

On the occasion of the 150th anniversary of the birth of Carlotta Strampelli, countess Parisani (1868-1926), wife and collaborator of Nazareno Strampelli, the Accademia Nazionale delle Scienze detta dei XL and ENEA (*Italian National Agency for New Technologies, Energy and Sustainable Economic Development*) have launched the first edition of the Carlotta Award, in recognition of the significant contribution of women scientists to the advancement of knowledge in the field of wheat genetics and breeding research. The Carlotta Award 2018 is assigned by an International Jury composed by Hélène Bergès, Paola Bonfante, Emilia Chiancone, Kellye Eversole, Patrizia Galeffi, Wendy Harwood, Elisabetta Lupotto, Stefania Masci, Monica Mezzalama, Conxita Royo.

The *Wheats & Women International Conference* aims to present and share the latest research experiences, new approaches and technologies in wheat research. Wheat varieties are going to face increasing challenges, including climate changes, production must be economically and ecologically sustainable, harvest must be safe and possess nutritional and technological qualities.

The *Wheats & Women International Conference* provides the ideal framework for the first edition of the Carlotta Award.

Scientific Committee: Amedeo Alpi, Paola Bonfante, Emilia Chiancone, Patrizia Galeffi, Simon Griffiths, Peter Langridge, Marina Carcea, Enrico Porceddu, Matthew Reynolds, Conxita Royo, Roberto Tuberosa.

Organizing Secretariat:

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Carlotta Award 2018

Wheats & Women



WHEATS & WOMEN International Conference

CARLOTTA AWARD 2018

Rome, June, 14th – 15th 2018

Marconi Hall,
National Research Council (CNR)
Piazzale Aldo Moro, 7 - Roma



PROGRAMME

Thursday, June 14th

- 9.00: **Welcome addresses**
EMILIA CHIANCONE
President, Italian National Academy of Sciences
ALDO CERIOTTI
Director, IBBA, Italian National Research Council
MASSIMO IANNETTA
Head of Biotechnologies and Agroindustry Division, ENEA, IT
ANDREAS BOERNER
President Designate, EUCARPIA
- 10.00 **Opening lecture**
The Wheat Initiative and its role in coordinating global wheat research
ALISA-NAOMI SIEBER, JKI, DE
- 10.30 – 10.50 Coffee break
- Session 1: Breakthrough discoveries that will shape research on wheat**
Chairpersons: PATRIZIA GALEFFI,
MICHELE MORGANTE
- 10.50 - 11.30 The reference sequence of wheat and IWGSC phase II: ensuring a full genomics toolbox for wheat
HÉLÈNE BERGÈS, *International Wheat Genome Sequencing Consortium*
- 11.30 – 12.10 Genome engineering in wheat - from GM to gene editing
WENDY HARWOOD, John Innes Centre, UK
- 12.10 – 12.50 The durum wheat genome reveals the signature of 10,000 years of selection
LUIGI CATTIVELLI, *Genomics Research Centre, Council for Agricultural Research and Economics, IT*
- 12.50 – 13.05 Genome size reduction following allopolyploidization events in wheat
INBAR BARIAH, *Ben-Gurion University, IL*
- 13.05 – 14.30 LUNCH BREAK
- Session 2: New breeding approaches for sustainability and food security**
Chairpersons: AMEDEO ALPI, CARLA CEOLONI
- 14.30 – 15.10 Wheat breeding on a global change scenario
CONXITA ROYO, *Scientific Director of The Breeding Programme, IRTA, ES*

- 15.10 – 15.50 Leveraging the root angle QTLome to enhance climate resilience in durum wheat
ROBERTO TUBEROSA, *Department of Agricultural Sciences, University of Bologna, IT*
- 15.50 – 16.30 The Golden Gate Bridge between wheat research and breeding
VIKTOR KORZUN, *KWS LOCHOW GMBH, DE*
- 16.30 – 17.10 Durum ideotype for a 4°C warmer world when all farmers will be females
FILIPPO M. BASSI, *ICARDA, MO*
- 17.10 – 17.25 Using wild relative introgressions for improved photosynthesis
AMANDA BURRIDGE, *University of Bristol, UK*
- 17.25 – 17.40 Doubled haploid production in durum wheat (*Triticum turgidum* subsp. *Durum* desf.) by microspores culture, gynogenesis and interspecific hybridization
OLFA SLAMA-AYED, *National Agronomic Institute of Tunisia (INAT), University of Carthage, TN*

Friday, June 15th

- Session 3: Improving wheat quality for processing, health and nutritional value**
Chairpersons: EMANUELE MARCONI,
STEFANIA MASCI
- 10.00 – 10.40 Plant genetic resources for improving wheat quality
ANDREAS BOERNER, *IPK Gatersleben, DE*
- 10.40 – 11.20 The nutritional value of the *Triticum* species
MARINA CARCEA, *Council for Agricultural Research and Economics, IT*
- 11.20 – 11.50 Coffee break
- 11.50 – 12.05 Breeding and quality of soft-textured durum wheat
LAURA GAZZA, *Council for Agricultural Research and Economics, IT*
- 12.05 – 12.20 Comparative physiological response of winter wheat varieties under fhb stress
VALENTINA SPANIC, *Agricultural Institute Osijek, HR*
- 12.20 – 12.35 The carotenoid biosynthetic and catabolic genes in wheat and association with yellow pigments
PASQUALINA COLASUONNO, *University of Bari "Aldo Moro", IT*

12.35 – 14.00 LUNCH BREAK

- Session 4: Agriculture and 2030 Agenda (the future of farming)**
Chairpersons: HÉLÈNE BERGÈS, ENRICO PORCEDDU
- 14.00 – 14.15 Genetic study of *Fusarium Head Blight* (FHB) resistance in durum wheat
ANGELICA GIANCASPRO, *University of Bari "Aldo Moro", IT*
- 14.15 – 14.55 Towards sustainable food and agriculture systems
ANDREA SONNINO, *Biotechnologies and Agroindustry Division, ENEA, IT*
- 14.55 – 15.35 Market-Based value chains and farming technologies
ROBERTO RANIERI, *Openfields, IT*
- 15.35 – 15.50 Boosting a healthier agriculture: identification of resistance genes for durum wheat cultivars more resistant to rust diseases
ANNA MARIA MASTRANGELO, *Council for Agricultural Research and Economics, IT*
- 15.50 – 16.05 Polymorphisms in the A and B genome copies of the *DRF1* gene are able to cluster a collection of durum wheat lines
CRISTINA CANTALE, *Biotechnologies and Agroindustry Division, ENEA, IT*
- 16.10–17.10 **Carlotta Award 2018**
- Emilia Chiancone**, *President, Italian National Academy of Sciences*
- Roberto Lorenzetti**, *Director, Rieti State Archives, MiBACT*
- A Representative of the Carlotta Parisani Strampelli family will award the prize

Winner talk

Wheat genomics and immunity
KSENIA KRASILEVA, *Norwich Research Park, UK*

17.10 Conclusions