

WEDNESDAY, SEPTEMBER 19th (Cont.)

09:45 – 10:00 *Giuliano G., Frusciante L., Valle G.*
Tomato QTL breeding: leads from the genome sequence

10:00 – 10:30 General discussion

10:30 – 11:30 **Coffee break & Poster presentation**
(from poster 7.01 to poster 7.20)

11:30 – 13:00 **Session 5 – Plant synthetic biology**
Chairpersons: *Faccioli P., Giuliano G.*

11:30 – 12:00 **Invited Lecture**
di Bernardo D.
Synthetic Biology: a perspective from mammals

12:00 – 12:15 *Di Salle P., Colantuono C., Gallo C., Traini A., Frusciante L., Chiusano M.L.*
Modeling molecular pathways based on gene expression and social network analyses: an example from *Arabidopsis thaliana*

12:15 – 12:30 *Colaiacovo M., Marchisio M.A., Stelling J., Caselle M., Faccioli P.*
miRNA-mediated regulatory circuits in peach: computational identification and dynamic simulation with a synthetic biology approach

12:30 – 13:00 General discussion

13:00 – 15:00 **Lunch break**

15:00 – 17:00 **Session 6 – Functional foods**
(in collaboration with INRAN)

Chairpersons: *Cardi T., Morelli G.*

15:00 – 15:30 **Invited Lecture**
Ferguson L.R.
Functional foods to reduce inflammation

15:30 – 15:45 *Ficco D.B.M., De Vita P., Luciani A., Vincentini O., Pettoello-Mantovani M., Silano M., Maiuri L., Cattivelli L.*
A decapeptide from Ω -secalin prevents the pathogenic inflammatory immune response of celiac disease

15:45 – 16:00 *Baima S., Maldini M., Natella F., Giusti A., Scaccini C., Morelli G.*
Improvement of broccoli sprouts nutritional value through manipulation of growth conditions

16:00 – 16:15 *Lago C., Landoni M., Doria E., Nielsen E., Pilu R.*
Constitution and study of a novel functional food: purple popcorn

16:15 – 16:30 *Stanca A.M., Tumino G., Baronchelli M., Pagani D., Reggiani F., Morcia C., Finocchiaro F., Ferrari B., Gianinetti A., Terzi V., Rizza F., Dimberg L., Germeier C.*
Genetic analysis of functional compounds in small grain cereals

16:30 – 17:00 General discussion

17:00 – 18:30 **Coffee break & Poster presentation**
(from poster 7.21 to poster 7.58)

18:30 **Poster removal**

19:30 **Social event: concert** (Basilica S. Pietro)

20:00 **Social Dinner & SIGA Poster Presentation Awards**
(Facoltà di Agraria)

THURSDAY, SEPTEMBER 20th

09:00 – 11:00 **Symposium**
Genomics of Quantitative Traits: from QTL to genes
Chairpersons: *Blanco A., Tuberosa R.*

Invited Lectures

09:00 – 09:30 *Yu J.*
Association mapping of genetic resources: achievements and future perspectives

09:30 – 10:00 *Pecchioni N.*
Adaptation to environment in diploid barley: from quantitatively inherited traits to QTLs and genes?

10:00 – 10:30 *Grando M.S.*
From a major QTL for monoterpene content in grape berries to functional validation of positional candidate gene *VvDXS*

10:30 – 11:00 *Salse J.*
Paleogenomics in plants: modeling of ancestors for modern species improvement

11:00 – 11:30 **Closing ceremony**
Blanco A., President of SIGA - Italian Society of Agricultural Genetics

UNDER THE PATRONAGE OF



WITH THE SUPPORT OF



SCIENTIFIC PROGRAMME

MONDAY, SEPTEMBER 17th

13:00 – 15:00 Registration and poster display

15:00 – 16:00 Opening ceremony

Welcome address by Academic and Local Authorities

Official opening

Blanco A., President of SIGA - Italian Society of Agricultural Genetics

16:00 – 19:30 Session 1 – Plant reproduction for crop improvement

(in collaboration with COST Action FA0903)

Chairpersons: Albertini E., Sharbel T.F.

