

## **Curriculum vitae et studiorum**

Dr. Elena Butturini

2007

Degree in Pharmaceutical Chemistry and Technology (C.T.F.), University of Bologna, with an experimental thesis in Biochemistry. Supervisor: Prof. Laura Landi.

2007

State examination.

2007–2010

PhD in Biosciences, Biochemistry curriculum, Biochemistry Section, Department of Life and Reproduction Sciences, University of Verona (now Department of Neuroscience, Biomedicine and Movement, University of Verona).

In this period she mainly worked on two projects:

Oxidative stress and post-translational modifications of the transcription factor STAT3.

Natural compounds with anti-STAT3 activity and study of the molecular mechanism of their action.

2009–2010

Research activity at Showa Pharmaceutical University, Tokyo.

Purification and expression in E.coli of Calmodulin kinase 4 and study of its enzymatic activity during oxidative stress.

Natural compounds with anti-STAT3 activity: molecular targets for the development of new anti-tumor drugs.

2010–2019

Research fellow at the Department of Neuroscience, Biomedicine and Movement, University of Verona.

2019–2023

Research scholarship at the Department of Neuroscience, Biomedicine and Movement, University of Verona.

01/06/2021

National Scientific Qualification for Associate Professor; competition sector 05/E1 General Biochemistry, valid from 01/06/2021 to 01/06/2030.

2023

Winner of the evaluation procedure for appointment as Associate Professor in Biochemistry (SSD BIO/10), University of Verona.

**Career breaks**

04/2012 – 01/2013 Maternity leave.

08/2014 – 03/2015 Maternity leave.

**Research activity**

Since 2023 Dr. Butturini has been Associate Professor of Biochemistry at the Department of Neuroscience, Biomedicine and Movement, University of Verona. Author of 30 publications in peer-reviewed journals, H-index 19, total citations 3425.

Her scientific activity focuses on the mechanisms regulating cellular redox balance and on the identification of natural molecules with antioxidant and anti-inflammatory activity with potential applications.

During her research period at Showa Pharmaceutical University in Tokyo she studied oxidative post-translational modifications and identified natural polyphenols able to modulate them.

In recent years she has worked on extracellular vesicles (EVs) as innovative delivery platforms for natural molecules, optimizing isolation, characterization and loading protocols. This research led to a patent concerning the use of milk-derived EVs as delivery systems for natural polyphenols.

Since 2009 she has served as reviewer for several international journals including:

PLoS One

International Journal of Biochemistry & Cell Biology

Oncotarget

Free Radical Biology and Medicine

Nitric Oxide: Biology and Chemistry

Biochemical Journal

Since 01-08-2020 she has been member of the Editorial Board of the journal 'Cancer Molecular Targets and Therapeutics', Frontiers in Oncology.

Guest Editor, International Journal of Molecular Sciences, Special Issue 'S-Glutathionylation in Redox Protein Signaling and Health Outcomes'.

Verona, March 2026