

International Conference

# FROM SEED TO PASTA III

A SUSTAINABLE DURUM WHEAT CHAIN  
FOR FOOD SECURITY AND HEALTHY LIVES



FSTP3

Bologna - Italy, 19-21 September 2018

Sala 20 maggio 2012, Regione Emilia-Romagna

Via della Fiera, 8 - Bologna



**PROGRAM**

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*Wheat Initiative*

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**Ayele Badebo**

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**Domenico Lafiandra**

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**Luca Ruini**

*Barilla,  
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**Yehoshua Saranga**

*Hebrew University,  
Israel*

**Rosanna Simeone**

*University of Bari,  
Italy*

**Cristobal Uauy**

*John Innes Centre,  
United Kingdom*

## INVITED SPEAKERS

**Maricelis Acevedo**  
(Cornell University, USA)

**Eduard Akhunov**  
(Kansas State University, USA)

**Karim Ammar**  
(CIMMYT, Mexico)

**José Luis Araus**  
(University of Barcelona, Spain)

**Filippo Bassi**  
(ICARDA, Morocco)

**Michael Baum**  
(ICARDA, Morocco)

**Brian Beres**  
(Agriculture Agri-Food, Canada)

**Eugenia Bergamaschi**  
(Confagricoltura Emilia Romagna Region, Italy)

**Antonio Blanco**  
(University of Bari, Italy)

**Hans Braun**  
(CIMMYT, Mexico)

**Marina Carcea**  
(CREA, Italy)

**Pasquale Casillo**  
(Casillo Group, Italy)

**Aldo Ceriotti**  
(CNR, Italy)

**Scott Chapman**  
(CSIRO, Australia)

**José Crossa**  
(CIMMYT, Mexico)

**Pasquale De Vita**  
(CREA, Italy)

**Assaf Distelfeld**  
(University of Tel Aviv, Israel)

**Elias Elias**  
(North Dakota State University, USA)

**Tzion Fahima**  
(University of Haifa, Israel)

**Agata Gadaleta**  
(University of Bari, Italy)

**Luud Gilissen**  
(University of Wageningen, The Netherlands)

**Marco Gobetti**  
(University of Bolzano, Italy)

**Carlos Guzman Garcia**  
(CIMMYT, Mexico)

**Ron Knox**  
(Agriculture Agri-Food, Canada)

**Yue Jin**  
(USDA-ARS, USA)

**Barbara Laddomada**  
(CNR Italy)

**Evans Lagudah**  
(CSIRO, Australia)

**Peter Langridge**  
(Wheat Initiative, Germany)

**Francesco Loreto**  
(CNR, Italy)

**Marco Maccaferri**  
(University of Bologna, Italy)

**Stefania Masci**  
(University of Tuscany, Italy)

**Annamaria Mastrangelo**  
(CREA, Italy)

**Marina Mastromauro**  
(Pastificio Attilio Mastromauro, Italy)

**Pierluigi Meriggi**  
(Horta, Italy)

**Luciano Mondardini**  
(Pavan, Italy)

**Craig Morris**  
(USDA-ARS, USA)

**Francesco Pantò**  
(Barilla G. e R. F.lli spa, Italy)

**Enrico Pè**  
(Scuola Superiore Sant'Anna, Italy)

**Curtis Pozniak**  
(University of Saskatchewan, Canada)

**Svsai Prasad**  
(ICAR, India)

**Conxita Royo**  
(IRTA, Spain)

**Roberto Ranieri**  
(Open Fields srl, Italy)

**Luca Ruini**  
(Barilla, Italy)

**Yehoshua Saranga**  
(University of Jerusalem, Israel)

**Daria Scarano**  
(ISEA, Italy)

**Wolfgang Spielmeier**  
(CSIRO, Australia)

**Valeria Terzi**  
(CREA, Italy)

**Cristobal Uauy**  
(John Innes Centre, UK)

- 08.30-09.00 Registration of participants
- 09.00 **OPENING SESSION AND WELCOME ADDRESSES\***  
*Chairs: Roberto Tuberosa (University of Bologna, Italy)*  
*Curtis Pozniak (University of Saskatchewan, Canada)*
- Paolo De Castro**  
*(V. President of Agricultural Commission & Rural Development European Parliament)*
- Simona Caselli**  
*(Agriculture Counselor of Emilia Romagna Region)*
- Roberto Tuberosa**  
*(Conference Chair - University of Bologna, Italy)*
- Giorgio Cantelli Forti**  
