontagna.it/en/percorsi-didattici/bsc-valorizzazione-e-tutela-dellambiente-e-del-territorio-montano)
Name and address of employer	DISAA – Università degli Studi di Milano, via Celoria 2, Milan (Italy)
Dates	November 12, 2004 to May, 2016
Occupation or position held	Teaching Assistanships (150 teaching hours)
Main activities and responsibilities	Statistics T.A., Agricultural Science major (first year, 100 students); Seminars (30 hours) in Forest Ecology and Mountain forest silviculture courses, Forestry major (first year, 60 students), mentorship of undergraduate and graduate student. Field weeks, Forest Ecology Class: field sampling, recognition of plant species, forest management, data processing.
Name and address of employer	Facoltà di Agraria – Università degli Studi di Torino. Via da Vinci 44, Grugliasco TO (Italy)
Dates	March 12, 2015 to June 30, 2015
Occupation or position held	Teaching trainee (250 teaching hours)
Main activities and responsibilities	Trainee in high school Biology, Chemistry, and Earth Science courses. Teaching classes and co-teaching, test preparation and evaluation
Name and address of employer	Technical College E. Majorana. Via Baracca 80, Grugliasco TO (Italy)
Dates	October 12, 2013 to June 30, 2014
Occupation or position held	High school substitute teacher (60 teaching hours)
Main activities and responsibilities	Teacher in high school Biology, Chemistry, and Earth Science courses. Teaching classes labs, test preparation and evaluation
Name and address of employer	ITGS G. Guarini. Via Salerno 60, Torino (Italy)
Dates	27 th -28 th June 2011
Occupation or position held	Course teacher in "Forest Simulation Models"
Main activities and responsibilities	Organizer and teacher in a course for forest technicians
Name and address of employer	Libera Università di Bolzano. Piazza Università 1, Bolzano (Italy)
Dates	March 2008 to May 2016
Occupation or position held	Seminar speaker (16 hours)
Main activities and responsibilities	Scientific seminars on forest modeling, deforestation, and ecosystem services
Name and address of employer	Università degli Studi di Bologna, Università degli Studi di Torino, Università degli Studi di Milano, Università degli Studi di Padova, Università degli Studi di Udine (Italy)

Education	
Dates	September 23th, 2017
Title of qualification awarded	Abilitazione Scientifica Nazionale settore 07/B2
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)
Name and type of organisation	Dissertation: <i>Modeling stand dynamics in Scots pine (Pinus sylvestris L.) forests of SW Alps.</i> 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)
Professional experience	
Dates	June 2016 - July 2016
Occupation or position held	Consultant
Main activities and responsibilities	Forest management plan of the City of Frassinò (CN): field survey, statistical analysis, ecosystem service assessment, silvicultural plan
Name and address of employer	SEAcop, Cso Palestro 9, 10111 Torino (Italy)
Type of business or sector	Forestry consultant
Dates	February 2011 - February 2012
Occupation or position held	Consultant
Main activities and responsibilities	Forest management plan of the City of Sampeyre (CN): field survey, statistical analysis, forest road plan and survey, silvicultural plan
Name and address of employer	SEAcop, via Lima 4 10137 Torino (Italy)
Type of business or sector	Forestry consultant
Dates	October 2000 - July 2003
Occupation or position held	Fixed term employee (600 working hours)
Main activities and responsibilities	Coordination of tourist activities and voluntary summer jobs in the Park
Name and address of employer	Gran Paradiso National Park. Via della Rocca, 47. Torino (Italy)
Type of business or sector	National Parks, Recreation management, Tourism and Environmental education

Research experience	
Dates	January 1 st , 2008 - March 30 th , 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 13-26, 2009
Occupation or position held	Short Term Scientific Mission - EU COST Project FP0603 "Forest modeling"
Main activities and responsibilities	Calibration of forest growth models for alpine species. Acquisition of techniques and tools for computer modeling.
Hosting institution	Institut für Silviculture, Universität für Bodenkultur, Peter Jordan Strasse 82, Wien (Austria)
Dates	April 11 th , 2007 - June 9 th , 2007
Occupation or position held	Visiting researcher
Main activities and responsibilities	P.I.: "Spatio-temporal pattern of decline in Scots pine vitality show response to endogenous and exogenous stress factors".
Hosting institution	Swiss Federal Institute for Forest, Snow and Landscape research. Zürcherstrasse 111, 8903 Birmensdorf ZH (Switzerland)
Dates	September 15 th , 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 24 th , 2003 - November 1 st , 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