16:00 – 16:30 Invited Lecture

Koltunow A.
Unravelling apomixis: asexual seed formation for agricultural crop improvement

16:30 – 16:45 Cremona G., Aiese Cighiano R., Termolino P., Paparo R., Consiglio M.F., Conicella C.
Histone hyperacetylation affects recombination in *Arabidopsis* male meiosis

16:45 – 17:00 Albertini E., Marconi G., Conner J., Galla G., Masiero S., Sharbel T.F., Colombo L., Barcaccia G., Ozias-Akins P., Falcinelli M.
Differential expression in sexual and apomictic genotypes of three model species strengthens a crucial role of APOSTART in the formation of seeds by apomixis

17:00 – 17:30 Invited Lecture

Lawit S.
Dupont Pioneer's paths towards self-reproducing hybrids

17:30 – 18:30 Coffee break & Poster presentation

(Session 1 and Session 2)

18.30 - 19:00 Invited Lecture

Mercier R.
FANCM limits meiotic crossover

19:00 - 19:30 General discussion

20:00 Welcome cocktail

TUESDAY, SEPTEMBER 18th

08:30 – 12:30 Session 1 (parallel) – Plant reproduction for crop improvement (cont.)

(in collaboration with COST Action FA0903)

Chairpersons: Koltunow A., Mazzucato A.

08:30 – 09:00 Invited Lecture

Sharbel T.F.
Evolutionary approaches to deciphering the functional switch from sexual to asexual (apomictic) reproduction in natural plant populations

09:00 – 09:30 Invited Lecture

Bouzayen M.
ARF and Aux/IAA proteins in the developmental transition leading to fruit set in tomato

09:30 – 09:45 Galla G., Sharbel T.F., Barcaccia G.

De novo sequencing and annotation of the *Hypericum perforatum* flower transcriptome

09:45 – 10:00 Mascheretti I., Rossi V.

The role of the chromatin remodelling factor nfc102 in the maize flowering pathway

10:00 – 11:30 Coffee break & Poster presentation

(Session 3)

11:30 – 11:45 Mizzotti C., Mendes M.A., Caporali E., Schmittger A., Kater M.M., Battaglia R., Colombo L.
Maternal control of fertilization and seed development

11:45 – 12:00 Cecchetti V., Petrocelli V., Falasca G., Altamura M.M., Costantino P., Cardarelli M.
Auxin and jasmonic acid interaction in the control of late stamen development in *Arabidopsis thaliana*

12:00 – 12:30 General discussion

08:30 – 12:30 Session 2 (parallel) – New insight into plant transgenic world

Chairpersons: Allavena A., Filippone E.

08:30 – 09:00 Invited Lecture

Daniell H.
Recent advances in chloroplast genetic engineering for non-food applications

09:00 – 09:15 Rosellini D., Ferradini N., Nicolai A., Veronesi F.

Selectable marker genes: innovations for the next generation of genetically modified crops

09:15 – 09:30 Avesani L., Merlin M., Gecchele E., Falorni A., Pezzotti M.

Perspectives for autoimmune diabetes prevention using plants

09:30 – 09:45 Pompa A., De Marchis F., Paciotti S., Persichetti E., Bellucci M.
Use of tobacco plants as bioreactors for the production of human enzymes

09:45 – 10:00 Egidi E., Janni M., Sestili F., Ceriotti A., D'Ovidio R., Lafiandra D., Kasarda D.D., Vensel W.H., Masci S.
Production of wheat transgenic plants to unravel the mechanism of the maturation process of LMW-GS

10:00 – 11:30 Coffee break & Poster presentation

(Session 3)

11:30 – 11:45 Moschetti L., Tundo S., Janni M., Sella L., Gazzetti K., Giardina T., Favaron F., D'Ovidio R.
Overexpression of the xylanase inhibitor TAXI-III reduces *Fusarium* head blight symptoms in durum wheat

11:45 – 12:00 Coppola M., Conesa A., Corrado G., Rao R.
PPs network of transgenic tomato plants constitutively expressing prosystemin

12:00 – 12:30 General discussion

12:30 – 13:00 SIGA Young Researcher Awards - 2012

Chairpersons: Blanco A., Filippone E.