*(President of National Agricultural Academy, Italy)*
- Eugenia Bergamaschi**  
*(President of Confagricoltura - Emilia Romagna Region, Italy)*
- 09.30 **One century of durum wheat breeding: An Italian legacy**  
**Antonio Blanco** *(University of Bari, Italy)*
- 10.00 **An industrial perspective for a more sustainable and safer pasta production**  
**Luca Ruini** *(Barilla G. e R. F.II spa, Italy)*
- 10.30 **OPENING KEYNOTE\***  
**Durum wheat genomics: From sequencing to breeding**  
**Curtis Pozniak** *(University of Saskatchewan, Canada)*
- 11.00 *Coffee break*
- 11.30-13.00 **SESSION 1\***  
**LEVERAGING THE TETRAPLOID WHEAT GENOMES**  
*Chairs: Luigi Cattivelli (CRA, Italy)*  
*Assaf Distelfeld (University of Tel Aviv, Israel)*
- 11.30 **The wild emmer wheat genome**  
**Assaf Distelfeld** *(University of Tel Aviv, Israel)*
- 11.50 **The durum wheat genome**  
**Annamaria Mastrangelo** *(CREA, Italy)*
- 12.10 **Editing the wheat genome**  
**Eduard Akhunov** *(Kansas State University, USA)*
- 12.30 **Rht18 semi-dwarfism reveals a new height-reducing mechanism in wheat**  
**Wolfgang Spielmeier** *(CSIRO, Australia)*
- 12.50 Discussion
- 13.00 *Lunch*

14.10-15.30 **SESSION 2\*****TETRAPLOID WHEAT GENETIC RESOURCES FOR THE IMPROVEMENT OF DURUM AND BREAD WHEAT***Chairs: Tzion Fahima (University of Haifa, Israel)**Edward Akhunov (Kansas State University, USA)*14.10 **Signature of selection sweeps in the tetraploid wheat germplasm***Marco Maccaferri (University of Bologna, Italy)*14.30 **Yr15 gene (*WTK1*) encodes two kinase-like protein domains and confers broad-spectrum resistance to stripe rust***Tzion Fahima (University of Haifa, Israel)*14.50 **Harnessing wild wheat alleles to enhance yield stability and productivity of modern wheat***Yehoshua Saranga (University of Jerusalem, Israel)*15.10 **Characterization of Ethiopian genetic resources for durum wheat***Enrico Pè (Scuola Superiore Sant'Anna, Italy)*15.30 *Coffee break* and poster viewing16.30-18.45 **Oral presentations selected from abstracts***Chairs: Anna Mastrangelo (CREA, Italy)**Wolfgang Spielmeier (CSIRO, Australia)*16.30 **Pan-Transcriptome analysis of 13 elite durum wheat varieties spanning the complete breeding era decades***Danara Ormanbekova (University of Bologna, Italy)*16.45 **Selection for uniform grain dimensions and germination during wheat domestication***Moran Nave (University of Tel Aviv, Israel)*17.00 **Deciphering the genetic basis and molecular defense mechanisms of spot blotch disease resistance of durum wheat: An emerging threat to wheat production in South-East Asia***Chethana Chethana (University of Dharwad, India)*17.15 **Durum and bread wheats share common resistance genes to *Zymoseptoria tritici****David Milliot-Stoclin (INRA, France)*17.30 **A wide collection of wild emmer accessions to recover novel diversity for yellow rust resistance***Elisabetta Mazzucotelli (CREA, Italy)*17.45 **Equipping durum wheat with a major QTL for resistance to Fusarium diseases transferred from *Thinopyrum elongatum* and its pyramiding with valuable genes from *Th. ponticum****Ljiliana Kuzmanovic (University of Tuscia, Italy)*18.00 **Mining the gene pool for novel resistance sources to *Zymoseptoria tritici* in Tunisian durum wheat landraces***Amor Yahyaoui (CIMMYT, Mexico)*18.15 **Polymorphisms in the *TdDRF1* gene sequence distinguish the A and B genome copies***Patrizia Galeffi (ENEA, Italy)*18.30 **Status of durum wheat genetic resources at ICARDA***Athanasios Tsivelikas (ICARDA, Morocco)*

