

## Curriculum Vitae

### Personal information

First name / Surname	<b>Andrea Maiorano</b>		
Address(es)	Via Regio Parco 37, Settimo Torinese (TO), Italy		
Telephone	+393493630063		
Mobile	+393493630063		
E-mail	maiorano.andrea@gmail.com		
Nationality	Italy		
Date of birth	12 April 1977		
Gender	Male		

### Personal statement and statement of intent

I started my research career at the University of Turin in 2003, with a fellowship (Italian 'Borsa di studio') at the Department of Agronomy, Forest and Land Management (*now: Department of Agriculture, Forest and Food Sciences, DISAFA*). I was in charge of analysing data of mycotoxin (fumonisins) contamination from different farm fields in Northern Italy and evidencing the relationships between mycotoxins, agricultural practices and meteorological factors.

In 2004 I started my PhD course in Agriculture, Forest, and Food Sciences. Research objectives included mainly the development of crop management strategies to reduce mycotoxin accumulation in cereals. During the first year of my PhD course, I started taking interest on the dynamic simulation of biophysical systems and the development of a first version of a simulation model system for the agronomic management of fumonisin contamination in maize grain was added to my PhD objectives. A training period (4 months) at the University of Wageningen (NL) at the beginning of 2007, gave me the opportunity to be trained on the basis of biophysical models development (MSc Course on 'System analysis' by Mark van Wijk).

The System Analysis approach and the development of process-based models were not studied disciplines at the Department DISAFA in Turin. Hence, during the PhD, the development of the model and the acquirement of new knowledge and skills related to process-based model development and implementation (applied mathematics, software development, model testing) were mainly obtained on my own initiative and based on an informal learning process. During the PhD research activity, on my own initiative, I also started to study water dynamics in maize kernels during maturation for their implications in mycotoxin contamination.

In 2007 I attained all my PhD objectives and I successfully defended my thesis at the beginning of 2008. The results of my PhD research activity were published (first author) in three international ISI journals (See publication list: A1-A2-A3).

From January 2008 to March 2010 I continued my research activity at the University of Turin. Research activity was based on the study of 1) the phenological development of the European corn borer (*Ostrinia nubilalis*) and its agronomic management, and 2) study of the maturation process in maize and its relationships with fungal infection and mycotoxin contamination. The results of this research activity were published (first author) in 2 international ISI journals (Publications A3-A4).

In August 2009 I submitted a project proposal for the 2009 Marie Curie IEF call, PEOPLE Program, 7th Framework Programme (Call FP7-PEOPLE-2009\_IEF, Scientific supervisor: Dr Marcello Donatelli). In July 2010 I was awarded the Marie Curie Fellowship for the project MIMYCS. The project was developed at the European Commission DG Joint Research Centre (JRC), and it was about the development of a framework of models (crop, insect borers, and fungi) simulating maize grain contamination by its main mycotoxins. Training objective of the project included the development of biophysical models, the development of independent model software components (C# language and Microsoft Visual Studio environment), and their integration in the modelling platform BioMA of the European Commission. The project was successfully completed in July 2012. Model development included: i) maize insect borers generic phenological model, ii) maize grain moisture during maturation model, iii) fungal development and mycotoxin synthesis model.

The project attracted also the interest of the company Syngenta Italy which supported the development of two models of the MIMYCS framework (insect pest model, and maize kernel moisture model). MIMYCS models were used and applied for impact studies under climate change scenarios in Europe, European corn borer chemical treatment management in Northern Italy (the model has been integrated in the decision support system *MaisExpert* <http://www.maisexpert.com/it> of the private company Syngenta Italy), methodological studies related to the modeling of insect pest phenological development. Partial results of the project MIMYCS have been published in three international ISI journals (first author), and in several international congresses (publications A6-A7-A8, from B3 to B11). Two more paper are under review by the ISI journals European Journal of Agronomy, and the Italian Journal of Agrometeorology (Publications H1, H2).

