

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

First and Last Name

VALENTINA CECARINI

Address

Telephone

E-mail

Nationality

Italian

Date of birth

05/08/1980

Marital Status

Married, two children

WORK EXPERIENCE

- | | |
|---|--|
| <ul style="list-style-type: none">• Dates (from – to)• Name and address of employer• Occupation or position held• Main activities and responsibilities | <p>01/06/2013 – 02/11/2015</p> <p>School of Biosciences and Veterinary Medicine, University of Camerino, via Gentile III da Varano, Camerino</p> <p>Post-doc position</p> <p>Purification and characterization of antimicrobial toxins from different strains of the <i>Wickerhamomyces anomalus</i> yeast (model for the bio-conservation in the agro-industrial field) and possible implications in the control entomogenous diseases.</p> |
| <ul style="list-style-type: none">• Dates (from – to)• Name and address of employer• Occupation or position held• Main activities and responsibilities | <p>09/2012 – 02/2013</p> <p>School of Biosciences and Biotechnology, University of Camerino, via Gentile III da Varano, Camerino</p> <p>Bursar</p> <p>Evaluation of the degradation products of diesel-biodiesel blends</p> |
| <ul style="list-style-type: none">• Dates (from – to)• Name and address of employer• Occupation or position held• Main activities and responsibilities | <p>10/2011 – 07/2012</p> <p>Fondazione di Medicina Molecolare e Terapia Cellulare
Dipartimento Scienze Mediche e Chirurgiche - Clinica Medica
Faculty of Medicine and Surgery, University of Ancona</p> <p>Bursar</p> <p><i>In vitro</i> and <i>in silico</i> analysis of PDGFR epitopes</p> |
| <ul style="list-style-type: none">• Dates (from – to) | <p>01/2011 – 07/2011</p> |

<ul style="list-style-type: none"> • Name and address of employer • Occupation or position held • Main activities and responsibilities 	<p>School of Biosciences and Biotechnology, University of Camerino, via Gentile III da Varano, Camerino</p> <p>Bursar</p> <p>Cross-talk between amyloid beta, proteasome and autophagy in models of Alzheimer's disease</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Occupation or position held • Main activities and responsibilities 	<p>03/2010 – 11/2010</p> <p>School of Biosciences and Biotechnology, University of Camerino, via Gentile III da Varano, Camerino</p> <p>Bursar</p> <p>Optical biosensors for the identification of viral nucleic acids</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Type of business or sector • Occupation or position held • Main activities and responsibilities 	<p>A.Y. 2007/2008</p> <p>University of Camerino, via Gentile III da Varano, Camerino</p> <p>Teaching molecular basis of neurodegenerative disorders and diagnostic strategies</p> <p>Contract professor</p> <p>2+1 CFU in Clinical and Molecular Diagnostic</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Occupation or position held • Main activities and responsibilities 	<p>01/2006 – 10/2006</p> <p>Sanders-Brown Center on Aging, University of Kentucky, 800 South Limestone University of Kentucky Lexington KY 40536-0230 and University of Camerino, via Gentile III da Varano, Camerino</p> <p>Bursar</p> <p>Study of the involvement of the proteasomal system in the onset and progression of neurodegenerative disorders</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Occupation or position held • Main activities and responsibilities 	<p>09/2005 – 12/2005</p> <p>University of Camerino, via Gentile III da Varano, Camerino</p> <p>Occasional service contract</p> <p>Study of the interaction between the proteasomal system and aflatoxins</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Occupation or position held • Main activities and responsibilities 	<p>01/2003 – 02/2003</p> <p>Ospedale civile di Civitanova Marche, Contrada San Domenico 137/A, 62013 Civitanova Marche (MC)</p> <p>Stage</p> <p>Monoclonal gammopathies analysis through electrophoretic techniques</p>

EDUCATION AND TRAINING

<ul style="list-style-type: none"> • Dates (from – to) • Name and type of organization providing education and training • Principal subjects/occupational skills covered • Title of qualification awarded • Level in national classification (if appropriate) 	<p>01/2007 – 01/2010</p> <p>School of Advanced Studies, University of Camerino, via Gentile III da Varano, Camerino</p> <p>Role of proteasomal systems in cancer and neurodegenerative disorders</p> <p>PhD in Aging and Nutrition</p> <p>PhD</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and type of organization providing education and training 	<p>10/ 2002 – 12/2004</p> <p>University of Camerino, via Gentile III da Varano, Camerino</p>