08.30-11.00 **SESSION 3**

**ENHANCING YIELD POTENTIAL AND YIELD STABILITY OF DURUM WHEAT**

*Chairs: Conxita Royo (IRTA, Spain)  
Evans Lagudah (CSIRO, Australia)*

08.30 **Decades of breeding scab resistant durum wheat in North Dakota: Challenges and successes**

*Elias Elias (North Dakota State University, USA)*

08.50 **Stem rust resistance in durum, particularly on sources of resistance to Ug99**

*Yue Jin (USDA-ARS, USA)*

09.10 **Protecting yield loss through multi-pathogen resistance genes: Benefits to durum wheat?**

*Evana Lagudah (CSIRO, Australia)*

09.30 **Map-based cloning of FHB resistance QTL in durum wheat**

*Agata Gadaleta (University of Bari, Italy)*

09.50 **Genomic selection in durum wheat**

*José Crossa (CIMMYT, Mexico)*

10.10 **High-throughput phenotyping to enhance wheat yield potential**

*Scott Chapman (CSIRO, Australia)*

10.30 *Coffee break* and poster viewing

11.00-12.00 **SESSION 4**

**MANAGING A SUSTAINABLE DURUM PRODUCTION FOR FOOD SECURITY**

*Chairs: Agata Gadaleta (University of Bari, Italy)  
Scott Chapman (CSIRO, Australia)*

11.00 **Exploring G x E x M synergies to enhance durum wheat production**

*Brian Beres (Agriculture Agri-Food, Canada)*

11.20 **Durum wheat nitrogen management: From monitoring to application and more**

