

## Registration

The conference is free of charge.

Registration needs to be done on-line at:

<http://159.149.119.18/fmi/iwp/cgi?-db=YeSVitE&-loadframes>

**Registration will close by November 29<sup>th</sup>, 2017.**

Maximum available seats 150.

### INFO FOR STUDENTS

Fifty seats are reserved for students. 0.5 CFU will be assigned after a final test.

For more information: [www.yesvite.unimi.it](http://www.yesvite.unimi.it).

Contact: [yesvite@unimi.it](mailto:yesvite@unimi.it) specifying "YeSVitE Conference" in the e-mail object.



### FUNDED BY



Department of Food, Environmental and Nutritional Sciences (DeFENS), Università degli Studi di Milano, Italy

### ORGANIZED BY

Dr. Ileana VIGENTINI, DeFENS, Università degli Studi di Milano, Italy

### FREE PATRONAGE



### SPONSORS

Castello Banfi Winery (Montalcino, Siena, Italy)



Guado al Melo Winery (Castagneto Carducci, Livorno, Italy)

Tenimenti Ruffino Winery (Pontassieve, Florence, Italy)



## Venue

FACULTY OF AGRICULTURAL AND FOOD SCIENCES  
UNIVERSITÀ DEGLI STUDI DI MILANO  
AULA C03, VIA G. CELORIA N. 2, 20133 MILAN, ITALY



The Department of Food, Environmental and Nutritional Sciences (DeFENS) was set up in May 2012 following the merger of three previous UNIMI Departments with the aim of continuing, giving further impulse and broadening the scope of research and teaching activities carried out previously at the individual Departments, developing new synergies between the specific experience of each Department and harmonizing research activities in the sector of Food, Agro-food and Nutritional Sciences.

### HOW TO GET THERE

#### By underground

Green line (Linea 2), Piola stop

#### By bus or tram

Bus n°91 and 93: Romagna-Pascoli stop

Bus n°61: Strambio-Gorini stop

Bus n°62: Piola stop

Tram n°19: Pascoli-Leonardo da Vinci stop

#### By car

Tangenziale est, Lambrate or Rubattino exit

#### By train

From Milano Centrale, Porta Genova, Milano Cadorna and Milano Porta Garibaldi:

Green line (Linea 2), Piola stop



# Yeasts for the Sustainability in Viticulture and Oenology

## YeSVitE

December 4<sup>th</sup>, 2017



### FUNDED BY



### PARTICIPANS



## The YeSVitE project

The wine world is going through a rapid transformation due to a deep change in consumer preferences, consumption habits and accompanied by an important reduction in economic resources available to the people. Thus, the modern viticulture and oenology has the key role of innovating traditional practices by supporting new choices for a sustainable production of wine. In general many of the current challenges faced by the world of wine can be addressed including production quality, making 'healthier' wines, and establishing the concept of sustainability in winemaking.

The strategic aim of the YeSVitE project is to create a coordinated network that can learn how to manage the topic of sustainability in oenology bringing innovation by exploiting yeasts as the principle resource, a still untapped source in food production.

The project has evaluated yeast biodiversity to reveal molecular linkages existing among species and strains of interest to winemaking and between novel and ancient areas of wine production. Through an optimisation process the project is promoting the use of yeasts to reduce pests in harvesting and to produce wines with low-alcohol and/or low sulphite content. In particular, the identification of fermentative yeasts isolated from ancient (Italy, Georgia, and Slovenia) and relative new (Canada and South Africa) vine-growing areas will allow the selection of yeast strains that could be useful to evaluate interactions between their genetic makeup and wine characteristics and the complex interplay of wine-related organisms that leads to the final wine product in the bottle.

### LINKS

[http://cordis.europa.eu/project/rcn/109193\\_en.html](http://cordis.europa.eu/project/rcn/109193_en.html)  
[www.yesvite.unimi.it](http://www.yesvite.unimi.it)

## Program

08:30 Registration

09:00 Conference Opening: Welcome

09:05 *DeFENS presentation*

Marisa PORRINI, Head of Department, University of Milan, Italy

09:15 *The YeSVitE Project*

Ileana VIGENTINI, Project Coordinator, University of Milan, Italy

09:35 Opening Lecture:

*Must bioprotection by yeast: an alternative to sulfite?*

Hervé ALEXANDRE, University of Burgundy, France

### SESSION 1: THE DIVERSITY "CHALLENGE" OF FERMENTATIVE YEASTS

10:10 Keynote:

*Linking genotype and phenotype molecular diversity of S. cerevisiae strains*

Uroš PETROVIČ, Jožef Stefan Institute, Slovenia

10:30 *From Georgia and Canada with FTIR: metabolomics of vine and wine related strains*

Laura CORTE, University of Perugia, Italy

10:45 *Survey on yeast biodiversity in Georgian vineyards: a pristine environment for the selection of wine strains*

Gabriella DE LORENZIS, University of Milan, Italy

11:10 Coffee break

### SESSION 2: EXPLOITATION OF SACCHAROMYCES AND NON-SACCHAROMYCES YEASTS TO MANAGE WINE FERMENTATION

11:45 Keynote:

*New frontiers of oenological yeast identification with amplicon based NGS*

Gianluigi CARDINALI, University of Perugia, Italy

11:55 *Alcohol level reduction in wine with non-*

*Saccharomyces species*

Pilar MORALES, Instituto de Ciencias de la Vid y del Vino, Spain

12:10 *How different nitrogen sources impact on*

*Brettanomyces bruxellensis growth in presence of SO<sub>2</sub>*

Daniela FRACASSETTI, University of Milan, Italy

12:25 *Investigation of the SO<sub>2</sub> stress response in*

*Brettanomyces/Dekkera bruxellensis using RNA-seq*

Federica VALDETARA, University of Milan, Italy

13:00 LUNCH

### SESSION 3: YEAST GENETIC IMPROVEMENTS FOR SUSTAINABILITY OF WINES

14:05 Keynote:

*A perspective on molecular wine biotechnology*

Ramón GONZÁLEZ GARCÍA, Instituto de Ciencias de la Vid y del Vino, Spain

14:25 *Getting new biodiversity from a single strain: the story of 32 spores*

Luca ROSCINI, University of Perugia, Italy

14:40 *The CRISPR/Cas3 system as a molecular strategy to decrease urea production in wine yeasts*

Ileana VIGENTINI, University of Milan, Italy

### SESSION 4: NATURAL INTERACTIONS BETWEEN GRAPE AND WINE-RELATED ORGANISMS FOR A SUSTAINABLE OENOLOGY

15:10 Keynote:

*From wine ecology to precision oenology*

Florian BAUER, Stellenbosch University, South Africa

15:30 *Analysis of the yeast population of Cabernet Sauvignon in wine-growing regions of different countries compared to the local cultivar yeast population by NGS*

Jordi TRONCHONI, Instituto de Ciencias de la Vid y del Vino, Spain

15:45 *Georgian indigenous yeasts and grape cultivars to edit the wine quality in a precision oenology perspective*

David MAGHRADZE, Agricultural University of Georgia, Georgia

16:00 *Biocontrol against Vitis vinifera fungal pathogens using wild grape-associated yeasts*

Gustavo CORDERO BUESO, University of Cádiz, Spain

16:30 Closing Lecture:

*Wine business: approaches to sustainability*

Paola CORSINOVÌ, Geisenheim University, Germany

17:00 Conference Closing