

Host: Maurizio UGLIANO, Università di Verona

Co-Hosts: Fulvio MATTIVI, Fondazione Edmund Mach; Luca ROLLE, Università di Torino



CONFERENCE PROGRAM

SCIENTIFIC PARTNERS



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TOPIC 1 Grapevine diversity and viticultural practices for sustainable grape growing <i>Chairpersons: Cornelis "Kees" Van Leeuwen, Sara Zenoni</i> <i>Session coordination: Maurizio Ugliano</i>	
9:15	Keynote Speaker Steve TYERMAN - Faculty of Sciences, The University of Adelaide (Australia) <i>Late ripening cell death and shrivel in Shiraz</i>
9:45 (5:45 pm AEST)	Joanna GAMBETTA - Charles Sturt University - Faculty of Science; University of Adelaide, School of Agriculture, Food and Wine; South Australian Research and Development Institute (Australia) <i>Defoliation timing impacts berry secondary metabolites and sunburn damage</i>
10:00 (5:30 pm ACST)	Ross SANDERS - Australian Research Council Training Centre for Innovative Wine Production, The University of Adelaide, and Commonwealth Scientific and Industrial Research Organisation (CSIRO) Agriculture and Food (Australia) <i>Within-vineyard spatial variation impacts methoxypyrazine accumulation in the rachis of cabernet sauvignon</i>
10:15	Jochen VESTNER - Institute for Viticulture and Oenology, DLR Rheinpfalz, Neustadt an der Weinstraße (Germany) <i>Sensory and chemical phenotyping of wines from a F1 grapevine population</i>
10:30	Gabriel DOURNES - SPO, Univ Montpellier, INRAE, Institut Agro, Montpellier (France) <i>First characterization of thiol precursors in Colombard and Gros Manseng: comparison of two cultivation practices</i>
10:45	Davide Lucien PATONO - Dept. Agricultural, Forest and Food Sciences, University of Turin (Italy) <i>Carbon isotope labeling to detect source-sink relationships in grapevines upon drought stress and re-watering</i>
11:00	Pause
16:30	Web connection
TOPIC 2 Microbial ecology from vineyard to consumption <i>Chairpersons: Maret du Toit, Sandra Torriani, Kalliopi Rantsiou</i> <i>Session Coordination : Fulvio Mattivi</i>	
16:45 (11:45 am Montevideo)	Keynote Speaker Francisco CARRAU - Faculty of Chemistry, University of the Republic, Montevideo (Uruguay) <i>Increasing autochthonous wine flavor diversity: the concept of friendly yeasts</i>
17:15	Rafael ÁLVAREZ-RAFAEL - UMR 1083 Sciences Pour l'Oenologie, INRAE, Montpellier SupAgro, Montpellier (France) <i>Screening of aroma metabolites within a set of 90 Saccharomyces strains</i>
17:30	Fanny BORDET - University of Bourgogne Franche-Comté, AgroSup Dijon, PAM UMR, Institut Universitaire de la Vigne et du Vin, Jules Guyot ; Lallemand SAS, Blagnac (France) <i>Saccharomyces cerevisiae intraspecies differentiation by metabolomic signature and sensory patterns in wine</i>
17:45	Tiziana NARDI - CREA – Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, Centro di Ricerca Viticoltura ed Enologia, Conegliano (Italy) <i>Changes in grape-associated microbiome as a consequence of post-harvest withering</i>
18:00	Carla SNYMAN - South African Grape and Wine Research Institute, Department of Viticulture and Oenology, Matieland (South Africa) <i>Optimised extraction and preliminary characterisation of mannoproteins from non-Saccharomyces wine yeasts</i>
18:15	Angela CORAL MEDINA - SPO, UMR, INRA, SupAgro, Université de Montpellier (France) ; School of Microbiology, University College Cork (Ireland) <i>Influence of nitrogen source on expression of genes involved in aroma production in Saccharomyces uvarum</i>
18:30	End of day 1 activities