*José Luis Araus (University of Barcelona, Spain)*

11.40 **A decision support system for durum wheat management**

*Pierluigi Meriggi (Horta, Italy)*

12.00-13.00 **Oral presentations from abstracts**

*Chairs: Pasquale De Vita (CREA, Italy)  
Brian Beres (Agrifood, Canada)*

12.00 **Genetic dissection of Fusarium head blight resistance in durum wheat**

*Giuseppe Condorelli (University of Bologna, Italy)*

12.15 **Improving Fusarium head blight resistance in durum wheat**

*Barbara Steiner (IFA, Austria)*

- 12.30 **Nitrogen response of old durum wheat cultivars compared to new released varieties in Morocco**  
Ali Amamou (*INRA, Morocco*)
- 12.45 **Effect of fertilizer source and timing of application on cadmium uptake of durum wheat**  
Shana Forster (*North Dakota State University, USA*)
- 13.00 *Lunch*
- 14.15-16.15 **SESSION 5**  
**DURUM WHEAT BREEDING TO FACE CLIMATE CHANGE**  
Round Table moderated by: **Filippo Bassi and Karim Ammar**  
*Participants:*
- Karim Ammar (*CIMMYT, Mexico*)
  - Filippo Bassi (*ICARDA, Morocco*)
  - Pasquale De Vita (*CREA, Italy*)
  - Ron Knox (*Agriculture Agri-Food, Canada*)
  - Conxita Royo (*IRTA, Spain*)
  - Daria Scarano (*ISEA, Italy*)
  - Svsai Prasad (*ICAR, India*)
- 16.15 *Coffee break* and poster viewing
- 17.00-18.45 **Oral presentations from abstracts**  
*Chairs: Enrico Pè (Scuola Superiore Sant'Anna, Italy)*  
*Barbara Steiner (University of Vienna, Austria)*
- 17.00 **Cas9 endonuclease-mediated modification of the *BRASSINOSTEROID INSENSITIVE 1* gene of wheat without genomic integration of recombinant DNA**  
Nagaveni Budhagatapalli (*IPK, Germany*)
- 17.15 **Breeding Australian durum wheat for quality**  
Gururaj Kadkol (*Tamworth Agricultural Institute, Australia*)
- 17.30 **Genetic improvement of Chilean durum wheat (*Triticum turgidum L. var. durum*) germplasm through integrated breeding approaches**  
Andres Schwember (*Pontificia Universidad Católica, Chile*)
- 17.45 **Genetic dissection of traits associated with drought and heat adaptation of durum wheat**  
Khaoula El Hassouni (*ICARDA, Morocco*)
- 18.00 **Phenotypic plasticity of root architecture among wild emmer wheat introgression lines promote drought tolerance**  
Harel Bacher (*Hebrew University of Jerusalem, Israel*)
- 18.15 **Adaptive traits to improve durum wheat yield in drought and crown rot environments**  
Samir Alahmad (*University of Queensland, Australia*)
- 18.30 **How to breed for a combination of high yield with high grain protein content?**  
Matthias Rapp (*University of Hohenheim, Germany*)

08.30-10.30 **SESSION 6****ENHANCING DURUM QUALITY AND HEALTHINESS***Chairs: Stefania Masci (University of Tuscia, Italy)**Craig Morris (USDA-ARS, USA)*8.30 **Durum wheat quality improvement at CIMMYT***Carlos Guzman Garcia (CIMMYT, Mexico)*8.50 **RE-evolution of durum wheat by resorting the *Hardness* locus***Craig Morris (USDA-ARS, USA)*09.10 **Celiac disease, non-celiac wheat sensitivity***Luud Gilissen (University of Wageningen, The Netherlands)*09.30 **Conventional and biotechnological approaches to improve durum healthiness***Stefania Masci (University of Tuscia, Italy)*09.50 **Bioactive compounds in durum wheat***Marina Carcea (CREA, Italy)*10.10 **Durum wheat products with improved quality and nutritional value***Marco Gobetti (University of Bolzano, Italy)*10.30 **Phenolic acids in durum wheat: genetic control, genomic studies and breeding perspectives***Barbara Laddomada (CNR, Italy)*10.50 *Coffee break* and poster viewing11.30-13.00 **Oral presentations selected from abstracts***Chairs: Marina Carcea (CREA, Italy)**Luud Gilissen (University of Wageningen, The Netherlands)*11.30 **Engineering the coeliac disease genes in durum and bread wheat by CRISPR/Cas9***Susana Sanchez-Leon (IAS-CSIC Spain)*11.45 **Optimization of inulin and barley addition on technological and structural properties of durum wheat spaghetti using a mixture design approach***Youkabet Zarroug (EISAT, Tunisia)*12.00 **Pasta as a vehicle of bioactive compounds: how technology can help to deliver high quality products***Alessandra Marti (University of Milan, Italy)*12.15 **Digestibility of processed durum wheat with increased resistant starch***Marina Corrado (Quadram Institute Bioscience, UK)*12.30 **Deoxynivalenol detoxification in transgenic durum wheat confers resistance to Fusarium head blight and Crown Rot diseases reducing grain mycotoxin contamination***Giulia Mandalà (University of Tuscia, Italy)*12.45 **Characterization of couscous quality parameters in relation to physico-chemical technological and biochemical profiles in two different durum wheat varieties***Daaloul Olfa (INRA, Tunisia)*13.00 *Lunch*