The development of the MIMYCS project allowed me to acquire several multidisciplinary and interdisciplinary skills related to several different aspects of model development (applied mathematics and algorithm development), climate change (impact analysis), independent and reusable software components development (object and component oriented software development), applied to three very different biological systems: pathogen-plant interaction, insect pest development and geographical distribution, water dynamics in maize kernels during development. The application of the new knowledge to such very different systems and the interaction of them increased also my analytical skills and the exploration of very different solutions in algorithm development and software architecture design.

During the development of the MIMYCS project I also worked as agrometeorologist for the European Commission, monitoring the development and forecasting yields of the main crops in Europe.

Thanks to the good results obtained during the development of the MIMYCS project my contract at the JRC was extended for one more year until July 2013. During this year my research activity included: agrometeorological analysis and yield forecast of the main crops in Europe (especially in Austria, Czech Republic, and Slovakia), contribution to the MARS Bulletin of the European Commission, implementation of models in the JRC modelling framework BioMA, further development of the project MIMYCS.

Thanks to the new skills acquired during the development of MIMYCS, in September 2013 I started working again at the University of Turin with a fellowship based on the simulation of soft and durum wheat grain quality aspects (protein content) using the model SiriusQuality1 and its calibration for the Italian conditions. The fellowship is on-going.

I have decided to apply for an AgreenSkills fellowship as I am very interested in

	<p>increasing the international dimension of my research profile working in one of the best research institutes in Europe such as the INRA. I am sure that such a research experience would boost my research career and will allow me to reach a position of professional maturity in France with an increased international dimension. The project that I will develop at the INRA will help me developing new skills in crop physiology and quality, model analysis and intercomparison, and uncertainty analysis, in an international environment including some of the best research institutes of the world (AgMIP-Wheat team). Considering also the skills acquired during my Marie Curie post-doc at JRC, I am confident that this project will give me a very competitive international profile in the field of agro-biological systems analysis and process-based model development and implementation, covering different aspects of agro-ecosystems.</p> <p>Hence, my mid-short term career objectives (next 2 years) include (i) improve and acquire new research skills and competences in cereal science, crop physiology, agro-meteorological modelling, climate change impact studies, uncertainty analysis, applied mathematics, algorithm and software development ii) publishing in international peer reviewed journals and conferences, iii) build a strong partnership with the INRA Grain Integrative Biology group in Clermont-Ferrand, iv) lay the foundations for my professional integration in France at the INRA or in one of the Institutes of the Agreenium consortium, (v) laying the foundations for future international collaborations and competitive projects. My long-term career objectives (5 years and over) include (i) reaching a recognised leading position in the scientific community in the analysis and modelling of agricultural biophysical systems, (ii) setting up a research team in France at the INRA or in one of the Institutes of the Agreenium Consortium, (iv) developing and maintaining an international research network allowing the development of international projects.</p> <p>Career breaks:</p> <ul style="list-style-type: none"> <li>- Graduated on 9 July 2003, I started my research career in 19 November 2003 at the University of Turin (IT). <i>Break of 133 days.</i></li> <li>- From 31 March 2010 to 16 July 2010. I left the University of Turin on 31 March 2010 because I was awarded a Marie Curie Fellowship for a project at the European Commission Joint Research Centre. The contract at the JRC started only in 16 July 2010 because of some JRC administrative issues that took more than 3 months to be solved. <i>Break of 107 days.</i></li> <li>- The contract at the JRC finished on 15 July 2013. I started working again at the University of Turin (IT) on 9 September 2013. <i>Break of 56 days.</i></li> </ul> <p><i>Total days of career break: 296.</i></p>
--	---

### Education and training

Location and dates	Turin, Italy 9 January 2008
Title of qualification awarded	PhD in Agriculture, Forest, and Food Sciences, University of Turin
Principal subjects/occupational skills covered	<p>Principal Subjects:</p> <ul style="list-style-type: none"> <li>- relationships between crop management systems and fungal diseases in cereals</li> <li>- design of crop management systems to improve cereal safety</li> <li>- development of a decision support system to control mycotoxin contamination in grain maize</li> <li>- process-based models of fungal diseases and insect pests in grain maize</li> </ul> <p>Occupational skills:</p> <ul style="list-style-type: none"> <li>- process-based modelling</li> </ul>