TOPIC 4	Wine longevity and shelf-life <i>Chairpersons: Bruno Fedrizzi, Veronique Cheynier, Panagiotis Arapitsas</i> <i>Session Coordination: Luca Rolle</i>
8:45	Keynote speaker Maria NIKOLANTONAKI - Institute of Vine and Wine Jules Guyot, University of Burgundy (France) Wine longevity and shelf-life
9:30 (5:30 pm AEST)	Xinyi ZHANG - National Wine and Grape Industry Centre, Charles Sturt University, Wagga Wagga (Australia) Inhibition of reductive characters in wine by Cu-organic acids: Predicting the duration of protection
9:45	Diego SÁNCHEZ-GIMENO - Laboratory of Aroma Analysis and Oenology (LAAE), de Química Analítica, Facultad de Ciencias, Universidad de Zaragoza (Spain) Evaluation of three alternative strategies for the long-term remediation of reductive off-odours in wines
10:00	Justine LABOYRIE - Unité de recherche Oenologie, INRAE, ISVV, University of Bordeaux, Villenave d'Ornon (France) Revealing the origins of old Bordeaux wines using terpene quantification
10:15	Wessel DU TOIT - South African Grape and Wine Research Institute, Department of Viticulture and Oenology, Stellenbosch University (South Africa) Know thy enemy: oxygen or storage temperature?
10:30	Alexandre PONS - Université Bordeaux, ISVV, Unité de Recherche Oenologie, Villenave d'Ornon ; Seguin Moreau Cooperage, Cognac (France) From precursor identification to the study of the distribution of 3-methyl-2,4-nonanedione in red wines and spirits
10:45	Pause
16:30	Web connection
TOPIC 3	Novel tools and strategies for precision and sustainable varietal and regional enology <i>Chairpersons: Jorge Ricardo da Silva, Pierre-Louis Teissedre, Urska Vrhovsek</i> <i>Session Coordination: Maurizio Ugliano</i>
16:45	Keynote Speaker Prof. Fernando ZAMORA - Universitat Rovira i Virgili, Tarragona (Spain) How can we reduce the use of Sulphur dioxide in winemaking without compromising its quality?
17:15	Giovanni LUZZINI - University of Verona (Italy) From vineyard to bottle. Rationalizing grape compositional drivers of the expression of Valpolicella aroma 'terroir'
17:30	Encarna GÓMEZ-PLAZA - University of Murcia (Spain) The effect of ultrasounds in Syrah wine quality is not dependent on the ripening or sanitary status of the grapes
17:45	Alberto DE ISEPPI - Department of Agronomy, Food, Natural Resources, Animals and Environment (DAFNAE), University of Padova (Italy) The valorization of wine lees as a source of mannoproteins for food and wine applications
18:00	Kiera NAREECE LAMBRECHT - Stellenbosch University, SAGWRI, Department of Viticulture and Oenology (South Africa) In line monitoring of red wine fermentations using IR spectroscopy
18:15 (9:15 am PDT)	Anita OBERHOLSTER - Department of Viticulture and Enology, University of California, Davis (United States of America) Evaluation of the impact of different amelioration techniques on the chemical composition and sensory characteristics of smoke impacted wines
18:30	End of day 2 activities

FRIDAY JUNE 25th

8:30 CEST Introductory talks



TOPIC 5	Chemical diversity of 'special' wine styles: fortified wines, passito style, botrytized and ice wines, orange wines, sparkling wines <i>Chairpersons: Matteo Marangon, Dietmar Krautwurst, Leigh Schmidtke</i> <i>Session Coordination: Fulvio Mattivi</i>
8:35	Keynote speaker Philippe DARRIET - ISVV Institute of Vine and Wine Science, University of Bordeaux, Villenave d'Ornon (France) Chemical diversity of 'special' wine styles: fortified wines, passito style, botrytized and ice wines, orange wines, sparkling wines
9:15	Rafael APOLINAR-VALIENTE - UMR-1208/IATE, Montpellier SupAgro (France) New acacia gums fractions: how their features affect the foamability of sparkling base wines?
TOPIC 6	Physiology of chemosensory perception, sensory science, consumers perception <i>Chairpersons: Matteo Marangon, Dietmar Krautwurst, Leigh Schmidtke</i> <i>Session Coordination: Fulvio Mattivi</i>
9:45	Keynote speaker Alejandro GIORGETTI – Laboratory of Applied Bioinformatics, University of Verona (Italy) Chemoperception: insights from computational techniques
10:15	Marie LE SCANFF - Unité de recherche Œnologie, INRA, ISVV, Université de Bordeaux, Villenave d'Ornon (France) Understanding sweetness of dry wines: first evidence of astilbin isomers in red wines and quantitation in a one-century range of vintages
10:30	Elisabetta PITTARI - Dept. Agricultural Science, University of Naples Federico II (Italy) Effect of oenological tannins on wine aroma before and after oxidation: a real-time study by coupling sensory (TDS) and chemical (PTR-ToF-MS) analyses
10:45	Maria-Pilar SAENZ-NAVAJAS –Instituto de Ciencias de la Vid y del Vino (UR-CSIC-GR), Department of enology, Logroño, La Rioja (Spain) A new approach for sensory characterization of grape. Relationship with chemical composition
11:00	Marc WEBER - DLR Rheinpfalz, Neustadt (Germany) European consumer preference for wines made from fungus resistant grape varieties
11:15	End of day 3 activities