14.00-15.45 **SESSION 7\*****INNOVATION IN THE DURUM WHEAT-PASTA CHAIN****Round Table** moderated by **Roberto Ranieri** (*Open Fields srl, Italy*)**Short summary on the innovations of pasta supply chain in the last 100 years****Roberto Ranieri** (*Open Fields srl, Italy*)**Keep Adding Value to Pasta World****Francesco Pantò** (*Barilla G. e R. F.Ili spa, Italy*)**Nutritional and healthy pasta claims****Marina Mastromauro** (*Pastificio Attilio Mastromauro, Italy*)**Effect of the patent “Gluten Friendly” on pasta****Pasquale Casillo** (*Casillo Group, Italy*)**High tech pilot tool for researchers to investigate ingredients and pasta performances under industrial conditions****Luciano Mondardini** (*Pavan, Italy*)**Traceability of the pasta supply chain****Valeria Terzi** (*CREA, Italy*)15.45-17.45 **SESSION 8\*****OPPORTUNITIES AND PERSPECTIVES IN WHEAT RESEARCH****Chairs:** **Roberto Tuberosa** (*University of Bologna*)**Peter Langridge** (*Wheat Initiative*)**CONGRESS KEYNOTE LECTURE****International collaboration on wheat improvement****Hans Braun** (*CIMMYT, Mexico*)**Global vision of durum and bread wheat research perspectives****Peter Langridge** (*Wheat Initiative*)**The PRIMA project: What role and opportunities for the durum value chain in the Mediterranean Basin?****Round table** moderated by **Aldo Ceriotti** (*CNR and EPSO*)

- **Maricelis Acevedo** (*Cornell University, USA*)
- **Michael Baum** (*ICARDA, Morocco*)
- **Francesco Loreto** (*CNR, Italy*)
- **Conxita Royo** (*IRTA, Spain*)

17.45 **CLOSING KEYNOTE\*****A glimpse into the future of durum breeding****Cristobal Uauy** (*John Innes Centre, UK*)18.15 **Concluding remarks****CLOSING & AWARDS CEREMONY**

\*In the signed sessions simultaneous translation (English/Italian) will be provided.

## SESSION 1.

### LEVERAGING THE TETRAPLOID WHEAT GENOMES

- P.1.01**      **Fine-Mapping of *QShm.ubo-2BS*, a major QTL for resistance to soil-borne cereal mosaic virus (SBCMV)**  
Matteo Bozzoli (*University of Bologna, Italy*)
- P.1.02**      **The ancient Mediterranean durum wheat quality QTLome assessed by DArTseq-SNP markers**  
José Miguel Soriano (*IRTA, Spain*)
- P.1.03**      **Micro RNA response to chronic and short-term nitrogen deprivation in durum wheat seedlings**  
Diana Zuluaga (*CNR, Italy*)
- P.1.04**      **Molecular characterization of Italian durum wheat landraces**  
Alberto Masoni (*University of Firenze, Italy*)
- P.1.05**      **The exploitation of genetic resources and next generation breeding way open new perspectives to increase durum wheat adaptation to drought stress**  
Valentina Buffagni (*University of Parma, Italy*)
- P.1.06**      **Association mapping for quality traits in a durum wheat collection**  
Adelina Olga Larsen (*INTA, Argentina*)
- P.1.07**      **Genome wide association study reveals novel quantitative loci for osmotic adjustment under drought stress in durum wheat**  
Giuseppe Emanuele Condorelli (*University of Bologna, Italy*)
- P.1.08**      **Chlorophyll fluorescence as a proxy to identify QTLs for heat-stress tolerance in durum wheat**  
Eder Licerio Grolí (*University of Bologna, Italy*)
- P.1.09**      **Genomic scan in durum wheat reveals regions controlling adaptation to the heat-prone conditions of the Senegal River**  
Amadou Tidiane Sall (*University of Dakar, Senegal*)

## SESSION 2.

### TETRAPLOID WHEAT GENETICS RESOURCES FOR THE IMPROVEMENT OF DURUM AND BREAD WHEAT

- P.2.10**      **Tetraploid wild species in improvement bread and durum wheat**  
Aigul Abugaliyeva (*Kazakh Scientific Research Institute, Kazakhstan*)
- P.2.11**      **Genetic architecture of semolina yield and of its components in durum wheat (*Triticum turgidum* spp. *durum*)**  
Pierre Roumet (*INRA, France*)
- P.2.12**      **Mapping of QTLs for resistance to stem rust in tetraploid wheats**  
Francesca Desiderio (*CREA, Italy*)
- P.2.13**      **Genetic markers associated to arbuscular mycorrhizal colonization in durum wheat**  
Daniela Marone (*CREA, Italy*)
- P.2.14**      **Assessment of some quality and yield components traits in old and modern Tunisian durum wheat varieties under rainfed condition**  
Cyrine Robbana (*University of Sciences of Bizerte, Tunisia*)

