

# Valeria Mapelli, Ph.D.

## Curriculum Vitae

<b>Current Positions</b>	<p><b>March 2022 – present:</b> <i>Associate Professor</i> at Dept. of Biotechnology and Bioscience, University of Milan-Bicocca, Milan, Italy</p> <p><b>May 2015 – present:</b> <i>Guest Researcher</i> at Division of Industrial Biotechnology, Dept. of Biology and Biological Engineering, Chalmers University of Technology, Gothenburg, Sweden</p>
<b>Education and Academic Titles</b>	<p><b>September 2016:</b> Docent in Bioscience, Chalmers University of Technology. <i>Qualification as Docent requires substantially greater documented independent ability to lead in formulating and solving scientific research problems, as well as pedagogical competence at the advanced graduate study level.</i></p> <p><b>December 2006:</b> Ph.D. in Industrial Biotechnology at University of Milano-Bicocca, Milan, Italy. Thesis title: <i>Physiological effects of calcium shortage on Saccharomyces cerevisiae: proteomic and metabolomic profiling.</i></p> <p><b>February 2003:</b> MSc degree in Biotechnology. University of Milano-Bicocca, Milan, Italy. Final grade: 110/110</p>
<b>Language</b>	<p><b>Italian:</b> mother tongue</p> <p><b>English:</b> excellent written and spoken</p> <p><b>Swedish:</b> basic written and oral comprehension and conversation</p> <p><b>French:</b> basic oral and written comprehension</p>
<b>Previous Positions</b>	<p><b>May 2015 – March 2022:</b> <i>Senior Researcher</i> at Sacco Srl, Cadorago (CO), Italy</p> <p><b>February 2012 – May 2015:</b> <i>Project Leader</i> in the Industrial Biotechnology group at Dept. of Chemical and Biological Engineering, Chalmers University of Technology, Gothenburg, Sweden</p> <p><b>February 2010 – January 2012:</b> <i>Post-doctoral associate</i> in the Industrial Biotechnology group at Dept. of Chemical and Biological Engineering, Chalmers University of Technology, Gothenburg, Sweden.</p> <p><b>May 2007 – January 2010:</b> <i>Post-doctoral associate</i> at Centre for Microbial Biotechnology, Danish Technical University (DTU), Kgs. Lyngby, Denmark and at Dept. of Chemical and Biological Engineering, Chalmers University of Technology, Gothenburg, Sweden.</p>

## Post-graduate Courses

- *Seminar for patent administrators*, European Patent Academy at the European Patent Office (2018)
- *IP value extraction and commercialisation*, on-line training course, European Patent Academy at the European Patent Office (2018)
- Specialisation Course in “*Project Management - Basic and Advanced*”, 24ORE Business School, Milan, Italy (2013-2014)
- *EMBO Practical Course Metagenomics: from Bench to Data Analysis*, EMBL Advanced Training Center, Heidelberg, Germany (2013)
- *Philosophies of Learning*, Gothenburg-IT University – Chalmers University of Technology, Gothenburg, Sweden (2013)
- *Introduction to Nutritional Metabolomics*, Copenhagen University, Copenhagen, Denmark (2012)
- *Supervision in Research*, Gothenburg-IT University – Chalmers University of Technology, Gothenburg, Sweden (2010)
- *Bioanalytical HPLC*, Lund University, Lund, Sweden (2008)
- *Biosystem Engineering*, Braunwald Switzerland (2008)
- *Management and Valorisation of Academic and Industrial Research Results*, Politecnico di Milano, Milan, Italy (2007)
- *Metabolic Engineering and Systems Biology*, DTU, Kgs. Lyngby, Denmark (2006)
- *Proteome Analysis*, University of Milano-Bicocca, Milan, Italy (2003)

## Awards

**March 2013:** Grant from the Italian Ministry of Education University and Research (MIUR) within the call “*Messaggeri della Conoscenza*”, an initiative of MIUR to implement top level teaching from international experts from leading institutions in Italian Universities. The title of the didactic project financed is “*Biotechnology for biorefinery: production of sustainable fuels and chemicals from renewable resources*”.

**November 2003:** Fellowship from Italian Ministry for Education University and Research (MIUR) supporting the PhD program in Industrial Biotechnology at University of Milano-Bicocca, Milan, Italy.

**May 2003:** Fellowship from Italian Ministry for Education University and Research (MIUR) on “*Integrated and comparative analysis of calcium-dependent modulation on transcriptome, proteome and cell cycle control in yeast and mammalian cells*”.

## Research Grants

**November 2017:** Funding from Novo Nordisk Fonden for a 3-years collaboration project on “*Engineering enzymes for the synthesis of 6-aminobex-2-enoic acid: first steps to green production of adipic acid*”. **VM** was co-applicant.