- Principal subjects/occupational skills covered
- Title of qualification awarded
- Level in national classification (if appropriate)

Biochemistry, Molecular diagnostic, Molecular Biology

Master degree in Biomolecular and Biofunctional Sciences, magna cum laude
Master degree

- Dates (from – to)

10/1999 – 04/2003

- Name and type of organization providing education and training

University of Camerino, via Gentile III da Varano, Camerino

- Principal subjects/occupational skills covered

Biochemistry, Zoology, Cellular Biology

- Title of qualification awarded

Bachelor degree in Applied Biology, magna cum laude

- Level in national classification (if appropriate)

Bachelor degree

- Dates (from – to)

09/1994 – 07/1999

- Name and type of organization providing education and training

Liceo Scientifico Leonardo da Vinci (Scientific studies), Civitanova Marche (MC)

- Principal subjects/occupational skills covered

Mathematics, Italian and English Literature, Latin, Physics

- Title of qualification awarded

High school diploma, 95/100

- Level in national classification (if appropriate)

High school diploma

PERSONAL SKILLS AND COMPETENCIES

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

ENGLISH

- Reading skills

EXCELLENT

- Writing skills

EXCELLENT

- Verbal skills

EXCELLENT

SOCIAL SKILLS
AND COMPETENCIES

Extremely organized person with a good problem solving attitude. Capacity to establish and maintain working relations with people of different national and cultural background acquired in the period spent abroad.

ORGANIZATIONAL SKILLS
AND COMPETENCIES

Sense of organization. Good experience in project and ability to work in a team acquired during the research activity in the University laboratories.

TECHNICAL SKILLS
AND COMPETENCIES

Computer skills and competences: MS- Office, Photoshop, EndNote, ImageJ, Melanie Software for 2D gel analysis.

Technical competences: Cromatography, Spectrophotometry, Spectrofluorimetry, 2D-Electrophoresis, Nucleic acid extraction, PCR, Western blotting, Immunoprecipitation, Elisa, Cell

	cultures, Isolation and Purification of Macromolecules from animal tissues and cellular lysates.
OTHER SKILLS AND COMPETENCIES	Swimming, Reading, Skiing
DRIVING LICENCE(S)	Category B
ADDITIONAL INFORMATION	<p>- DR.SSA ANNA MARIA ELEUTERI, UNIVERSITY OF CAMERINO, ANNAMARIA.ELEUTERI@UNICAM.IT</p> <p>- PROF. JEFFREY N. KELLER, PENNINGTON BIOMEDICAL RESEARCH CENTER, BATON ROUGE, LA, USA JEFFREY.KELLER@PBRC.EDU</p>
ANNEXES	<p>LIST OF SCIENTIFIC PUBLICATIONS</p> <p>CHAPTER BOOK</p> <p>CONGRESSES AND CONFERENCES</p> <p>AWARDS AND FELLOWSHIPS</p>

I authorise the use of my personal data according to Legislative Decree N°196/03.

Camerino, li 19th October, 2015

Yours faithfully

Valentina Cecarini

SCIENTIFIC PUBLICATIONS

The fine-tuning of proteolytic pathways in Alzheimer's disease.

Cecarini V., Bonfilì L., Cuccioloni M., Mozzicafreddo M., Angeletti M., Keller J.N., Eleuteri A.M. Submitted to *Neurobiology of Aging*

A yeast strain associated to Anopheles mosquitoes produces a toxin able to kill the malaria parasite.

Valzano M., **Cecarini V.**, Cappelli A., Capone A., Bozic J., Cuccioloni M., Epis S., Petrelli D., Angeletti M., Eleuteri A.M., Favia G., Ricci I. Submitted to *Malaria Journal*.

Antiproliferative, antimotility and pro-apoptotic effects of mangiferin. Cuccioloni M., Bonfilì L., Mozzicafreddo M., **Cecarini V.**, Scuri S., Cocchioni M., Eleuteri A. M., Angeletti M. Under revision- *Food and function*.

Effects of Ghrelin on the Proteolytic Pathways of Alzheimer's Disease Neuronal Cells.

Cecarini V., Bonfilì L., Cuccioloni M., Keller J.N., Bruce-Keller A.J., Eleuteri A.M. *Mol Neurobiol*. 2015 Jun 2.