	<ul style="list-style-type: none"> <li>- crop management systems design</li> <li>- study of plant diseases</li> <li>- study of plant insect pest</li> <li>- field trials</li> <li>- statistical analysis</li> <li>- data gathering</li> <li>- writing of scientific and technical papers and reports</li> </ul>
Name of Institute	University of Turin, Faculty of Agriculture, Italy
Location and dates	Turin, Italy 09 July 2003
Title of qualification awarded	MSc (Italian 'Laurea', 5 years)
Principal subjects/occupational skills covered	<ul style="list-style-type: none"> <li>- Agronomy</li> <li>- Plant diseases</li> <li>- Insect pests</li> <li>- herbaceous and tree crops</li> <li>- agro-meteorology</li> <li>- agro-ecology</li> </ul>
Name of Institute	University of Turin, Faculty of Agriculture, Italy

### Work experience

Location and dates	Turin, Italy 9 September 2013 - today
Occupation or position held	Grant holder (6 months)
Main activities and responsibilities	Study of relationships between nitrogen application and wheat protein content in soft and durum wheat Calibration of existing models simulating nitrogen content in wheat grain for Northern Italy
Name of employer	University of Turin, Department of Agriculture, Forest, and Food Sciences
Location and dates	Ispra (VA), Italy 16 July 2012 – 15 July 2013
Occupation or position held	Grant holder (Cat. 30), Post-doc researcher
Main activities and responsibilities	Agrometeorological data analysis and crop forecast in Europe (MARS Bulletin) Model development and model software implementation (C#) Improvement of the modelling framework BioMA of the European Commission
Name of employer	European Commission Joint Research Centre
Location and dates	Ispra (VA), Italy 16 July 2010 – 15 July 2012
Occupation or position held	Marie Curie Fellow, Grant holder (Cat. 30), Post-doc researcher
Main activities and responsibilities	EU FP7 Marie Curie IEF Fellow (Call FP7-PEOPLE-2009_IEF – Contract 255149 – MIMYCS Project). European Commission JRC, Ispra (VA), Italy. Scientific supervisor: Dr. Marcello Donatelli. The main themes of research of the project were: Development of generic and reusable independent model software components Modelling of fungi development and mycotoxin contamination Modelling of maize insect borers phenological development

	<p>Modelling of biophysical processes related to maize plant development Climate warming effects on the system formed by maize crop –insect borers – toxigenic fungi</p> <p>Skills improved or acquired during the research activity and training: Applied mathematics Algorithm development Model development Programming logic including object- and component-oriented programming Climate change impact studies</p>
Name of employer	European Commission Joint Research Centre
Location and dates	Turin, Italy 10 January 2008 – 31 March 2010
Occupation or position held	Post-doc researcher, research fellow (Italian 'Assegno di ricerca')
Main activities and responsibilities	Modelling of the maize toxigenic fungus <i>Fusarium verticillioides</i> Modelling of the phenological development of the maize borer <i>Ostrinia nubilalis</i> Modelling of moisture content and water activity in developing maize kernels Designing of crop management system to manage cereal safety
Name of employer	University of Turin
Location and dates	Turin, Italy 1 December 2004 – 9 January 2008
Occupation or position held	PhD Student
Main activities and responsibilities	Relationships between crop management systems and fungal diseases in cereals Design of crop management systems to improve cereal safety Development of decision support systems to control fungal diseases in grain maize Process-based models of fungal diseases and insect pests in grain maize
Name of employer	University of Turin
Location and dates	Turin, Italy 19 November 2003 – 31 October 2004
Occupation or position held	Fellowship (Italian 'Borsa di Studio')
Main activities and responsibilities	Study of Relationships between meteorological factors, agronomic practices and mycotoxin contamination Data gathering in field trials Statistical analysis
Name of employer	University of Turin

