

## CRISTINA ULIVIERI CURRICULUM VITAE ET STUDIORUM

Associate professor in Molecular Biology, Department of Life Sciences, University of Siena.

### Education and training

1996 Degree in Biological Sciences Graduates “Magna cum laude” University of Siena  
1995-1996 Experimental thesis work in Molecular Biology Chiron Vaccines, Siena  
1997 Professional qualification as Biologist  
2001 Master in Evolutionary Biology, University of Siena  
2004 PhD Degree in Evolutionary Biology, University of Siena  
2013 Professional qualification as person responsible for directing animal experiments.  
FELASA (Federation of European Laboratory Animal Science Associations) certification

### Attendance to practical course

2000 Practical course of flow cytometry -Becton Dickinson, Milano  
2002 SICiCS Workshop on cytometry –I.R.C.C.S. Roma  
2003 Confocal microscopy and applications -Leica Microsystem, Siena  
2007 IV Interactive Course in Cytometry -SIICA, Modena  
2013 Laboratory Animal Science (LAS) Course VI (FELASA accredited course, code C) EMBL,  
Monterotondo, Italy

### Important academic appointments

2002-2003 Lecturer in Molecular Genetics and OGM, University of Siena  
2003-2004 Lecturer in Recombinant DNA Technology, University of Siena  
2003-2005 Lecturer in Electronic Microscopy, Molecular Biology and Biochemistry laboratory, University of Siena  
2003-2006 Lecturer in Molecular Biology, Master in Bioinformatics “Alberto del Lungo”, University of Siena  
2005-2021 Assistant professor of Molecular Biology, University of Siena. Teaching activities: Molecular Biology and Recombinant DNA, Molecular Biology and Biochemistry, Molecular Biology of Immune Response, Molecular Genetics, Molecular Biology.  
2007-2010 Member of Teaching Committee First cycle degree in Biological Sciences, University of Siena  
2005-2009 Member of PhD program Evolutionary Biology, University of Siena.  
2005-present Thesis supervisor (44 Thesis: First cycle degree, Biological sciences. Second cycle degree, Cellular and Molecular Biology, Biology; 17 Doctoral Thesis: Evolutionary Biology and Life Sciences PhD programs).  
2009- present Member of PhD program in Life Sciences, University of Siena  
2012- present Lecturer in PhD program in Life Sciences, University of Siena  
2012-2014 Member of Teaching Committee Second cycle degree in Molecular and Cellular Biology, University of Siena  
2013- present Member of the Animal Welfare Body, University of Siena  
15-01-2018 External examiner of PhD thesis, dell’Ecole Doctorale Sciences de la Vie et de la Sante, Agronomie, Environment, University of Clermont Auvergne, France  
2022-present Associate Professor of Molecular Biology, University of Siena. Teaching activities: Molecular Biology, Epigenetics and Epigenome.  
2017-2022 Coordinator of faculty-student joint committee (Commissione Partetica Docenti Studenti) for quality assurance activities of Degree courses, Department of Life Sciences, University of Siena  
2023- present Coordinator of PhD program in Life Sciences, University of Siena

### Research Experience

1995-1996 Internship, Research center IRIS, Chiron Vaccines, Siena  
1997-1998 Fellow researcher, University of Siena, Department of Evolutionary Biology, University of Siena  
1999-2001 Fellow researcher, Federazione Italiana per la Ricerca sul Cancro (FIRC), Department of Evolutionary Biology, University of Siena  
07-1999 Visiting scientist, The Basel Institute for Immunology (Lab. Dr. Ed Palmer), Switzerland  
10-2000 Visiting scientist, The Basel Institute for Immunology (Lab. Dr. Ed Palmer), Switzerland  
2000-2003 Ph.D. Student at the Department of Evolutionary Biology, University of Siena