MONDAY JUNE 28th

8:30 CEST Introductory talks

**ROUND TABLE #1 - Identity, typicality, traceability***Chairpersons: Melane Vivier, Thierry Doco, Claudio Lovisolo***Introductory flash talks**

8:40	Cornelis VAN LEEUWEN - EGFV, Univ. Bordeaux, Bordeaux Sciences Agro, INRAE, ISVV, 33882 Villenave d'Ornon, France Temperature variability inside a wine production area and its effect on vine phenology and grape ripening. An example from the Saint-Emilion-Pomerol
8:47	Giorgio GAMBINO - Institute for Sustainable Plant Protection, National Research Council (IPSP-CNR) Torino (Italy) Genetic traceability of 'Nebbiolo' musts and wines by single nucleotide polymorphism (SNP) genotyping assays
8:54	Pavel SOLOVYEV - Fondazione Edmund Mach (FEM), San Michele all'Adige (Italy) NMR profiling of grape musts from some Italian regions
9:01	Ruchira RANAWEERA - Department of Wine Science, The University of Adelaide (Australia) Fluorescence spectroscopy with XGBoost discriminant analysis for intraregional wine authentication
9:08	Marianthi BASALEKOU - University of West Attica (Greece) Neural networks and FT-IR spectroscopy for the discrimination of single varietal and blended wines. A preliminary study
9:15	Thomas BAERENZUNG dit BARON - PPGV, INP-PURPAN, University of Toulouse (France) Insights from Selected Ion Flow Tube Mass Spectrometry (SIFT-MS) and chemometrics applied to the quick discrimination of grapevine varieties
9:22	Diana BELLIN - Department of Biotechnology, University of Verona (Italy) Understanding the genetic determinism of phenological and quality traits in 'Corvina' grape variety for selection of improved genotypes
9:30	<i>Comments from Panelists - Discussion</i>
10:30	Pause
16:30	Web connection

ROUND TABLE #2 - Shelf-life, winemaking and packaging: quality vs. appearance*Chairpersons: Alvaro Pena, Vicente Ferreira, Stephanie Marchand***Introductory flash talks**

16:40	Mpho MAFATA - South African Grape and Wine Research Institute, Department of Viticulture and Oenology, Stellenbosch University (South Africa) Data fusion approaches for sensory and multimodal chemistry data applied to storage conditions
16:47	Prudence Fleur TCHOUAKEU BETNGA - Free University of Bozen-Bolzano (Italy) Volatile and phenolic profiles of wines closed with different stoppers and stored for 30 months
16:54	Diletta INVINCIBILE - University of Verona (Italy) Effect of simulated shipping conditions on colour and SO ₂ evolution in Soave wines
17:01	Daniela FRACASSETTI - Department of Food, Environmental and Nutritional Sciences (DeFENS), Università degli Studi di Milano (Italy) Characterization of tannins and prevention of light-struck taste: the enofotoshield project
17:08	Fernanda COSME - Chemistry Research Centre - Vila Real (CQ-VR), Food and Wine Chemistry Lab, University of Trás-os-Montes and Alto Douro, Vila Real (Portugal) Monitoring the tawny port wine aging process using precision enology
17:15	Panagiotis ARAPITSAS - Department of Food Quality and Nutrition, Research and Innovation Centre Fondazione Edmund Mach, San Michele all'Adige (Italy) White wine light-strike fault: a comparison between flint and green bottles under the typical supermarket conditions
17:22	Cristina MEDINA-PLAZA - University of California, Davis (United States of America) Investigating the impact of bottle color, temperature and light exposure on rose wine characteristics
17:30	<i>Comments from Panelists - Discussion</i>
18:30	End of day 4 activities