12:30 – 12:45 "Francesco D'Amato" Award for Agricultural Genetics

Guerra D.
Identification of a protein network interacting with TdRF1, a wheat RING ubiquitin ligase with a protective role against cellular dehydration

12:45 – 13:00 "Francesco Sala" Award for Plant Breeding

Pinosio S.
Large-scale detection of rare variants via pooled multiplexed Next-Generation Sequencing: towards next generation Ecotilling

13:00 – 14:30 Lunch break

14:30 – 17:00 Session 3 – New routes to biodiversity

Chairpersons: Baldoni L., Pecchioni N.

14:30 – 15:00 Invited Lecture

Springer N.M.
Genomic and epigenomic variation among maize inbreds

15:00 – 15:15 Bulgarelli D., Rott M., Schlaeppli K., Ver Loren Van Theemat E., Schulze-Lefert P.
Revealing the structure and assembly cues for *Arabidopsis* root-inhabiting bacterial microbiota

15:15 – 15:30 Venturini L., Ferrarini A., Zenoni S., Tormielli G.B., Fasoli M., Buson G., Tononi P., Zago E., Zamperin G., Minio A., Pezzotti M., Delledonne M.

De novo assembly of transcriptome for improvement of reference annotation and identification of varietal diversity

15:30 – 15:45 Acquadro A., Scaglione D., Portis E., Lai Z., Knapp S.J., Rieseberg L., Lanteri S.
Next-Generation Sequencing in *Cynara cardunculus*: transcriptome analysis and SNP discovery across domestic and wild taxa

15:45 – 16:00 Biagetti E., Ferrarini A., Benazzo A., Bellucci E., Bitocchi E., Giardini A., Minio A., Rau D., Rodriguez M., Attene G., Bertorelle G., Delledonne M., Nanni L., Papa R.
Tagging the signature of domestication in the common bean using RNA-Seq genotyping

16:00 – 16:15 Palombieri S., Botticella E., Sestili F., Massi A., Mantovani P., Bovina R., Lafiandra D.
Optimization of a durum wheat TILLING platform to improve grain yield and quality

16:15 – 16:30 Ercolano M.R., Ferriello F., Sacco A., D'Alessandro R., Minio A., Venturini L., Ferrarini A., Barone A., Delledonne M., Frusciantè L.
Tomato 'San Marzano' and 'Vesuviano' secrets revealed by genome sequencing

16:30 – 17:00 General discussion

17:00 – 18:30 Coffee break & Poster presentation

(Session 4 and Session 6)

18:30 – 20:30 SIGA General Assembly

WEDNESDAY, SEPTEMBER 19th

08:30 – 10:30 Session 4 – Heterosis and QTLs: theory and practice

Chairpersons: Barcaccia G., Frascaroli E.

08:30 – 09:00 Invited Lecture

Moreau L.
Genetic architecture of European maize: multiparental QTL mapping and insights into heterosis

09:00 – 09:15 Pea G., Pè M.E., Landi P., Frascaroli E.
Toward the fine mapping of a heterotic locus in maize

09:15 – 09:30 Rey N.A., Saccardo F., Pagnotta M.A.
Assessment of the genetic stability in globe artichoke hybrids and evaluation of their parents by means of SSR molecular markers

09:30 – 09:45 Graziani M., Maccaferri M., Salvi S., Paux E., Feuillet C., Sanguineti M.C., Massi A., Tuberosa R.
Progress in the positional cloning of QYld.idw-3B, a major QTL for grain yield in durum wheat