2002-2004	Staff researcher/Post-doctoral researcher, Department of Evolutionary Biology/Life Sciences, University of Siena
2005-2021	Permanent position as Assistant Professor in Molecular Biology (SSD BIO/11), Department of Life Sciences, University of Siena
2022-present	Associate Professor in Molecular Biology (SSD BIO/11), Department of Life Sciences, University of Siena

### Research Activities

She has extensive expertise in molecular and cellular immunology with a focus on signal transduction pathways in lymphocyte activation, differentiation and apoptosis and dysregulation of these processes in immune and pathogen-related diseases. She has expertise in flow cytometry applied to immunology as well as in the *in vivo* analysis of the immune response in the mouse. Her research has been focused on the molecular characterization of antigen receptor and chemokine receptor signaling in lymphocytes and dysregulation of these processes by drugs (NSAIDs, statins) and pathogens (*H. pylori*, *B. anthracis*, *cytomegalovirus*, *hepatitis C virus*, *human Immunodeficiency virus*) as well as to the identification of signaling dysfunctions in immune related diseases (Systemic Lupus Erythematosus, Multiple Sclerosis, Common Variable Immunodeficiency, B Cell Chronic Lymphocytic Leukemia). Recently she focused her research on the EAE mouse model of MS as well as in the study of neuroinflammation, addressing the contribution of astrocytes to this process. Her interest in anti-cancer therapy has resulted in novel information on the immune response induced by vaccine or chemo-immunotherapy in lung and colorectal cancer patients and in the demonstration of pro-apoptotic and anti-proliferative effects of pyrrolonaphthoxazepines compounds and novel cyclic peptide.

### Research support

from 1997-present: Active member of the research unit coordinated by Prof. Cosima Baldari funded by European Union, Italian Ministry of Education, University & Research, Italian Association for Cancer Research, Telethon, Italian Association for Multiple Sclerosis.

Principal Investigator (PI) of the Research contract funded by GSK Vaccines S.r.l. “Deep characterization of the molecular Mode of Action of host responses to GMMA vaccines” (2019-2022) and “Advanced in vitro Human Immune Profiling of GMMA-based vaccines” (2022-2025). Grant from Istituto Toscano Tumori (ITT)-Regione Toscana GRANT PROPOSAL 2013. Project: “Overcoming chemo-resistance: elucidation of the molecular mechanism of pyrrolo-1,5 benzoxazepines (PBOXs) as innovative anticancer agents” (Unit 2 coordinator); Grant from University of Siena (PAR 2006). Project: “COX2: a molecular target for cancer therapy?” and Young Researchers program 2001. Project: “Functional analysis of Grb2 binding sites on the Shc adaptor in T cell activation and proliferation” Principal Investigator

She published 64 full papers in international peer-reviewed journals

(<https://pubmed.ncbi.nlm.nih.gov/?term=Ulivieri+C.&sort=date&size=100>), *h*-index: 21 (Scopus)

### Peer reviewing, and memberships

Review Editor Frontiers in Immunology and Neurology section Multiple Sclerosis and Neuroimmunology

Ad hoc Reviewer for peer reviewed journal including Cardiovascular Drugs and Therapy, Cell Communications and Signalling, Cells, European Journal of Inflammation, Frontiers in Immunology, Frontiers in Neurology, Human Immunology, Immunology and Cell Biology, Immunology Letters, International Immunopharmacology, International Journal of Cancer, International Journal of Immunopathology and Pharmacology, International Journal of Molecular Sciences, Journal of Clinical Medicine, Journal of Immunological Sciences, Journal of Physiology and Pharmacology Journal of Proteome Research, Medical Sciences, PlosOne, Scientific Report, Tissue and Cell.

### Other

From 2019

Responsible for the welfare and care of the animals, Animal facility, University of Siena

from 2016

Tutor for incoming students. Department of Life Sciences. University of Siena

Seminars at high school

2002-2014

Academic advisor for incoming students. Project “Nuovi-Per-Corsi di Qualità” Department of Life Sciences. University of Siena