

Maria Cavaletto

Curriculum vitae

PERSONAL DATA

Born in Salassa (TO), Italy on 23 April 1965.

Married, with three sons.

BIO AND EDUCATION

In 1984 she obtained High school leaving qualification in scientific studies.

In 1988 she graduated with full marks (110/110 laude et mention) in Biological Sciences at the University of Torino.

In 1990 she obtained the faculty to Biologist Profession.

From 1988 to 1998 she worked at Dipartimento di Biologia Animale e dell'Uomo dell'Università di Torino.

From 1991 to 1998 she spent periods of research at CNR-CSAAPZ Torino.

From 1998 to 2015 she works at Dipartimento di Scienze e Innovazione Tecnologica dell'Università del Piemonte Orientale (Alessandria). She has gathered an environmental biochemistry team and carried out a biochemistry-proteomic lab ex-novo in the Department.

From 2015 she has entered the project of Biological Research laboratories settlement in San Giuseppe center – Vercelli; and from Jan, 2022 she works in the new Dipartimento per lo Sviluppo Sostenibile e la Transizione Ecologica (DiSSTE) – Vercelli. Here she coordinates the biochemistry-proteomics lab for environmental and nutritional researches.

UNIVERSITY CAREER

2019 at present	Full Professor of Biochemistry BIO/10 at the University of Piemonte Orientale
2006-2019	Associate Professor of Biochemistry BIO/10, Università del Piemonte Orientale
1998-2006	Researcher of Biochemistry BIO/10, Università del Piemonte Orientale
1993-1998	Researcher of Biochemistry BIO/10, II Facoltà di Scienze MFN (Università di Torino) – sede di Alessandria

UNIVERSITY POSITIONS

2023 - present	Member of the "Quality Assurance Committee" of Università del Piemonte Orientale
2022 - present	RQDF Teaching Quality Manager of the Dipartimento per Sviluppo Sostenibile e la Transizione Ecologica.
2019- present	Member for University of Piemonte Orientale in the General Council of Fondazione Cassa di Risparmio di Alessandria.

2016-present	Coordinator of Scientific Technical Committee, ITS Foundation Biotecnologie e Nuove Scienze della Vita
2018 - 2022	Coordinator of the master degree in Biology, at the University of Piemonte Orientale.
2013-2018	Member of the Patent Committee of Università del Piemonte Orientale
2014-2016	DISIT referent for the Job Placement of Università del Piemonte Orientale
2019 - present	Member of Doctoral “Food,Health and Longevity” Committee of Università del Piemonte Orientale
2013-2019	Member of the Doctoral “Chemistry and Biology” Committee of Università del Piemonte Orientale
2008-2013	Member of the Doctoral “Environmental Sciences” Committee of Università del Piemonte Orientale

MAIN FIELDS OF INTEREST

1. Proteomics
2. Membrane proteins
3. Enzymes and their applications
4. Milk proteins
5. Renewable energies, green chemistry

From 1991 at present, she is member of SIB – Società Italiana di Biochimica e Biologia Molecolare

CURRENT ISSUES OF RESEARCH

1. Lignocellulosic biomass degradation

In the field of renewable energies and environmental biochemistry, we are studying the enzymatic processes involved in the degradation of lignocellulosic biomass for the production of high valueadded molecules. We employ classical biochemistry and –omics technologies.

2. Nutritional biochemistry

In the field of Nutritional biochemistry we are characterizing human milk proteins, we employ proteomics techniques. We focus on nutraceutical and immunological features of milk proteins.

3. Environmental biochemistry

We characterize biochemical processes involved in environmental contamination, mostly from metals. Both plants and microorganisms are the objects of our investigations.

TOP FIVE PAPERS

1. Pavlovic R, Panseri S, Giupponi L, Leoni V, Citti C, Cattaneo C, **Cavaletto M**, Giorgi A. Phytochemical and Ecological Analysis of Two Varieties of Hemp (*Cannabis sativa* L.) Grown in a Mountain Environment of Italian Alps. *Front Plant Sci.* 2019 Oct 15;10:1265. doi: 10.3389/fpls.2019.01265.
2. **Cavaletto M**, Givonetti A, Cattaneo C. The Immunological Role of Milk Fat Globule Membrane. *Nutrients.* 2022 Oct 31;14(21):4574. doi: 10.3390/nu14214574.
3. Cesaro P, Cattaneo C, Bona E, Berta G, **Cavaletto M**. The arsenic hyperaccumulating *Pteris vittata* expresses two arsenate reductases. *Sci Rep.* 2015 Sep 28;5:14525. doi: 10.1038/srep14525.
4. **Cavaletto M**, Giuffrida MG, Conti A. Milk fat globule membrane components--a proteomic approach. *Adv Exp Med Biol.* 2008;606:129-41. doi: 10.1007/978-0-387-74087-4_4.
5. Effect of hydrogen peroxide on antioxidant enzymes and metallothionein level in the digestive gland of *Mytilus galloprovincialis*. (2002) **M Cavaletto**, A Ghezzi, B Burlando, V Evangelisti, N Ceratto, A Viarengo. *Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology* 131 (4), 447-455