### Languages

Mother tongue(s)	<i>Italian</i>				
Other language(s)	<b>Understanding</b>		<b>Speaking</b>		<b>Writing</b>
<i>European level (*)</i>	Listening	Reading	Spoken interaction	Spoken production	
<i>English</i>	C1	C1	C1	C1	C1
<i>Spanish</i>	C1	C1	C1	C1	C1
<i>French</i>	B1	B2	B1	B1	A2

(\* Common European Framework of Reference for Languages  
<http://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr>

## Academic Record

### Publications

#### Accepted, in press and published articles / papers:

##### **International peer reviewed (with impact factor)**

- A9. **Maiorano A**, Donatelli M, Validation of an insect pest phenological model for the European corn borer (*Ostrinia nubilalis* Hbn) in the Po Valley in Italy, Italian Journal of Agrometeorology, *Accepted for Publication*
- A8. **Maiorano A**, Cerrani I, Fumagalli D, Donatelli M, 2013. New biological model to manage the impact of climate warming on maize corn borers. Agronomy for Sustainable Development, In Press - Published on line October 2013 (<http://link.springer.com/article/10.1007%2Fs13593-013-0185-2>), DOI:10.1007/s13593--13-0185-2
- A7. **Maiorano A**, Bregaglio S, Donatelli M, Fumagalli D, Zucchini A, 2012. Comparison of modelling approaches to simulate the phenology of the European Corn Borer under future climate scenarios. Ecological Modelling, 245: 65-74, DOI: 10.1016/j.ecolmodel.2012.03.034
- A6. **Maiorano A**. 2012. A physiologically based approach for degree-day calculation in pest phenology models: the case of the European CornBorer (*Ostrinia nubilalis* Hbn.) in Northern Italy. International Journal of Biometeorology, 56(4): 653-659, DOI: 10.1007/s00484-011-0464-z
- A5. **Maiorano A.**, Mancini M.C., Reyneri A., 2010. Water interactions in maize grain during maturation: differences among commercial hybrids. Maydica, 55:209-217
- A4. **Maiorano A.**, Mancini M.C., 2010. Water relationships and temperature interactions in maize grain during maturation. Field Crop Research, 119: 304-307, DOI:10.1016/j.fcr.2010.07.019
- A3. **Maiorano A.**, Reyneri A., Magni A., Ramponi C. 2009. A decision-aid tool for evaluating the agronomic risk of exposure to fumonisins of different maize crop management systems in Italy. Agricultural Systems, 102:17-23, DOI:10.1016/j.agsy.2009.06.003
- A2. **Maiorano A.**, Reyneri A., Sacco D., Magni A., Ramponi C. 2009. A dynamic risk assessment model (FUMAgrain) of fumonisin synthesis by *Fusarium verticillioides* in maize grain in Italy. Crop Protection, 28:243-256, DOI:10.1016/j.cropro.2008.10.012
- A1. **Maiorano A.**, Blandino M., Reyneri A., Vanara F., 2008. Effects of maize residues on the *Fusarium* spp. infection and deoxynivalenol (DON) contamination of wheat grain. Crop Prot, 27:182-188  
DOI:10.1016/j.cropro.2008.10.012

##### **International Conference Papers**

- B11. **Maiorano A.**, Bregaglio S., Donatelli M., 2012. Comparison of modelling approaches to simulate the phenology of agricultural insect pests under future climate scenarios. Congress of the European Society of Agronomy, 20-25 August 2012, Helsinki, Finland
- B10. **Maiorano A.**, Fumagalli D., Donatelli M., 2012. Potential distribution and phenological development of the Mediterranean Corn Borer (*Sesamia nonagrioides*) under warming climate in Europe. Congress of the European Society of Agronomy, 20-25 August 2012, Helsinki, Finland
- B9. **Maiorano A.**, Donatelli M., 2012. Modelling maize grain moisture content during maturation and post-maturity dry-down. Congress of the European Society of Agronomy, 20-25 August 2012, Helsinki, Finland
- B8. **Maiorano A.**, Donatelli M., 2012. MIMYCS, A framework for simulating maize

kernels mycotoxin contamination in Europe. Congress of the European Society of Agronomy, 20-25 August 2012, Helsinki, Finland