- P.2.15**      **Discrimination of wheat varieties in the field by hyperspectral imaging on canopies**  
Martin Ecartot (*INRA, France*)
- P.2.16**      **A Candidate Gene Analysis of QTLs for Root Growth Angle in Durum Wheat**  
Danara Ormanbekova (*University of Bologna, Italy*)
- P.2.17**      **Whole plant phenotyping to select climate-ready durum wheat genetic resources**  
Michela Janni (*CNR, Italy*)
- P.2.18**      **Restoration Conservation and Characterization of Lost Genetic Diversity of Wheat Landraces from Israel and Palestine**  
Sivan Frankin (*Volcani Center, Israel*)

### **SESSION 3.**

#### **ENHANCING YIELD POTENTIAL AND YIELD STABILITY OF DURUM WHEAT**

- P.3.19**      **Registration of “Hammadi” a new Moroccan durum wheat Variety**  
Ali Amamour (*INRA, Morocco*)
- P.3.20**      **Idéotype SUD - Idea and approach. France and Portugal collaborates for the characterization of wheat varieties more tolerant to water and heat stress**  
Ana Sofia Almeida (*Ministry of Agriculture, Portugal*)
- P.3.21**      **Environmental Influence on Quality Parameters of Some Durum Wheat Varieties Grown in Algeria**  
Abdelkader Benbelkacem (*INRA, Algeria*)
- P.3.22**      **Idéotype SUD - Results. France and Portugal collaborates for the characterization of wheat varieties more tolerant to water and heat stress**  
Stéphane Jézéquel (*Arvalis institut du Végétal, France*)
- P.3.23**      **First durum wheat cultivar for dry land areas in Chile?**  
Christian Alfaro Jara (*Instituto de Investigaciones Agropecuarias, Chile*)
- P.3.24**      **Losses in grain yield and quality of Chilean Triticum durum production. Impact of climate change?**  
Dalma Castillo (*Instituto de Investigaciones Agropecuarias, Chile*)
- P.3.25**      **Genomic selection and genome scan to identify valuable durum wheat germplasm for heat stress**  
Hafssa Kabbaj (*ICARDA, Morocco*)
- P.3.26**      **Irrigation Effects on Quality Characteristics of Durum Wheat in Tunisia**  
Rifka Hammami (*INRA, Tunisia*)
- P.3.27**      **Genetic dissection of root architectural traits and their association with drought adaptation in durum wheat**  
Khaoula EL Hassouni (*ICARDA, Morocco*)
- P.3.28**      **Genetic dissection of fusarium head blight resistance in durum wheat (*Triticum turgidum* ssp *durum*)**  
Giuseppe Emanuele Condorelli (*University of Bologna*)
- P.3.29**      **Genetic characteristics of heterosis of wheat (*Triticum* L.)**  
Afet Dadash Mammadova (*Azerbaijan National Academy of Sciences, Azerbaijan*)
- P.3.30**      **Indian durum wheat - its importance and potential for pasta industry**  
SV Sai Prasad (*ICAR-IARI, India*)