**December 2016:** Funding from MIUR (Italian Ministry of Research and University) for a PhD project within the Program “*Dottorati di ricerca innovativi a caratterizzazione industriale*” In collaboration with the University of Bari Aldo Moro. **VM** was Project Manager.

**November 2015:** Funding from the Swedish research Council – *FORMAS* for the research project: “*Engineering ammonia lyases for novel bio-based microbial cell*”.

*factory: first steps to green production of adipic acid*". **VM** was co-applicant and project manager.

**November 2013:** Funding from the Swedish research Council – FORMAS and from the Danish Agency for Science Technology and Innovation (DASTI) for the research project: “*Characterization of metabolism and robustness of Lactococcus lactis under different fermentation conditions for production of starter cultures with improved robustness*”. **VM** was co-applicant.

**June 2013:** Funding from the Swedish research Council – FORMAS as co-applicant in a collaborative project with the title: “*Upgrading of renewable domestic raw materials to value-added bulk and fine chemicals for a biobased economy: technology development, systems integration and environmental impact assessment*”. **VM** was co-applicant.

**January 2012:** Funding from Göteborg Energi research foundation (Göteborg Energi Forskningsstiftelse) supporting the research project: “*Improvement of biogas generation by coupling bioelectrochemical systems to anaerobic digestion*”. **VM** was main applicant.

**January 2012:** Funding from Energy Area of Advance at Chalmers University of Technology for the project: “*Building a Biorefinery Production Platform via Bioprocess Integration*”.

**February 2010:** Funding from Göteborg Energi research foundation (Göteborg Energi Forskningsstiftelse) supporting the research project: “*Development and improvement of microbial fuel cell technology for electricity production from organic waste material*”. **VM** was main applicant.

## Teaching and Supervision

**2018 and 2019:** Invited lecturer at the post-graduate course *BIOCIRCE – Bioeconomy in the Circular Economy*, organized by the University of Milan-Bicocca.

**January 2014:** Organizer, coordinator and teacher of the course “*Biotechnology for biorefinery: production of sustainable fuels and chemicals from renewable resources*”. University of Bari – Aldo Moro.

**2008 – 2014:** Teacher in the course “*Food Biotechnology*” at Chalmers University of Technology, with special focus on microbial strain improvement and biotechnological production of nutraceuticals.

**February 2012:** invited lecturer and organizer of a series of lectures on: “*Industrial Microbiology and Fermentation Technology*” at University of Turin.

**2014 – 2019:** main supervisor of **one PhD student** (Emma Skoog, graduated on June 5<sup>th</sup>, 2019 at Chalmers University of Technology).

**2012 – present:** mentor of **post-doctoral associates**.

**2004 – 2015:** supervisor of **10 MSc students**

## Leadership and Management

### Project Leadership and Coordination

- Scientific ideation and leadership of research projects
- Coordination of collaborations within specific research projects
- Work Package Leader in collaborative projects

### Preparation of proposals for national and international grants

- Elaboration of scientific research projects
- Coordination of co-applicants within collaborative projects

### Responsibility positions

- Responsible for coordinating Patent Surveillance at Sacco Srl.
- Responsible for organization of scientific educational seminars and lectures at Sacco Srl.
- Responsible scientist for analytical equipment (HPLC)
- Responsible for coordinating the tasks of lab technicians
- Coordinator of MSc and BSc students
- Organizer and co-organizer of post-graduate courses

## Special Commissions

**Editor** of the volume “Yeast Metabolic Engineering – Methods and Protocols” within the series “Methods in Molecular Biology” Humana Press Inc. part of Springer Science+Business Media. ISBN978-1-4939-0562-1, ISSN: 1064-3745.

Currently I am **co-editor** of the second edition of the same volume (to be published in 2021).

**Peer-reviewer** for the following scientific journals: Biotechnology for Biofuels, Archives of Microbiology, Biological Trace Elements Research, Computational and Structural Biology, Environmental Biotechnology, World Journal of Microbiology and Biotechnology, Microbial Cell Factories.

Appointed member of 4 **PhD** thesis **evaluation committees**

## Popular Science Dissemination

**2004-2008:** Editorial board member of “*Prometeus*”, the magazine of the National Association of Italian Biotechnologist. As member of the editorial board, I have written and edited about 50 articles published on-line. [www.prometeusmagazine.org](http://www.prometeusmagazine.org)

**October 2005:** Member staff of *Biopop*, Bologna, Italy. *Biopop* was a project in which young European biotechnologists met citizens to build a new model of communication with society, and to move towards a science made of participation, discussion and decision sharing. The project was financially supported by the 6<sup>th</sup> Framework Programme (FP6) for research.

## Scientific Publications

The complete list of my peer-reviewed publications can be found at <https://orcid.org/0000-0001-8724-3221>