B7. **Maiorano A.**, Fumagalli D., Donatelli M., 2012. Potential distribution and phenological development of the Mediterranean Corn Borer *Sesamia nonagrioides* in Europe under warming climate. International Environmental Modelling and Software Society Congress, 1-5 July 2012, Leipzig, Germany

B6. **Maiorano A.**, MIMYCS – A framework for simulating maize kernels mycotoxin contamination in Europe. Marie Curie Researchers Symposium, 25-27 September 2011, Warsaw, Poland

B5. **Maiorano A.**, Bregaglio S., Fumagalli D., Donatelli M., Models for pest development simulation under climate scenarios. 7th European Conference on Ecological Modelling, 30 May – 2 June 2011, Riva del Garda, Italy

B4. **Maiorano A.**, Rigamonti I., Baumgärtner J., DDM-Sim 0.1: A generic software component for time varying distributed delay models with attrition. 7th European Conference on Ecological Modelling, 30 May – 2 June 2011, Riva del Garda, Italy

B3. **Maiorano A.**, Donatelli M., Baruth B. 2010. Project MIMYCS: a simulation model system for simulating mycotoxin contamination in maize grain in Europe. XIth European Society of Agronomy Congress, 29 August – 3 September 2010, Montpellier, France

B2. **Maiorano A.**, Magni A., Ramponi C., Reyneri A. 2007. Système d'aide à la décision (SAD) pour l'évaluation du risque de contamination par les fumonisines dans le grain de maïs. Colloque Scientifique "Progres et perspectives de la recherche sur les mycotoxines de fusarium dans les cereals" Arcachon, France – 11, 12 et 13 Septembre 2007, pp 73-74

B1. Burato G., Maffioli G., **Maiorano A.**, Reyneri A. 2005. Field strategy for mycotoxin control in maize. In: Proceeding of "The World Mycotoxin Rorum – the third conference". noordwijk (NL), 10-11 november, p. 89

**National Conference Papers (Italy)**

C9. **Maiorano A.**, Donatelli M., 2012. Potential distribution and phenological development of *Sesamia nonagrioides* under climate change. Congress of the Italian Society of Agronomy, Bari, 19-21 September 2012.

C8. **Maiorano A.**, Donatelli M., 2012. Project MIMYCS: a simulation model system for simulating mycotoxin contamination in maize grain in Europe. Congress of the Italian Society of Agrometeorology, Palermo, 5-7 June 2012.

C7. **Maiorano A.**, Magni A., Ramponi C., Reyneri A. 2007. Development of a decision support system based on a model simulating fumonisin contamination in maize grain. Congress of the Italian Society of Agronomy, 13-14 September, Catania

C6. Reyneri A., **Maiorano A.**, Vanara F., 2006. Climate change and crop production. UNASA congress, 15-16 June, Agriculture Academy of Turin

C5. **Maiorano A.**, Maffioli G., Ramponi C., Reyneri A. 2006. Fumonisin contamination in maize grain: risk assessment during the field phase. 2nd National Congress on Mycotoxins in Foods, 16-18 October, Istituto Superiore di Sanità, Roma

C4. Reyneri A., Blandino M., **Maiorano A.**, Vanara F., 2005. Effects of the damage by the European Corn Borer on mycotoxin contamination in maize grain and strategies for its management. Congress of the Italian Society of Agronomy, 20-22 September, Foggia, Italy

C3. Reyneri A., Blandino M., **Maiorano A.**, Vanara F., 2005. Mycotoxin contamination in maize grain and effects of agronomic techniques influencing the crop cycle duration. Congress of the Italian Society of Agronomy, 20-22 September, Foggia, Italy