## SESSION 4.

### MANAGING A SUSTAINABLE PRODUCTIN FOR FOOD SECURITY

- P.4.31**      **Diversity and Correlation analysis in Durum Wheat (*Triticum aestivum* L) Germplasm**  
Muhammad Ashfaq (*University of the Punjab, Pakistan*)
- P.4.32**      **GPDur Project: Genetic and Phenotypic evaluation of durum wheat for simultaneous improvement of grain yield and protein content**  
Delphine Hourcade (*ARVALIS, France*)
- P.4.33**      **Phenotypic and genotypic diversity in an Argentinian durum wheat (*Triticum turgidum* L. var *durum*) panel**  
Ana Laura Achilli (*CERZOS, Argentina*)
- P.4.34**      **Varietal Investigation of Durum Wheat Targeting Industrial Production of Semolina and Pasta in Nepal**  
Dhruba B. Thapa (*Nepal Agricultural Research Council, Nepal*)
- P.4.35**      **Enhancing grain yield by knock down Grain Weight 2 genes in durum wheat**  
Francesco Sestili (*University of Tuscia, Italy*)
- P.4.36**      **Multi-environmental analysis of 49 trials conducted in the Mediterranean basin and Mexico for the dissection of the genetic basis of grain yield in *Triticum durum* Desf**  
Giuseppe Sciara (*University of Bologna, Italy*)
- P.4.37**      **Wheat rust surveillance and monitoring in Sicily 2016-2018**  
Biagio Randazzo (*AS.A.R., Italy*)
- P.4.38**      **Effect of silicon on durum wheat growth and drought stress tolerance**  
Sourour Ayed (*University of Carthage, Tunisia*)
- P.4.39**      **Monsanto's Beachell-Borlaug International Scholars Program**  
Edward Runge (*Texas A&M University, USA*)

## SESSION 5.

### DURUM WHEAT BREEDING TO FACE CLIMATE CHANGE

- P.5.40**      **Paving the path of durum wheat hybrid: Identification of heterotic combinations and flowering genes**  
Priyanka Gupta (*University of Bologna, Italy*)
- P.5.41**      **State of research on wheat as a strategic crop in the Senegal River Valley**  
Madiama Cisse (*University of Cheikh, Senegal*)
- P.5.42**      **EMPHASIS on the network of European plant phenotyping infrastructures and on its Italian node Phen-Italy**  
Michela Janni (*CNR, Italy*)
- P.5.43**      **Improved Septoria tritici blotch disease control using variety mixtures**  
Sarrah Ben M'Barek (*CRRGC, Tunisia*)
- P.5.44**      **Genomic regions influencing yield stability in durum**  
Meriem Zaïm (*ICARDA, Morocco*)

## **SESSION 6.**

### **ENHANCING DURUM QUALITY AND HEALTHINESS**

- P.6.45**      **Gluten forming capacity of Argentinean durum wheat genotypes (*Triticum durum* Desf) is related to cultivar's intrinsic gluten strength and protein levels**  
Marta Miravalles (*University of Sur, Argentina*)
- P.6.46**      **Development of functional durum wheat pasta derived by waste material from the brewing process**  
Laura Gazza (*CREA, Italy*)
- P.6.47**      **Deoxynivalenol content in less refined milling fractions of durum wheat employing an innovative technology**  
Alessandro Cammerata (*CREA, Italy*)
- P.6.48**      **The effect of acorn (*Quercus ilex*) flour addition to pasta quality**  
Youkabed Zarroug (*ESIAT, Tunisia*)
- P.6.49**      **The organic treatments on commodities and environment: the efficacy of the Natural Pyrethrum**  
Stefano Cherubin (*Newpharm, Italy*)

## **SESSION 7.**

### **INNOVATION IN THE DURUM WHEAT-PASTA CHAIN**

- P.7.50**      **Characterization of the seed proteome of *Triticum durum* varieties selected for their different immunogenic potential**  
Sara Graziano (*University of Parma, Italy*)
- P.7.51**      **Effects of *Opuntia ficus-indica* cladodes in functional bread made with Sicilian durum wheat landraces**  
Rosaria Bognanni (*CNR, Italy*)
- P.7.52**      **Phenotyping of old and modern durum wheat genotypes for gliadin composition in relation to health quality**  
Michele Andrea De Santis (*University of Foggia, Italy*)

