



Workshop on

Biodiversity in Agroecosystems

Milano, 24-25 February 2011

INVITED SPEAKERS

Stella AGOSTINI

Stella Agostini is Senior Researcher at the Agriculture Faculty of University of Milano. She has a PhD in Agriculture Engineering and several professional experiences in Spatial Planning. She is author of over 80 scientific and technical papers, and her research fields mainly concern farm buildings and rural land, focusing on: desing, recovering and re-use; rural vernacular heritage and biocultural heritage.

Paul BLACKWELL

His main research is currently in Bayesian statistics, particularly in ecology and environmental science. Much of that work involves developing methods to enable inference for stochastic processes. He is also interested in applied probability, modelling, simulation and statistics more generally, again often with biological applications. References are given on the publications page <http://paul-blackwell.staff.shef.ac.uk/papers.html>

Diego BREVIARIO

Diego Breviario has a long standing experience in molecular biology and genetics of Eukaryotes including yeast, animals and plants. For almost 29 years he has been analyzing structural and functional features of genes and DNA genomic sequences. He has cloned several genomic and cDNA sequences including the following plant gene families : alpha- and beta-tubulin, annexin, calcium-dependent protein kinases. Of recent, he has driven his attention on non coding genomic DNA sequences, particularly introns that are used in evolutionary genomic studies both as tools for establishing evolutionary distances (ILP for Intron Length Polymorphisms) and for detecting DNA polymorphisms or as tools for modulating gene expressions (IME for Intron mediated enhancement of gene expression). He is an associated Editor of Trangenic Research and acts as Referee for more than 20 International recognized plant scientific journals. He also acts as an advisor for the evaluation of National and International Grant applications among which MIUR (Italian Ministry for Research) Italian Universities ; CNR ; EMBO; BARD; NSF-USA, USDA, Newcastle University. He has been an invited speaker at both National and International Meetings and Congresses (ICGEB-UNIDO, Trieste ; NATO workshop , Kiev; International Symposium of Plant Cytoskeleton, Yalta ; AOX Symposium, Evora Portugal ; 2nd Generation Biofuels, Accra , Ghana). He has organized several National scientific events such as ; Expo dei sapori 2003-2004; Expo capitale umano e Innovazione 2006 ; Science for food-Festival della Scienza 2006. He has been tutoring more than 40 different young scientists (Master students; PhD students; contracters ; fellowships). He has been teaching in several Master Courses (Managers for scientific innovation, 2000 ; Bio-communication,2002 ; Biomasses and energy production). He has given seminars in several Foreigner Institutions (some : N.I.H Bethesda USA; E.MB.L. Heidelberg DE; Merck Sharp and Dhome ,West Point USA; NCSU Raleigh USA; CPRO-DLO, Wageningen, NL; CAAS, Beijing, China; Freiburg University, Freiburg, DE; NIAB, Cambridge, UK)

Anna CAROLI

Graduated in Veterinary Medicine at Milan University. Full professor at the University of Brescia in "General zootechnics and animal breeding" discipline at the Department of Biomedical Sciences and Biotechnology, Faculty of Medicine. She carried out her teaching activities mainly in genetic improvement of livestock production and biometrics applied to animal production. She developed an intense scientific activity documented by more than 350 works mainly related to animal genetics, animal husbandry and zootechnics, animal product quality, applied molecular biology, and genetic improvement of domestic animals. The scientific activity is focused on milk production and its quality, technology and nutrition. Besides her scientific experience in animal husbandry, breeding and biotechnology, she has developed her expertise in biometrics and bioinformatics analysis.

Paola DE SANTIS

Paola De Santis has been working for Bioversity International (formerly the International Plant Genetic Resources Institute) since 2000 under the "Productivity, Resilience and Ecosystem Services from Community Management of Diversity in Production Systems Project." She collaborates with national researchers and farmers from developing countries to conduct research on the conservation and use of biodiversity in agricultural ecosystems, in particular in centres of crop genetic diversity

From 2000 she assisted in the implementation of the global project "Strengthening the scientific basis of in situ conservation of agricultural biodiversity." This global project, implemented in Burkina Faso, Ethiopia, Hungary, Mexico, Morocco, Nepal, Peru, and Vietnam, provided tools and methods to build partnerships between agricultural researchers, conservation institutions and farmers to maintain and use crop genetic diversity. Since 2005 she has been supporting a global project on enhancing the use of local crop genetic diversity within farmer's production systems to reduce genetic vulnerability and crop damage from pest and diseases ("Managing agricultural biodiversity to control pests and diseases"). She has been leading the work in participatory diagnostic approaches within the project organizing and leading training courses on participatory approaches for Bioversity staff and national partners (researchers and farmers) in China, Ecuador, Morocco, and Uganda.

