

# 109° Congresso della Società Botanica Italiana

## INTERNATIONAL PLANT SCIENCE CONFERENCE

Florence, 2 - 5 September 2014

### Programme

#### Tuesday 2 September 2014

13:00-19:00 Registration  
14:00-15:00 Opening Ceremony

#### Keynote lecture

15:00-15:30

- **Chiara Tonelli**, Milano IT (ERC Representative)  
(title to be announced)

#### (Topic I) Global Change, Biodiversity and Adaptation

*Plant responses to climate change*  
(Symposium 1)

15:30-19:00

- **Giampiero Maracchi**, Firenze IT (20 + 5 min)  
Climate changes and scenarios
- **Terry Callaghan**, Sheffield UK (20 + 5 min)  
Ecosystem change or stability and multiple causes
- **F. Stuart Chapin III**, Fairbanks USA (20 + 5 min)  
Ecosystem stewardship: sustainability strategies for a rapidly changing planet

#### Communications

- **Simon Pierce**  
Understanding the response of plant biodiversity to environmental perturbation using Grime's CSR theory
- **Consolata Siniscalco**  
Phenological analysis provides insights on the spatial distribution and on response to snowmelt of plant functional types in subalpine grassland
- **Michele Dalle Fratte**  
Relationships between climate and phenology of high elevation plants. A 7-years snow and phenology monitoring in the Italian Central Alps
- **Luca Bragazza**  
Persistent extreme climatic events reduce carbon accumulation in peatlands: mechanisms and quantification
- **Andrea Mondoni**  
Effects of climate change on seed germination and recruitment success of alpine plants

- **Giovanna Aronne**  
From cold mountains to warm coastal cliffs: insights for the future of a *Primula* species
- **Francesco Malfasi**  
Long-term vegetation dynamic in relation to climate change in the Italian Central Alps

Wednesday 3 September 2014

**(Topic I) Global Change, Biodiversity and Adaptation**

*Plant responses to climate change*  
(Symposium 2)

09:00-10:00

- **Giovanni Vendramin**, Firenze IT (20 + 5 min)  
Molecular markers, population genomics and adaptation to climate change of forest tree species
- **Sandy Knapp**, London UK (20 + 5 min)  
Botanical collections for understanding environmental change

**(Topic II) Plant and Cell Biology**

*Plant development and reproduction*  
(Symposium 1)

10:00-13:00

- **Donato Chiatante**, Varese IT (20 + 5 min)  
Development of the hidden half: primary and secondary roots
- **Silvia Coimbra**, Oporto PT (20 + 5 min)  
AGPs cross-talk in *Arabidopsis* pollen-pistil interaction
- **Fabio Fornara**, Milano IT (20 + 5 min)  
Network controlling seasonal flowering in rice

**Communications**

- **Stefano Del Duca**  
Factors involved in pollen tube growth and their importance in allergic sensitization
- **Alessandro Manzo**  
Characterization of volatile emission of Italian populations of orchids with different reproductive strategies
- **Maria Adele Signorini**  
Investigations on *Oxalis pes-caprae* in Italy. Morphological, anatomical and ultrastructural features of stigma and style and their possible relations with self-incompatibility
- **Giampiero Cai**  
Effects of acute heat stress on the female reproductive apparatus of *Lycopersicon esculentum* cv micro-tom
- **Livio Trainotti**  
A golven-like peptide at the crossroad between auxin and ethylene during peach ripening
- **Simona Masiero**  
Transcriptional regulation of egg cell specific genes in *Arabidopsis thaliana*

13:00-14:00 Lunch

## (Topic II) Plant and Cell Biology

### Plant cell dynamics and plasticity

(Symposium 2)

14:00-17:00

- **Chris Hawes**, Oxford UK (20 + 5 min)  
Shaping the endoplasmic reticulum
- **Alessandro Vitale**, Milano IT (20 + 5 min)  
Endoplasmic reticulum as protein storage compartment

### Communications

- **Simone Sello**  
Integration of plastids in the plant calcium signaling network revealed by the targeting of aequorin chimeras to chloroplast subcompartments
- **Giacomo Bartoli**  
Apoptotic hallmarks support the role of PCD in aerenchyma ontogenesis of *Egeria densa* Stem
- **Daniele Nocentini**  
Diversity of floral nectar composition in the tribe *Lithospermeae* (Boraginaceae)
- **Marco Mucciarelli**  
In vitro morphogenesis of *Arabidopsis* to search for novel endophytic fungi modulating plant growth
- **Andrea Andreucci**  
In vitro functional characterization of AQUA1: a new poplar (*Populus x euramericana* clone I-214) aquaporin involved in zinc stress
- **Antonio Slaviero**  
The use of ligninase enzymes to target the scarification of the seed coat: application for the propagation of the orchids *Himantoglossum adriaticum* and *Anacamptis morio*

17:00-19:00 Meeting of SBI Working Groups

**Thursday 4 September 2014**

## (Topic III) Biotechnology and Natural Resources

### Plant biotechnology for agriculture and environment

(Symposium 1)