	<p>C2. Reyneri A., Blandino M., <b>Maiorano A.</b>, Vanara F., 2005. Control of mycotoxin contamination in maize grain production system. Rapporti Istisan, National Congress on Mycotoxins in Foods, 29-30 November 2004, Istituto Superiore di Sanità, Roma</p> <p>C1. Reyneri A., Blandino M., <b>Maiorano A.</b>, Vanara F., 2003. Agronomic techniques for the control of fusarium-toxins in maize grain during the field phase. Annals of the Agricultural Academy of Turin, 30 April 2003</p> <p><b>European Commission – Crop Yield Forecasts - MARS Bulletin</b> D1 – D16: Contribution to 16 issues of the European Commission Crop Yield Forecast – MARS Bulletin from January 2012 to July 2013 (<a href="http://mars.jrc.ec.europa.eu/Bulletins-Publications/">http://mars.jrc.ec.europa.eu/Bulletins-Publications/</a>).</p> <p><b>Italian technical journals (written in Italian – titles translated in English)</b> E5. <b>Maiorano A.</b>, Blandino M., Reyneri A., Vanara F., 2007. Management of maize residues to control mycotoxin contamination. L'Informatore Agrario, 38:51-54 E4. <b>Maiorano A.</b>, Magni A., Ramponi C., Reyneri A., 2007. A support system for the management of fumonisins in maize. L'Informatore Agrario, 22: 76-79 E3. <b>Maiorano A.</b>, Reyneri A., Maffioli G., Ramponi C., 2007. Risk assessment of fumonisin contamination in maize grain. L'Informatore Agrario, 7: 52-57 E2. <b>Maiorano A.</b>, Reyneri A. (2007). Maize and ochratoxins: the risks for pigs. Rivista di Suinicoltura, 9:46-51 F1. Reyneri A., Blandino M., Vanara F., <b>Maiorano A.</b>, 2005. Agricultural factors influencing mycotoxin synthesis. L'Informatore Fitopatologico, 3:3-10</p> <p><b>Spanish technical journals (written in Spanish – titles translated in English)</b> F2. <b>Maiorano, A.</b>, Blandino, M., Reyneri, A., Vanara F. (2008). Agricultural factors influencing mycotoxin synthesis in maize grain: the Italian experience. Tierras de Castilla y León, 146:77-81 F1. <b>Maiorano A.</b>, Reyneri A., (2008). Fumonisin contamination in maize grain in Italy: agricultural practices and decision support systems. Vida Rural, 273, 42-45</p> <p><b>Italian Regional Bulletins (written in Italian – titles translated in English)</b> G2. Blandino M., <b>Maiorano A.</b>, Reyneri A., 2004. Mycotoxin in maize: prevention and control. Regione Piemonte, Direzione Sviluppo dell'Agricoltura. Coordinators: T. Trevisan, A. Turletti G1. Blandino M., Reyneri A., Vanara F., Carnaroglio F., <b>Maiorano A.</b>, 2007. Mycotoxin in cereals. Regione Piemonte, Assessorato Agricoltura. Coordinatori: Trevisan, T., Turletti, A., Blandino, M.</p> <p><b>Submitted publications:</b> H1. <b>Maiorano A.</b>, Fanchini D., Donatelli M., MIMYCS.Moisture, a process-based model of moisture content in developing maize kernels, Submitted to European Journal of Agronomy, Submitted on 13 August 2013, <i>Under review</i></p>
Presentations as invited speaker	<p><b>Maiorano A.</b>, Modelling insect pest continental distribution, 6<sup>th</sup> Crop Growth Monitoring System Expert Meeting, European Commission Joint Research Centre, 12-13 November 2013, Ispra (VA) (<a href="http://mars.jrc.ec.europa.eu/mars/News-Events/The-6th-CGMS-Expert-Meeting">http://mars.jrc.ec.europa.eu/mars/News-Events/The-6th-CGMS-Expert-Meeting</a>)</p>
Books or books chapter author	<p><b>Maiorano A.</b>, Blandino M, Reyneri A. 2010. Fusarium Head Blight and DON contamination management in soft and durum wheat cultivation. In Soybean and Wheat Crops: Growth, Fertilization and Yield., Novapublishers, Eds. Samuel Davies, George Evans</p>