She recently co-authored a paper for the Proceedings of National Academy of Sciences (PNAS) on "*A global perspective of the richness and evenness of traditional crop-variety diversity maintained by farming communities*", published with 28 co-researchers from five continents, providing global indicators to monitor the loss of diversity in farmers' fields. Jarvis, DI, *et al.* 2008. 108; 5326-533.

Lisetta GHISELLI

Ph. D. in "Agrobiotechnology for tropical and subtropical crops" with a dissertation on "Genetic characterization of potato (*Solanum tuberosum* L.) landraces" at the University of Florence in 2002. From 2002 to the present, she has a research fellowships at the Department of Agronomy and Land Management at the University of Florence. In 2006-2007 she had a Contract Research at the DISAT. The scientific activity was mainly related to the following themes: 1) Nitrate accumulation in horticultural crops; 2) Evaluation of the genotype-environment interaction and optimisation of the agronomical management of fertilisation in horticultural crops; 3) Experimental field trial scheme realisation, data collection and sample analysis; 4) Statistical analysis of the data collected, analysis of variance, correlations; 5) In vitro cultivation of roots and tubers crops; 6) Molecular characterization techniques (DNA extraction and PCR amplification with SSR markers); 7) Role of nitrogen and environment on the yield of different genotypes of the main food crops; 8) Eco-physiological and nutritional indicators for yield in potatoes; 9) Nitrogen management in extra seasonal potato crop for a quality production; 10) Recover a genetic characterisation of old potato landraces of Tuscany (Cv. Rossa di Cetica, Turchesa) and Calabria (Cv. Viola Calabrese) ; 11) Valuation of the genetic components and the environment in the production of bioactive molecules in wheat; 12) Determination of micro and macroelements on vegetal matrices.

Gianni GILIOLI

Assistant Professor at the Biomedical Sciences and Biotechnology Department, School of Medicine, University of Brescia (Italy). Research interests. (i) Biomathematical modelling for

population and ecosystem study and management: single population dynamics, trophic web, parameter estimation in ecological modelling; (ii) Ecosystem management: conservation ecology, ecosystem services, invasive species, biodiversity; (iii) Eco-epidemiological models: disease transmission models of human and animal diseases; (iv) Human health and sustainable development in Sub-Saharan Africa: prevention and control of Arthropod-vectored diseases, management scheme for a sustainable use of resources in agro-pastoral communities; (v) Study and management of plant pest populations: pest population dynamics and control, sampling schemes, cost-benefit analysis and decision support in pest control.

Laura LORU

Laura Loru got a degree in Biological Sciences at the University of Sassari (Department of Zoology and Biological Anthropology). She received her PhD in "Monitoring and control of forest ecosystems in mediterranean environment" from the University of Sassari (Department of Plant Protection, Agricultural Entomology section).

Since the beginning of her research activity she got involved in studying freshwater macro zoobenthos of both lotic ecosystems, in order to value water quality with the use of the Extended Biotic Index, and lentic ecosystems, collaborating in a pluriannual research project concerning the biological control of mosquito by mean of the use of *Gambusia holbrooki* Girard, 1859.

Successively her research activity concerned the laboratory study of the interactions between Neuroptera Chrysopidae, an important group of predaceous insects utilized for the biological control of insect and mite pests in agriculture, and microbiological bioinsecticides.

During the Doctorate she collaborated to the national project CO.RI.BIO.: "Research on hazelnut to obtain high quality biological production" financed by Mi.P.A.A.F.; in particular she got involved in the "Management of pest hazelnut in Sardinia".

Recently she undertook the study of the biodiversity of an important group of phytophagous and predaceous insects, the Hemiptera Heteroptera (true bugs). She started her true bug-experience exploiting the high professional skills present at the Di.Va.P.R.A. of the Agriculture Faculty of Turin, then she got involved in the identification of the Heteroptera fauna collected during the last decade in a variety of sardinian natural and agricultural ecosystems by the Ecosystems Study Institute (CNR) of Sassari.