Environmental pollutants directly affect the liver X receptor alpha activity: Kinetic and thermodynamic characterization of binding.

Mozzicafreddo M., Cuccioloni M., Bonfilì L., **Cecarini V.**, Palermo F.A., Cocci P., Mosconi G., Capone A., Ricci I., Eleuteri A.M., Angeletti M. *J Steroid Biochem Mol Biol*. 2015 Aug;152:1-7.

Arene-ruthenium(II) acylpyrazolonato complexes: apoptosis-promoting effects on human cancer cells.

Pettinari R., Pettinari C., Marchetti F., Skelton B.W., White A.H., Bonfilì L., Cuccioloni M., Mozzicafreddo M., **Cecarini V.**, Angeletti M., Nabissi M., Eleuteri A.M. *J Med Chem*. 2014 Jun 12;57(11):4532-42.

Wild type and mutant amyloid precursor proteins influence downstream effects of proteasome and autophagy inhibition.

Cecarini V., Bonfilì L., Cuccioloni M., Mozzicafreddo M., Rossi G., Keller J.N., Angeletti M., Eleuteri A.M. *Biochim Biophys Acta*. 2014 Feb;1842(2):127-34.

Ghrelin induces apoptosis in colon adenocarcinoma cells via proteasome inhibition and autophagy induction.

Bonfilì L., Cuccioloni M., **Cecarini V.**, Mozzicafreddo M., Palermo F.A., Cocci P., Angeletti M., Eleuteri A.M. *Apoptosis*. 2013 Oct;18(10):1188-200.

Arene-Ru(II) complexes of curcumin exert antitumor activity via proteasome inhibition and apoptosis induction. Bonfilì L, Pettinari R, Cuccioloni M, **Cecarini V**, Mozzicafreddo M, Angeletti M, Lupidi G, Marchetti F, Pettinari C and Eleuteri A.M. *ChemMedChem*. 2012 Sep 20.

Abstract: Transient Receptor Potential Vanilloid 1 activation induces autophagy in thymocytes through ROS-regulated proteasome inhibition, UPR and AMPK/ATG4C pathways. V. Farfariello, C. Amantini, M. Nabissi, M. B. Morelli, S. Liberati, A. M. Eleuteri, L. Bonfilì, **V. Cecarini**, M. Sorice & G. Santoni. *Immunology*, 137 (Suppl. 1), 185-772.

Crosstalk between the ubiquitin-proteasome system and autophagy in cellular models of Alzheimer's disease. **Cecarini V**, Bonfilì L, Cuccioloni M, Mozzicafreddo M, Rossi G, Buizza L, Uberti D, Angeletti M and Eleuteri AM. *Biochim Biophys Acta*. 2012 Jul 31;1822(11):1741-1751.

Sanguisorba minor extract suppresses plasmin-mediated mechanisms of cancer cell migration.

Cuccioloni M, Bonfilì L, Mozzicafreddo M, **Cecarini V**, Eleuteri AM, Angeletti M. *Biochim Biophys Acta*. 2012 Jul;1820(7):1027-34.

Identification of an EGCG oxidation derivative with proteasome modulatory activity.

Bonfilì L, Cuccioloni M, Mozzicafreddo M, **Cecarini V**, Tacconi R, Angeletti M and Eleuteri AM. *Biochimie*. 2011 May;93(5):931-40.

Targeting proteasomes with natural occurring compounds in cancer treatment.

Cecarini V, Cuccioloni M, Mozzicafreddo M, Bonfilì L, Angeletti M and Eleuteri AM. *Curr Cancer Drug Targets*. 2011 Mar;11(3):307-24.

The relationship between the 20S proteasomes and prion-mediated neurodegenerations: potential therapeutic opportunities.

Cecarini V, Bonfilì L, Cuccioloni M, Mozzicafreddo M, Angeletti M and Eleuteri AM. Review. Apoptosis. 2010 Nov;15(11):1322-35.

Effects of thymoquinone on isolated and cellular proteasomes.

Cecarini V, Quassinti L, Di Blasio A, Bonfilì L, Bramucci M, Lupidi G, Cuccioloni M, Mozzicafreddo M, Angeletti M, Eleuteri AM. FEBS J. 2010 May;277(9):2128-41.

Interplay between 20S proteasomes and prion proteins in scrapie disease.