<p>Participation in open calls for proposals as contributor or leader</p>	<p>2009 – Seventh Framework Programme, Programme PEOPLE , Marie Curie Intra-European Fellowship, Call FP7-PEOPLE-2009_IEF. Project: <i>MIMYCS, A framework for simulating maize kernels mycotoxin contamination in Europe</i> (24 months). Results: Score 86.9/100, AWARDED. Project developed at the European Commission Joint Research Centre in Ispra (VA), Italy (July 2010 – July 2012)</p> <p>2012 – Seventh Framework Programme, Programme PEOPLE , Marie Curie International Outgoing Fellowship, Call FP7-PEOPLE-2012-IOF. Project: <i>GAPS, A flexible and generic model platform for simulating agricultural insect pest population dynamics</i> (24 months). Results: Score 82.1/100, Classified as “Proposal of good quality. Having passed all thresholds but for which funding is not available”, NOT AWARDED.</p> <p>2013 – Seventh Framework Programme, Programme PEOPLE , Marie Curie International Outgoing Fellowship, Call FP7-PEOPLE-2013-IOF. Project: <i>GAPS, A flexible and generic model platform for simulating agricultural insect pest population dynamics</i>. Results: Score 85.9/100, Classified as “Proposal of good quality. Having passed all thresholds but for which funding is not available”, NOT AWARDED.</p> <p>2013 – Italian Academy at Columbia University Fellowship Programme (1 semester). Submitted on 6 December 2013. Results expected in March 2014.</p>
<p>Graduate teaching as lecturer or training coordinator</p>	<p>October 2013 - Seminar (2 hours) "Modelli di simulazione in Ecologia Agraria", MSc Course on Agricultural Sciences, Agroecology module (Prof Amedeo Reyneri), Dep DISAFA, University of Turin</p> <p>June 2011 – One hour session during the Workshop "The software platform BioMA". During the 7<sup>th</sup> European Conference on Ecological Modelling (ECEM), 30 May - 2 June 2011, Riva del Garda, IT</p> <p>January 2011 - Seminar (2 hours) "MIMYCS, A simulation model system for simulating mycotoxin contamination in maize grain in Europe", Joint Research Centre of the European Commission, Institute of Environment and Sustainability</p> <p>October 2007 – 2 hours lesson during the MSc Course on Agricultural Sciences, Agroecology module (Prof Amedeo Reyneri), Dep DISAFA, University of Turin, IT</p> <p>Co-Supervisor of the BSc thesis by Mattia Ciro Mancini, 2009, “Effects of the maturation process on fumonisin contamination in maize grain”, University of Turin, Italy</p> <p>Co-Supervisor of the MSc thesis by Paolo Gariglio, 2010, “Corn-cobs as an alternative source of energy for drying maize grain”, University of Turin, Italy</p> <p>From 2005 to 2010, supervisor of four owner of fellowship (Italian ‘Borsa di studio’)</p>
<p>Awards and prizes, if any</p>	

### Collaboration and Networking

<p>Participation in collaborative projects funded by competitive programmes</p>	
<p>Partnerships or experience with industry</p>	<p>September 2003 – October 2004: Fellowship at the University of Turin funded by the company <i>Pioneer Hi-Bred Italy</i>. The research project was aimed at developing agronomic management strategies, including decision support systems tools, for reducing mycotoxin contamination in maize kernels.</p> <p>October 2011 – March 2013: Collaboration Agreement (JRC – n° 32773) between the EC Joint Research Centre and the company <i>Syngenta Italy</i> for 1) the validation of an insect pest (European Corn Borer, <i>Ostrinia nubilalis</i>) phenological model for Northern Italy, and 2) for the calibration and validation</p>

	of a model simulating maize kernel moisture content during maturation. The two models were developed during the development of the project MIMYCS which attracted the interest of Syngenta Italy which supported their development with data from the field for calibration and validation issues. The insect pest phenological model has been implemented in the Syngenta decision support system used to support their customers (MaisExpert System - <a href="http://www.maisexpert.com/it/home.aspx">http://www.maisexpert.com/it/home.aspx</a> ).
University or post-graduate programme leader	
Graduate teaching as lecturer or training coordinator	
Membership of professional bodies and committees	European Society of Agronomy International Environmental Modelling and Software Society International Society for Ecological Modelling Marie Curie Fellowship Association Italian Association of Agrometeorology