Luigi MARIANI

Luigi Mariani is a Senior agrometeorologist with experience in applied meteorology, climatology and mathematical modeling of agro-ecosystems. His previous professional experience includes: 1987 - 2001: manager of the Agrometeorological Service of Lombardy; 1990-1992: scientific responsible of the agrometeorological research unit in the project "Integrated research on the degradation of slopes mountains areas" (EPOCH - European Project On Climatic Hazards); 1992-1998: scientific responsible of the ERSAL' research unit in MEDALUS II and MEDALUS III (MEditerranean Desertification And Land Use), focused on static and dynamic climatology of the Italian area; 1996-1999: scientific responsible of ERSAL research group in MAP (Mesoscale Alpine Programme); 1997-1998: project leader of the ERSAL research group involved in the project ESTEC 12210 (Use of Meteosat for Dynamic Fade Restoration) of the European Space Agency; 1997-2006: President of the Italian Agrometeorological Association; 2006-2009: Vice-President of the Italian Agrometeorological Association; 2005-2007: contract professor of Physical Geography at Politecnico di Milano; 2000-2008: responsible of the meteo-climatological research unit in the research project "Progetto Valchiavenna", sponsored by CNR, Università degli Studi di Milano and Fondazione Cariplo with research activities on climatology of extreme events in the Alpine area; 2006-2008: research activities in RICLIC Warm project.

At present he works as independent professional and he is contract professor of Agrometeorology and Crop science at the Università degli Studi di Milano - Department of Crop Science, where he is involved in original research on micrometeorology, simulation models and analysis of land suitability. He participates to IPHEN (Italian Phenological Network), a national project for the real time production of phenological cartography for Vitis vinifera, Sambucus nigra, Cupressus sempervirens, Cupressus arizonica and Olea europaea.

Carlo RONDININI

Research Scientist in zoology, his main scientific interests are mapping and modelling animal distributions and setting conservation priorities worldwide. Co-responsible of the Red List Partnership agreement between Sapienza and IUCN, he is the coordinator of the Global Mammal Assessment since 2008. His current collaborations with a number of research institutions in Europe, the Americas and Australia are focussed on the development of global conservation strategies for mammals.

Piero SARDO

Born in Bra in 1946, Piero Sardo studied classics and philosophy. He was among the members of the first Commission of Free Radio, and director of the weekly newspaper *Brasette*. A journalist by trade, Sardo collaborates with various newspapers and television stations, including *L'Espresso*, *Slow*, *GenteViaggi*, *Panorama Travel*, *Panorama*, *Verde Oggi*, *Specchio*, *Il Sole 24 Ore* and *La Stampa*. He has been a key collaborator in the *Vini d'Italia* guide, and today is a member of the Final Commission for Tasting and Evaluation. He has authored several books for *Slow Food Editore* including *Il Buon Paese* (a guide to artisan foods of Italy), *Cheeses of Italy* and *Cheeses of Europe*.

Among the founders of *Slow Food*, Sardo has been the Vice President of *Slow Food*, and, in 1996 contributed in creating the *Ark of Taste*, a catalog of traditional breeds, variety and food products endangered by the industrial food production system.

He has also been President of the Scientific Ark Commission, establishing the criteria for selection and inclusion in the *Slow Food Ark of Taste*, which now lists more than 800 products all over the world.

In 2003 Piero Sardo became President of the *Slow Food Foundation for Biodiversity*, whose aim is to raise funds to support and coordinate projects in defense of biodiversity all over the world.

Piero Sardo draws the main strategies of the *Slow Food Foundation* and actively contributes in its projects by supervising all the activities and offering his great experience in the management of the projects: he regularly participates at the technical missions of the Foundation to visit the projects and to evaluate the achievements made.

Piero Sardo is *Slow Food*'s key spokesman for all the themes involving biodiversity projects, and he is regularly invited at national and international conferences to talk about the *Slow Food* strategies in sustainable agriculture and to illustrate the positive experience of the Foundation projects in supporting small scale producers.

His works:

Itinerario Slow "Orsitano e l'Arborea";

Il buon paese, 1994 e 2000, guide to the best Italian food production;

Formaggi d'Europa, 1997, guide to DOP and IGP Europe cheeses;

Formaggi d'Italia, 1999, guide to traditional Italian cheeses.