Curriculum Vitae LUCIA COLOMBO

Current Position.
From 2010, Full Professor in General Botany, Dipartimento di Bioscienze, Università degli Studi di Milano, Italy

Previous position.
2005 to 2010 Associate Professor, General Botany, Dipartimento di Biologia, Università degli Studi di Milano, Italy.
1999 to 2005 Assistant Professor, General Botany, Dipartimento di Biologia Università degli Studi di Milano, Italy.
1998-1999 Scientist, Plant Developmental Genetics, Dipartimento di Genetica e Biologia dei Microorganismi, Università degli Studi di Milano, Italy.
1993-1997 Post doc Plant Developmental Genetics, Plant Research International- University of Wageningen, The Netherlands.

Education.
1993 PhD in Molecular and Cellular Biology, Dipartimento di Genetica e Biologia dei Microorganismi, Università degli Studi di Milano Italy.
1989 Degree in Biological sciences (thesis in Plant Genetics), score 110/110 with laude.

Bibliometric indicators: Lucia Colombo has 95 peer reviewed publication. She has *h index* of 45 (scopus), 51 (Google scholar). Citation 5717 (scopus), 8168 (Google scholar). Having a h-index higher than 30 she has been included in the list of 'Italian top scientist', (http://www.topitalianscientists.org/).

Management activities
2020. Member of the evaluation group (GEV) - Sub area 5 that is involved in the 2015-2019 national quality evaluation system for universities and research bodies.
From **2019** coordinator of CusMiBio (Centre of the University and School of Milan for Bioscience Education), a UMIL center to improve Science Education in High Schools.
2014 to **2019.** Head of the Department of Biosciences, Università degli Studi di Milano, Italy. In the 2018, the Biosciences Department has been selected as one of the 13 Italian Department of Excellence in the area 05 (biological sciences).
2010 to **2014** Coordinator of the Master Course in Molecular Biology of the Cell, Università degli Studi di Milano, Italy.
2011 to **2014**. Director of the Botanical Garden 'Città Studi, Università degli Studi di Milano, Italy
2008 to **2014** member of the directory board of the Italian Botanical Society
From **2008** Member of the directory board of the PhD school in Molecular and Cellular Biology Università degli Studi di Milano, Italy
2000 to **2008** Member of directory board of the PhD school in Plant Biology, Università degli Studi di Milano, Italy.

Research Grants in the last 10 years
2020-2023 PI, EU Marie Curie STAFF Exchange project (PolyPLOID)
2019-2022; Coordinator, PRIN project 2017
2019-2023: PI, EU Marie Curie STAFF Exchange project (MAD)
2018-2021: PI, Fondazione Cariplo granted project (WAKE-APT).
2015-2020: PI, EU Marie Curie STAFF Exchange project (SEX SEED)
2014-2019: PI, EU project (PRO-CROP)

2014-2017; Coordinator, PRIN project 2017
2011-2015 Coordinator, EU Marie Curie STAFF Exchange project (EVO-CODE)
2010-2014: PI, EU Marie Curie Initial Training Network (SysFLOW).

Professional membership
Member of the Italian Botanical Society
The international Society of Sexual Plant Reproduction

Honours and Awards
2003; award by the President of the Italian Republic, Mr. Ciampi for the outstanding research in plant development and plant biotechnology.
2003; award of the Journal 'Le Scienze' for the outstanding research in plant development and plant biotechnology.
1997; Marie Curie Reintegration fellowship to start a group in developmental biology at the Università degli Studi di Milano, Italy
1993-1995; Marie Curie post doc fellowship (1993-1995) to spend two years at Plant Research International, Wageningen to study the genetic control of flower development.
1993; Post Doc fellowship from Accademia Nazionale dei Lincei
1993 Best manuscript in Plant Genetics in (as Ph.D student). The award was given by the Italian Society of Plant Genetics.
1989; Best thesis in Plant Genetic. The award was given by the Italian Society of Plant Genetics.

Referee for International Journal and editorial board membership.
Co-editor in 2015 of a special edition for Plant Reproduction and Frontiers in Plant Sciences. Reviewer for the following international journals: Science, Plant Journal, PLoS Biology, PLoS Genetics, Nature, Nature Communication, Plant Physiology, Plant Reproduction, Mechanisms of Development, Journal of Experimental Botany, Plant Cell, Development.

Referee for national and International Granted Agencies
In the last 10 years she has been in the panel of the following granting agencies: Ministero dell'istruzione, dell'università e della ricerca (MIUR) Italy; National Science Foundation (NSF), USA; Israel Science Foundation (ISF), Israel; United States Department of Agriculture (USDA), USA; Agence nationale de la recherche (ANR), France; Science Foundation Ireland (SFI), Ireland; Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO), Netherlands.