## **SESSION 8.**

### **OPPORTUNITIES AND PERSPECTIVES IN WHEAT RESEARCH**

- P.8.53**      ***Ae. tauschii* introgression into durum wheat**  
Manel Othmeni (*University of Nottingham, UK*)
- P.8.54**      **From Kazakhstan based on microsatellite markers**  
Shynar Anuarbek (*University of Kazakh, Kazakhstan*)
- P.8.55**      **From plant breeding to industrial process: Integrated data management based on a Research Resource Planning**  
Rudy Mezino (*Doriane, France*)

## REGISTRATION

### Registration Fees On Site

<b>PARTICIPANTS</b> .....	€ 430,00
<b>STUDENTS &amp; GRADUATE STUDENTS</b> .....	€ 280,00

#### The Fee includes:

*Participation to the scientific sessions, Welcome reception, Coffee break & lunches as in the program\*, Congress kit, Certificate of attendance, Gala Dinner\**

*\*These services for registrations onsite could be not available.*

## SIMULTANEOUS TRANSLATION

Simultaneous translation (English/Italian) will be provided in the following Sessions:

- Opening Session
- Session 1
- Session 2
- Session 7
- Session 8
- Closing Keynote

## CONFERENCE VENUE

### **SALA 20 MAGGIO 2012, REGIONE EMILIA-ROMAGNA**

Via della Fiera, 8 - 40127 Bologna Italy

#### **How to reach the Conference venue:**

**Bus Line 35** Direction “Facoltà di Agraria”, Bus Stop “Viale della Fiera”

The ticket price is Euro 1,50 and it is possible to buy it directly on the bus.

The bus stop is 130 m from the congress venue.

**Bus Line 38** Direction “Fiera Aldo Moro”, Bus Stop “Fiera Aldo Moro”

The ticket price is Euro 1,50 and it is possible to buy it directly on the bus.

The bus stop is 130 m from the congress venue.

#### **SHUTTLE SERVICE - ONLY COSMOPOLITAN & HOLIDAY INN HOTEL**

It will be available a free shuttle service /from/to the Conference Venue each day:

#### **19, 20 and 21 September**

##### MORNING

h. 08.00 - HOTEL COSMOPOLITAN → Conference Venue

h. 08.05 - HOTEL HOLIDAY INN → Conference Venue

##### EVENING

h. 18.30 - CONFERENCE VENUE → Hotel Cosmopolitan & Hotel Holiday Inn

## **GALA DINNER**

**Thursday 20 September 2018**

### **Hotel Savoia Regency\*\*\*\***

Via del Pilastro, 2 - 40127 Bologna

### **SHUTTLE SERVICE - ONLY FROM COSMOPOLITAN & HOLIDAY INN HOTEL**

h. 19.45 - HOTEL COSMOPOLITAN → Hotel Savoia Regency

h. 19.50 - HOLIDAY INN → Hotel Savoia Regency

## **SPECIAL AWARDS**

### **For young scientists (< 35 years of age)**

The Young Investigator Awards recognize the outstanding quality of the symposium contribution and early career trajectory of graduate students/postdoctoral researchers.

Therefore, the Scientific Committee will evaluate all the oral and poster presentations and the best of each category will receive a special prize (Euro 500, 00 for the two best oral presentations, Euro 250 for the two best poster presentations) and a certificate.

The names of the awardees will be announced during the Closing Ceremony (Friday, September 21, 2018).

## **POSTERS SESSION**

Posters dimension: 70cm width x 100cm height

Set up date and time: Wednesday 19 September - from 8.30

Dismantling date and time: Friday 21 September - from 12.00 to 18.00

Posters can be hang by pins (a kit will be provided by the Organizing secretariat)

## **USEFUL CONTACTS**

### **Bologna Airport Guglielmo Marconi**

Tel. +39 051 6479647

Website: [www.bologna-airport.it](http://www.bologna-airport.it)

### **Bus Transportation**

Webiste: [www.tper.it](http://www.tper.it)

### **Taxi Service**

Tel. + 39 051 372727

Tel. + 30 051 4590

### **Emergency**

Tel. + 39 112

### **Organizing Secretariat Avenue media - onsite**

Mob. + 39 348 2487176



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## ORGANIZING SECRETARIAT



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