ROUND TABLE #3 - Advances in vinification processes, novel compounds and novel reactions	
<i>Chairpersons: Liz Waters, Angelita Gambuti, Andrew Clark</i>	
Introductory flash talks	
8:40 (6:40 pm NZST)	Bahareh SARMADI - School of Chemical Sciences, University of Auckland (New Zealand) Measuring elemental sulfur in grape juice in relation to varietal thiol formation in Sauvignon blanc wines
8:47 (3:17 pm ACST)	Xingchen WANG - Department of Wine Science and Waite Research Institute, The University of Adelaide (Australia) Alternative fate of varietal thiols in wine: identification, formation, and enantiomeric distribution of novel 1,3-oxathianes
8:54	Susanne DEKKER - Edmund Mach Foundation (Italy) Chemical and biochemical formation of polysulfides in synthetic and real wines using UHPLC-HRMS
9:01	Marie Sarah EVERS - University of Bourgogne Franche-Comté, AgroSup Dijon, VALMiS-Institut Universitaire de la Vigne et du Vin, Dijon; Sofralab, Magenta (France) The role and quantification of vitamins in wine: what do we know?
9:08	Léa DELCROS - MHCS, Comité Champagne, Epernay (France) First identification of a glycosylated fraction involved in mushroom-off-flavor in grapes: influence of <i>B. cinerea</i> , powdery mildew and <i>C. subabruptus</i>
9:15	Edward BREARLEY-SMITH - Department of Agronomy, Food, Natural Resources, Animals and Environment, University of Padova (Italy) Macromolecular characterization of disease resistant red wine varieties (PIWI)
9:22	Matteo BORDIGA - Department of Pharmaceutical Sciences, Università degli Studi del Piemonte Orientale "A. Avogadro", Novara (Italy) Oligosaccharides from <i>Vitis vinifera</i> grape seeds: a focus on gentianose as a novel bioactive compound
9:30	<i>Comments from Panelists - Discussion</i>
10:30	Pause
16:30	Web connection
ROUND TABLE #4 - Yeast, bacterial and plant resources for sustainable winemaking processes	
<i>Chairpersons: Herve Alexandre, Laurent Torregrosa, Gianbattista Torielli</i>	
Introductory flash talks	
16:40	Rocio ESCRIBANO VIANA - ICVV, Instituto de Ciencias de la Vid y el Vino, University of La Rioja (Spain) Bioprotective effect of non- <i>Saccharomyces</i> yeasts in wines made without SO ₂
16:47	Vasileios ENGLEZOS - University of Turin, DISAFA (Italy) Effect of environmentally friendly vineyard protection strategies on yeast ecology during fermentation
16:54	Ana Belén BAUTISTA-ORTÍN - University of Murcia (Spain) Effect of plant fining agents in the must flotation process. Functional characterization
17:01	María-Pilar MARTÍNEZ-PÉREZ - Department of Food Science and Technology, Faculty of Veterinary Sciences, University of Murcia (Spain) The use of elicitors in the vineyard to mitigate the effects of climate change on wine quality
17:08	Chantal MAURY - USC 1422 GRAPPE, INRAE, Ecole Supérieure d'Agricultures, Angers (France) Impact of electrolyzed water applied as an alternative treatment in vineyard on grape and wine quality
17:15	Guilherme MARTINS - Université de Bordeaux, ISVV, Unité de Recherche Oenologie EA 4577, USC 1366 INRAE, Bordeaux INP; Bordeaux Sciences Agro, Gradignan (France) Bacterial community in different wine appellations – biotic and abiotic interaction in grape berry and its impact on <i>Botrytis cinerea</i> development
17:22 (11:22 am Santiago)	Fernando SALAZAR - Laboratorio de Fermentaciones Industriales, Facultad de Ciencias Agronómica y de los Alimentos, Pontificia Universidad Católica de Valparaíso (Chile) Application of UV-LED in wine as an alternative to sulphur dioxide
17:30	<i>Comments from Delegates - Discussion</i>
18:30	End of day 5 activities

ROUND TABLE #5 - Wine sensory descriptors in a globalized market	
<i>Chairpersons: Ulrich Fisher, Vincenzo Gerbi, Giuseppina Paola Parpinello</i>	
<i>Introductory flash talks</i>	
8:40	Andrea VERSARI - Università degli Studi di Bologna (Italy) Prediction of astringency in red wine using tribology approach to study in-mouth perception
8:47	Alejandro SUÁREZ - Instituto de Ciencias de la Vid y del Vino (CSIC-UR-GR), La Rioja (Spain) Effect of culture and familiarity on wine perception: a study with Spanish and British wine experts
8:54	Dimitra L. CAPONE - Australian Research Council Training Centre for Innovative Wine Production, The University of Adelaide (Australia) Chemical and sensory diversity of regional Cabernet sauvignon wines
9:01 (15:01 Beijing)	Wen MA - School of Food & Wine, Ningxia University (P. R. China) Chinese localization of wine aroma descriptors
9:08	Edouard PELONNIER-MAGIMEL - Unité de Recherche Œnologie, EA 4577, USC 1366 INRAE Villenave d'Ornon (France) Sensory profile: a tool to characterize originality of wines produced without sulfites
9:15	Matija LESKOVIĆ - South African Grape and Wine Research Institute, Department Viticulture and Oenology, University of Stellenbosch, Matieland (South Africa) Long-term sensorial and compositional effects of copper fining on the wine containing 'reductive' and 'tropical' volatile sulfur compounds
9:22 (4:45 pm ACST)	Damian ESPINASE NANDORFY - The Australian Wine Research Institute, Glen Osmond (Australia) Whole bunch fermentation: adding complexity, or just making 'green' wine?
9:30	<i>Comments from Panelists - Discussion</i>
10:20	Announcements: <ul style="list-style-type: none"> - Best Young Scientists Award - Organizers of MACROWINE 2023 Acknowledgements
10:30	End of the congress