Main Contribution to Dissemination of Sciences
She has been the initiator of the workshop series named "Molecular Control of Flower Development", which she has organized with my group in 2007 (first edition). Subsequent editions were organized in 2009 and 2015 (Spain), 2011 and 2017 (Italy), 2013 and 2019 (France). She has also initiated in 2006, the International PhD school of plant development in Maratea (Italy). Since then a Plant Developmental school has been organized every year in Germany except for 2012 when she has organized this event again in Siena (Italy). These two initiatives have promoted plant development and flower development studies in Europe and have as special focus the interaction between world-wide leaders in the field of flower development and young scientists.
She has contributed to the Fascination of Plant Day in all of the editions to promote Plant science among the general public. Furthermore, she has been invited several times to give lectures in public events organized to promote sciences among society. Since 2019 she is the coordinator of of CusMiBio (Centre of the University and School of Milan for Bioscience Education), a UMIL center to improve Science Education in High Schools.

National and International teaching activities

In the last 10 years I have been teaching General Botany to bachelor students; Reproductive Strategies and Developmental Genetics to the master students at the University of Milan.
In 2014 to 2015, I have taught at the University of Rio as Foreign Professor in Plant Developmental Biology (two weeks course each year).
In 2015 I was one of the teacher at the Seed Biology Ph.D summer school (Paris - F) and in 2014 I was one of the teacher at Sexual Plant Reproduction Course University of Porto (P) .
I have been invited to give single lecture or seminar in the frame of international and/or national Ph.D school

Publications 2016-2021

1. Moschin S, Nigris S, Ezquer I, Masiero S, Cagnin S, Cortese E, Colombo L, Casadoro G, Baldan B (2021). Expression and Functional Analyses of *Nymphaea caerulea* MADS-Box Genes Contribute to Clarify the Complex Flower Patterning of Water Lilies. **Front Plant Sci.** 22; 12:730270.

2. Cucinotta, Mara, Cavalleri, Alex, Guazzotti, Andrea, Astori, Chiara, Manrique, Silvia, Bombarely, Aureliano, Oliveto, Stefania, Biffo, Stefano, Weijers, Dolf, Kater, Martin M, Colombo, Lucia (2021). Alternative Splicing Generates a MONOPTEROS Isoform Required for Ovule Development. **CURRENT BIOLOGY**, vol 41, p 892-899.

3. Cucinotta M, Cavalleri A, Chandler JW, Colombo L. (2021) Auxin and Flower Development: A Blossoming Field. **Cold Spring Harb Perspect Biol**. 1;13(2)

4. N. Kawamoto, DP Del Carpio, A. Hofmann, Y Mizuta, D. Kurihata, T. Higashiyama, N. Uchida, K. Tori, L. Colombo, G. Groth, R. Simon (2020). A Peptide pair coordinates regular ovule initiation patterns with seed number and fruit size. **CURRENT BIOLOGY**, vol. 30, p. 4352-4361

5. Cucinotta, Mara, Di Marzo, Maurizio, Guazzotti, Andrea, de Folter, Stefan, Kater, Martin M, Colombo, Lucia (2020). Gynoecium size and ovule number are interconnected traits that impact seed yield. **JOURNAL OF EXPERIMENTAL BOTANY**, vol. 71, p. 2479-2489

6. Di Marzo, Maurizio, Herrera-Ubaldo, Humberto, Caporali, Elisabetta, Novák, Ondřej, Strnad, Miroslav, Balanzà, Vicente, Ezquer, Ignacio, Mendes, Marta A., de Folter, Stefan, Colombo, Lucia (2020). SEEDSTICK Controls Arabidopsis Fruit Size by Regulating Cytokinin Levels and FRUITFULL. **CELL REPORTS**, vol. 30, p. 2846-2857

7. Mendes, Marta A, Petrella, Rosanna, Cucinotta, Mara, Vignati, Edoardo, Gatti, Stefano, Pinto, Sara C, Bird, Dayton C, Gregis, Veronica, Dickinson, Hugh, Tucker, Matthew R, Colombo, Lucia (2020). The RNA dependent DNA methylation pathway is required to restrict SPOROCYTELESS/NOZZLE expression to specify a single female germ cell precursor in Arabidopsis. **DEVELOPMENT**, vol. 13;147(23)

8. Herrera-Ubaldo, Humberto, Lozano-Sotomayor, Paulina, Ezquer, Ignacio, Di Marzo, Maurizio, Chávez Montes, Ricardo Aarón, Gómez-Felipe, Andrea, Pablo-Villa, Jeanneth, Diaz-Ramirez, David, Ballester, Patricia, Ferrándiz, Cristina, Sagasser, Martin, Colombo, Lucia, Marsch-Martínez, Nayelli, de Folter, Stefan (2019). New roles of NO TRANSMITTING TRACT and SEEDSTICK during medial domain development in Arabidopsis fruits. **DEVELOPMENT**, vol. 146, p. 1-14

9. Cucinotta M, Marinque S., Cuesta C, Benkova E, Novak O, Colombo L (2018). CUP-SHAPED COTYLEDON1 (CUC1) and CUC2 regulate cytokinin homeostasis to determine ovule number in Arabidopsis. **JOURNAL OF EXPERIMENTAL BOTANY**, vol. 69, p. 5169-5176.