Amici M, **Cecarini V**, Cuccioloni M, Angeletti M, Barocci S, Rossi G, Fioretti E, Keller JN, Eleuteri AM. J Neurosci Res. 2010 Jan;88(1):191-201.

50 Hz extremely low frequency electromagnetic fields enhance protein carbonyl groups content in cancer cells: effects on proteasomal systems.

Eleuteri AM, Amici M, Bonfilì L, **Cecarini V**, Cuccioloni M, Grimaldi S, Giuliani L, Angeletti M, Fioretti E. J Biomed Biotechnol. 2009;2009:834239.

Wheat sprout extract-induced apoptosis in human cancer cells by proteasomes modulation.

Bonfilì L, Amici M, **Cecarini V**, Cuccioloni M, Tacconi R, Angeletti M, Fioretti E, Keller JN, Eleuteri AM. Biochimie. 2009 Sep;91(9):1131-44.

Natural occurring polyphenols as template for drug design. Focus on serine proteases.

Cuccioloni M, Mozzicafreddo M, Bonfilì L, **Cecarini V**, Eleuteri AM, Angeletti M. Chem Biol Drug Des. 2009 Jul;74(1):1-15. Review.

Homology modeling and docking analysis of the interaction between polyphenols and mammalian 20S proteasomes.

Mozzicafreddo M, Cuccioloni M, **Cecarini V**, Eleuteri AM, Angeletti M. J Chem Inf Model. 2009 Feb;49(2):401-9.

Natural polyphenols as proteasome modulators and their role as anti-cancer compounds.

Bonfilì L, **Cecarini V**, Amici M, Cuccioloni M, Angeletti M, Keller JN, Eleuteri AM. FEBS J. 2008 Nov;275(22):5512-26. Review.

Amyloid peptides in different assembly states and related effects on isolated and cellular proteasomes.

Cecarini V, Bonfilì L, Amici M, Angeletti M, Keller JN, Eleuteri AM. Brain Res. 2008 May 13;1209:8-18.

Wheat sprout extract induces changes on 20S proteasomes functionality.

Amici M, Bonfilì L, Spina M, **Cecarini V**, Calzuola I, Marsili V, Angeletti M, Fioretti E, Tacconi R, Gianfranceschi GL, Eleuteri AM. Biochimie. 2008 May;90(5):790-801.

Oxidative inactivation of the proteasome in Alzheimer's disease.

Cecarini V, Ding Q, Keller JN. Free Radic Res. 2007 Jun;41(6):673-80.

Binding of aflatoxins to the 20S proteasome: effects on enzyme functionality and implications for oxidative stress and apoptosis.

Amici M, **Cecarini V**, Pettinari A, Bonfilì L, Angeletti M, Barocci S, Biagetti M, Fioretti E, Eleuteri AM. Biol Chem. 2007 Jan;388(1):107-17.

Interplay between protein synthesis and degradation in the CNS: physiological and pathological implications.

Ding Q, **Cecarini V**, Keller JN. Trends Neurosci. 2007 Jan;30(1):31-6. Review.

Protein oxidation and cellular homeostasis: Emphasis on metabolism.

Cecarini V, Gee J, Fioretti E, Amici M, Angeletti M, Eleuteri AM, Keller JN. Biochim Biophys Acta. 2007 Feb;1773(2):93-104.

Decreased RNA, and increased RNA oxidation, in ribosomes from early Alzheimer's disease.

Ding Q., Markesbery W. R., **Cecarini V.**, Keller J. N. Neurochemical Research 2006 May; 31(5):705-10

CHAPTER BOOK

Protein degradation, protein synthesis and oxidation in the central nervous system, **Cecarini V.** and Keller JN, on the book "Enzymes and the cellular fight against oxidation", 2008. Editor Anna Maria Eleuteri. Published by Research Signpost, Kerala, India.

CONGRESSES AND CONFERENCES

- Valzano M., Cappelli A., Ulissi U., Damiani C., Capone A., Bozic J., Cecarini V., Favia G., Ricci I. A killer yeast strain is harbored in malaria vectors: New insights in the mosquito biology and possible implications in the malaria transmission blocking. XXVIII Congresso Nazionale SolPa, Roma 24-27 giugno 2014 (pag. 213).