### Research management, Technology transfer, and Communication

Team management	
Technological platform management	
Consultancy for the public or private sector	

<b>Other experience and skills relevant to the application</b>	<p><i>PERSONAL SCIENTIFIC AND TECHNICAL TRAINING</i></p> <p>2013 - English course - European Level C1 (6 months), JRC, Ispra (VA), Italy</p> <p>2013 - Course on Clear Writing (2 days), JRC, Ispra (VA), Italy</p> <p>2012 - Workshop "Modelling Environments for Biophysical Modelling in Hydrology and Agriculture (BioMA and OMS3)", Joint Research Centre, Ispra (VA), Italy (5 days).</p> <p>2012 - Course on Object Oriented Programming and C#, JRC, Ispra (VA), Italy (5 days)</p> <p>2011 - Course on Project Management Fundamentals, JRC, Ispra (VA), Italy (3 days)</p> <p>2011 - English course - European Level B2(6 months), JRC, Ispra (VA), Italy</p> <p>2010 - Course on Scientific Writing, JRC, Ispra (VA), Italy (3 days)</p> <p>2008 - Course on Data Analysis and Programming Elements, ARPA Bologna, Italy (4 days)</p> <p>2008 - English course, The Shenker Institute of English, Turin, Italy (6 months)</p> <p>2008 - French course, Centre Culturelle Français, Turin, Italy (6 months)</p> <p>2007 - Master course on System Analysis, Simulation and System Management, Wageningen University, Wageningen, The Netherlands (4 months)</p> <p>2007 - Master Course on Spatial Statistics and GIS Modelling, Wageningen University, Wageningen, The Netherlands (4 months)</p> <p>2006 - Master course on GIS and Thematic cartography, Polytechnic of Turin, Italy (3 months)</p> <p>2006 - Course on statistics for PhD students, University of Turin, Italy (3 months)</p> <p><i>PERSONAL SKILLS AND COMPETENCES</i></p> <p>Good knowledge of agrometeorological data analysis</p> <p>Writing of scientific and technical articles, papers, reports</p> <p>Very good knowledge of programming language C#</p> <p>Good knowledge of the statistics software R-Cran</p>
--	--

	<p>Very good knowledge of development environment Visual Studio          Good knowledge of object-oriented and component-oriented programming          Good knowledge of Microsoft Visual Basic for Application (VBA)          Good knowledge of software for bibliographic databases like Mendeley, EndNote and Zotero          Very good knowledge of Office package (Word, Excel, Power Point, Visio)          Applied mathematics          Model development          Algorithm development</p> <p><i>INTERNATIONAL EXPERIENCES</i>          2012-2013: Grant holder at the European Commission's JRC (12 months)          2010-2012: Marie Curie Fellowship at the European Commission's JRC (24 months)          2007: 4 months at Wageningen University (PhD training).          2001: 9 months at the University of Cordoba, Spain (Erasmus Project)</p>
--	--

### Scientific References

Full name	<b>Marcello Donatelli</b>
Position	Institute Director
Institution	CRA – Consiglio per la Ricerca e la Sperimentazione in Agricoltura, Bologna, Italy
Email address	marcello.donatelli@entecra.it
Full name	<b>Bettina Baruth</b>
Position	Researcher
Institution	European Commission – Joint Research Centre
Email address	bettina.baruth@jrc.ec.europa.eu
Full name	<b>Marco Acutis</b>
Position	Full Professor
Institution	University of Milan
Email address	marco.acutis@unimi.it

### How did you find out about AgreenSkills?

<i>Please help us improve our call for submissions, by letting us know how you first heard of the AgreenSkills programme (e.g. university call for submissions, job mailing list/website, magazine advertisement etc.)</i>	Suggested by a colleague of the Department of Agricultural, Forest, and Food Sciences at the University of Turin, Italy
--	---