09:00-11:00

- **Michele Morgante**, Udine IT (20 + 5 min)  
From one to the many genomes of a plant: the evolution of the grapevine pan-genome
- **Graziella Berta**, Alessandria IT (20 + 5 min)  
Reclamation of polluted or disturbed sites by revegetation and use of beneficial microorganisms

- **Robert Verpoorte**, Leiden NE (20 + 5 min)  
Metabolomic and Botany

#### Communications

- **Monica Ruffini Castiglione**  
*Vicia faba*: a model organism for plant cell biology studies assessing environmental pollution and bioremediation processes
- **Elisabetta Sgarbi**  
In vitro propagation of *Quercus robur* by plant form bioreactor

### (Topic III) Biotechnology and Natural Resources

#### Bioactive natural resources (Symposium 2)

11:00-13:30

- **Nunziatina de Tommasi**, Salerno IT (20 + 5 min)  
Plant chemical diversity in target identification and drug discovery

#### Communications

- **Barbara Sgorbini**  
Aromatic plants: from the aroma to herbal teas
- **Giacomo Mele**  
Secreted material and antimicrobial activity of *Sabira cacaliaefolia*
- **Alessandra Guerrini**  
HP-TLC bioautographic assay as a preliminary research tool to match chemical and biological properties of official plant extracts
- **Cinzia Sanna**  
Preliminary study of endemic plants of Sardinia as a source of new antiviral agents
- **Filomena Conforti**  
*Origanum vulgare* subsp. *viridulum*: a phytoalimurgic plant with inhibitory against human cancer cell proliferation
- **Alessandra Braca**  
Flavonoids and phenylpropanoids from *Phlomis kurdica* (Lamiaceae) as inhibitors of lactate dehydrogenase
- **Giovanna Certo**  
*Entada africana* (Mimosaceae) as a source of skin whitening agents
- **Manuela Mandrone**  
Phytochemical profile and biological activities evaluation of three species of *Hypericum*

13:30-14:30 Lunch

14.30-18.00 General Assembly of SBI members and other related celebrations

20.00 Social Dinner (Botanical Garden "Giardino dei Semplici" - Via Lamarmora, 2)

**Friday 5 September 2014**

Villa Bardini - Costa San Giorgio 2, Firenze

### **Session 1**

#### **(Topic IV) Landscape and Biogeography**

##### *Vegetation and Ecology*

##### *(Symposium 1)*

9:00-11:00

- **Carlo Blasi**, Roma IT (20 + 5 min)  
Mapping and assessment of ecosystems in Italy: the contribution of modern vegetation science
- **Frank Berendse**, Wageningen NE (20 + 5 min)  
Ecosystem functions and the mechanisms that control the species diversity in plant communities

#### **Communications**

- **Anna Maria Mercuri**  
Palynology applied to the study of climate change and human impact: pollen from archaeological sites as tool for the assessment of long-term local impact and human induced environments
- **Lara Reale**  
Reed-beds decline: new occurrences of a dramatic threat to biodiversity in Central Italy
- **Anna Guglielmo**  
Diacronic landscape changes: a case study on SE Sicily salt marshes
- **Sabina Burrascano**  
A dynamic key to integrate grassland and forest sustainable management in a global change perspective

#### **(Topic IV) Landscape and Biogeography**

##### *Biogeography and Taxonomy*

##### *(Symposium 2)*

11:00-13:00

- **Elena Conti**, Zürich CH (20+ 5 min)  
Diversification in Primulaceae s.s.: elucidating the roles of breeding systems and climatic cycles in evolutionary dynamics at different temporal and geographic scales
- **Federico Selvi**, Firenze IT (20 + 5 min)  
The family Boraginaceae: deep phylogeny, character evolution and still open taxonomic problems

#### **Communications**

- **Lorenzo Peruzzi**  
Recent advances in evolution and taxonomy of Liliaceae
- **Flavia Domizia Nardi**  
Traditional and molecular cytogenetic characterization of *Solidago* (Asteraceae) in Italy

- **Assunta Esposito**

Analysis of *Olea europaea* subsp. *europaea* biodiversity from Cilento, Vallo di Diano and Alburni National Park

## Session 2

### (Topic V) Historic Gardens and Vegetation

9:00-11:00

- **Luigi Zangheri**, Firenze IT (20 + 5 min)  
Trees and the cultural landscapes of World Heritage List
- **Massimo De Vico Fallani**, Roma IT (20 + 5 min)  
Trees of archaeological parks. History and types
- **Francesco Ferrini**, Firenze IT (20 + 5 min)  
“Historic gardens ecosystems”: can one provide public use and maintain the ecological balance?

### Communications

- **Paola Capone**, Salerno IT (10 + 5 min)  
From Salerno’s Minerva Garden to the illuminated herbarium of the Circa instans: a path with no boundaries
- **Maria Chiara Pozzana**, Firenze IT  
Presentation of “Giardino Bardini” and its restoring

11:00-13:00

**Visit to “Giardino Bardini”**

14:30-18:00

**Visit to “Giardino di Boboli”** (World Heritage List)  
**Meeting point “Entrata Annalena”** (Via Romana, 37)