10. Ferreira LG, de Alencar Dusi DM, Irsigler AST, Gomes ACMM, Mendes MA, Colombo L, de Campos Carneiro VT. GID1expression is associated with ovule development of sexual and apomitic plants. **PLANT CELL REP**. 2018 Feb;37(2):293-306.

11. Francesca Resentini, Philipp Cyprys, Joshua G Steffen, Svenja Alter, Piero Morandini, Chiara Mizzotti, Alan Lloyd, Gary N Drews, Thomas Dresselhaus, Lucia Colombo, Stefanie Sprunck, Simona Masiero (2017) SUPPRESSOR OF FRIGIDA (SUF4) Supports Gamete Fusion via Regulating Arabidopsis EC1 Gene Expression. **PLANT PHYSIOLOGY** 137; 155-166

12. Reyes-Olalde JI, Zúñiga-Mayo VM, Serwatowska J, Chavez Montes RA, Lozano-Sotomayor P, Herrera-Ubaldo H, Gonzalez-Aguilera KL, Ballester P, Ripoll JJ, Ezquer I, Paolo D, Heyl A, Colombo L, Yanofsky MF, Ferrandiz C, Marsch-Martínez N, de Folter S. (2017). The bHLH transcription factor SPATULA enables cytokinin signaling, and both activate auxin biosynthesis and transport genes at the medial domain of the gynoecium **PLOS GENETICS.** Apr 7;13(4).

13. Mara Cucinotta, Silvia Manrique, Andrea Guazzotti, Nadia E Quadrelli, Marta A Mendes, Eva Benkova, Lucia Colombo (2016) Cytokinin response factors integrate auxin and cytokinin pathways for female reproductive organ development. **DEVELOPMENT**, 143, 4419-4424

14. V. Balanzà, I. Roig-Villanova, M. Di Marzo, S. Masiero, L. Colombo (2016). Seed abscission and fruit dehiscence required for seed dispersal rely on similar genetic networks. **DEVELOPMENT** 143 (18), 3372-3381.

15. I Ezquer, C Mizzotti, E Nguema-Ona, M Gotté, L Beauzamy, VE Viana, N. Dubrulle, A. Costa de Oliviera, E. Caporali, A.S Koroney, A. Boudaoud, A. Driouich, Lucia Colombo (2016). The developmental regulator STK controls the structure and mechanical properties of the Arabidopsis seed coat. **THE PLANT CELL**, 28(10):2478-2492

16. P. Lozano-Sotomayor, R.A. Chávez Montes, M. Silvestre-Vañó, H. Herrera-Ubaldo, R. Greco, J. Pablo-Villa, B.M. Galliani, D. Diaz-Ramirez, M. Weemen, K. Boutilier, A. Pereira, L. Colombo, F. Madueno, N. Marsch-Martinez, S. de Folter (2016). Altered expression of the bZIP transcription factor DRINK ME affects growth and reproductive development in Arabidopsis thaliana. **PLANT JOURNAL** 88(3):437-45

17. M.A. Mendes, R. Guerra, B. Castelnovo, Y.S. Velazquez, P. Morandini, S. Manrique Urpì, N. Baumann, R. Groß-Hardt, H. Dickinson, L. Colombo (2016). Live and let die : a REM complex promotes fertilization through synergid cell death in Arabidopsis. **DEVELOPMENT**, vol. 143, p. 2780-2790.

18. G.H. Villarino, Q. Hu, S. Manrique, M. Flores-Vergara, B. Sehra, L. Robles, J. Brumos, A.N. Stepanova, L. Colombo, E. Sundberg, S. Heber, R.G. Franks (2016). Transcriptomic signature of the SHATTERPROOF2 expression domain reveals the meristematic nature of Arabidopsis gynoecial medial domain. **PLANT PHYSIOLOGY**, vol. 171, p. 42-61.

19. N. González-Schain, L. Dreni, L.M. Lawas, M. Galbiati, L. Colombo, S. Heuer, K.S. Jagadish, M.M. Kater (2016). Genome-wide transcriptome analysis during anthesis reveals new insights into

the molecular basis of heat stress responses in tolerant and sensitive rice varieties. **PLANT AND CELL PHYSIOLOGY**, vol. 57 (1), 57-68.