- 12-14 September 2012: "International workshop on Transient Receptor Potential (TRP) Channels" Valencia, SPAIN. Poster Session: "TRPV1-mediated autophagy in thymocytes is a consequence of proteasome inhibition and unfolded protein response activation". V. Farfariello, C. Amantini, M. Nabissi, M. B. Morelli, S. Liberati, A. M. Eleuteri, L. Bonfili, V. **Cecarini**, M. Sorice & G. Santoni.

- 5 - 8 September, 2012: "European Congress of Immunology" Glasgow, SCOTLAND. Poster Session: Transient Receptor Potential Vanilloid 1 activation induces autophagy in thymocytes through ROS-regulated proteasome inhibition, UPR and AMPK/ATG4C pathways V. Farfariello, C. Amantini, M. Nabissi, M. B. Morelli, S. Liberati, A. M. Eleuteri, L. Bonfili, V. **Cecarini**, M. Sorice & G. Santoni.

- 22-26 July 2012: "XXVIth International conference on polyphenols" Florence, ITALY. Poster Session: "Ruthenium-curcumin complexes as potential anticancer drugs"

- 28-30 October 2010, Camerino – Workshop on Biotechnology, Drug Discovery & Novel Therapeutic Approaches. Lecture: Polyphenols: From reducing properties to biological functions.

- 13 April 2006, Lexington, USA – Lexington conference on RNA therapy for neurodegenerative diseases. Poster Session: **Valentina Cecarini**, Qunxing Ding, Edgardo Dimayuga, William R. Markesbery, Jeffrey N. Keller, Proteasome Inhibition Induces Reversible Impairments In Protein Synthesis.

- 26-28 October 2005, Torino, Italy - VII Congresso Nazionale Società Italiana di Diagnostica di Laboratorio Veterinaria: Convegno degli IZZSS sulle Encefalopatie Spongiformi Animali. Poster Session: Manila Amici, **Valentina Cecarini**, Simone Barocci, Massimo Biagetti, Evandro Fioretti, Anna Maria Eleuteri. Interazione aflatossine-proteasomi 20S: effetti sulla funzionalità enzimatica.

- 5-7 March 2008, Santa Cruz, Tenerife – Third Intracellular Proteolysis Meeting. Poster Session:

- **Valentina Cecarini**, Laura Bonfili, Manila Amici, Mauro Angeletti, Anna Maria Eleuteri. Amyloid peptides in different assembly states and related effects on isolated and cellular proteasomes;

- Matteo Mozzicafreddo, Massimiliano Cuccioloni, Laura Bonfili, **Valentina Cecarini**, Anna Maria Eleuteri, Mauro Angeletti. Docking analysis applied to the interaction between polyphenols and mammalian 20S proteasome.

- Laura Bonfili, **Valentina Cecarini**, Manila Amici, Mauro Angeletti, Evandro Fioretti, Rosalia Tacconi, Anna Maria Eleuteri. Changes in proteasome functionality induced by wheat sprout extracts.

AWARDS AND FELLOWSHIPS

09/2012 – 02/2013 – University of Camerino – Research fellowship for the project "Evaluation of the degradation products of diesel-biodiesel blends"

10/2011-07/2012 - Fondazione di Medicina Molecolare e Terapia Cellulare - Facoltà di Medicina e Chirurgia, University of Ancona - Research fellowship for the project "In vitro and in silico analysis of PDGFR epitopes"

01/2011-07/2011 – University of Camerino – Research fellowship for the project "Cross-talk between amyloid beta, proteasome and autophagy in models of Alzheimer's disease".

April 2011: Top-Cited Paper Award "Natural polyphenols as proteasome modulators and their role as anti-cancer compounds", by L. Bonfili, **V. Cekarini**, M. Amici, M. Cuccioloni, M. Angeletti, J.N. Keller, A.M. Eleuteri, FEBS Journal (2008) Vol 275, Issue 22.

03/2010 - 11/2010 – University of Camerino – Research fellowship for the project "Optical biosensors for the identification of viral nucleic acids"

01/2007-01/2010 – University of Camerino – Three years PhD fellowship 2007-2010.

01/2006-10/2006 – University of Camerino – 1 year research fellowship spent at the Sanders-Brown Center on Aging, University of Kentucky, Lexington, USA.

01/2005 – University of Camerino - Guido Marsili award based on the quality of the master degree thesis "Effetto di aflatossine su sistemi proteasomali isolati".