



## PERSONAL INFORMATION

Name

**ANTONIO FRANCIOSO**

Nationality

**Italian**

Date of birth

**28/07/1988**

## EDUCATION AND TRAINING

- Dates (from – to)
- Name and type of organisation providing education and training

**11/2012 - 12/2015**

“Sapienza” University of Rome

PhD in Biochemistry, Department of Biochemical Sciences “Rossi A. Fanelli” (XXVIII ciclo)  
Sapienza University of Rome

Title of thesis: *“Resveratrol: an Ethylene bridge between Chemistry and Biochemistry”*

Tutors : Prof. Maria d’Erme; Prof. Luciana Mosca

- Dates (from – to)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered

**03/2015 - 09/2015**

Faculty of Biology, Universidad de La Habana, Cuba

Grupo de Genética Toxicológica

Visiting scientist, Genotoxicity and mutagenicity of 2,4,6-trihydroxyphenantrene, extraction and characterization of natural products from endemic tropical flora

- Dates (from – to)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

**11/2010 - 10/2012**

“Sapienza” University of Rome – Pharmaceutical Biotechnology

Analytical and organic chemistry; natural compounds; biochemistry; microbiology; medicinal chemistry

Master degree with the mark of 110 cum laude / 110. Title of experimental thesis : *“Development of a new Resveratrol pharmaceutical liquid formulation and studies on its antiviral activity ”*

- Dates (from – to)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

**09/2007 - 11/2010**

“Sapienza” University of Rome - Biomedical Laboratory Techniques

Chemistry; neurochemistry and neurobiology; biotechnology; medicine

Bachelor degree with the mark of 110 cum laude / 110. Title of experimental thesis : *“New  $\beta$ -sheet breaker peptides against  $\beta$ -amyloid aggregation and fibrillogenesis: a possible therapeutic strategy for Alzheimer disease”*

- Dates (from – to)
- Name and type of organisation providing education and training
- Title of qualification awarded

**2002-2007**

Liceo Scientifico “G. Pellecchia”, Cassino (FR), Italy  
 High school scientific lyceum diploma

**WORK EXPERIENCE**

- Dates (from – to)
- Name and address of employer
- Occupation and main activities

**2017 – TO DATE**

Department of Biochemical Sciences “Rossi A. Fanelli”; Sapienza University of Rome, and “GNOSIS” S.p.a.  
 Contract for research activities - Analytical investigations on glutathione thioester derivatives and determination of S-Adenosylmethionine in human plasma

- Dates (from – to)
- Name and address of employer
- Occupation and main activities

**2016 – 2017**

Department of Biochemical Sciences “Rossi A. Fanelli”; Sapienza University of Rome  
 Post-doctoral fellowship (FILAS project): “chemical and biological studies on  $\beta$ -hexachlorocyclohexane, a persistent environmental pollutant of “Valle del Sacco” (ITALY).

- Dates (from – to)
- Name and address of employer
- Occupation and main activities

**2015 – 2017**

Department of Biochemical Sciences “Rossi A. Fanelli”; Sapienza University of Rome  
 Teaching assistant of molecular biology exercises for high school students in “Bioform project 2015-2017” (Fondazione per l'Avanzamento delle Ricerche in Medicina Molecolare – ONLUS)

- Dates (from – to)
- Name and address of employer
- Occupation and main activities

**2012 - 2015**

Department of Biochemical Sciences “Rossi A. Fanelli”; Sapienza University of Rome  
 Teaching assistant for laboratory exercises of biochemistry

- Dates (from – to)
- Name and address of employer
- Occupation and main activities

**2011 - 2012**

Faculty of Pharmacy and Medicine, “Sapienza” University of Rome  
 Tutor for the course of Pharmaceutical Biotechnology

- Dates (from – to)
- Name and address of employer
- Occupation and main activities

**2010 - 2012**

Pharmaceutical company “NOOS” S.r.l.  
 Consultant

- Dates (from – to)
- Name and address of employer
- Occupation, main activities and responsibilities

**2009 - 2010**

School of Medicine, University “La Sapienza”, Rome  
 Tutor of “Scientific English” for students of the Degree in Medicine and Surgery

- Dates (from – to) **2008 - 2009**
- Name and address of employer School of Medicine, University "La Sapienza ", Rome
- Occupation, main activities and responsibilities Assistant at the "Museum of Pathological Anatomy"

**PERSONAL SKILLS AND COMPETENCES**

MOTHER TONGUE	<b>ITALIAN</b>
OTHER LANGUAGES	
	<b>ENGLISH</b>
• Reading skills	EXCELLENT
• Writing skills	GOOD
• Verbal skills	GOOD
	<b>SPANISH</b>
• Reading skills	EXCELLENT
• Writing skills	GOOD
• Verbal skills	EXCELLENT
	<b>FRENCH</b>
• Reading skills	GOOD
• Writing skills	ELEMENTARY
• Verbal skills	ELEMENTARY
	<b>ARABIC</b>
• Reading skills	NO
• Writing skills	NO
• Verbal skills	GOOD
<b>ORGANISATIONAL SKILLS AND COMPETENCES</b>	Good experience in project management or groups. Good social interaction. Good organizational skills due to experience as counselor and teacher for children and students
<b>ARTISTIC SKILLS</b>	Singing and playing music; dancing; sailing
<b>RESEARCH ACTIVITIES:</b>	Organic natural compounds and modulation of oxidative stress in biological processes. Study of polyphenolic antioxidants and properties of natural biopolymers for pharmaceutical purposes. Chemistry and biochemistry of Sulfur-containing natural compounds
<b>TECHNICAL SKILLS AND COMPETENCES</b>	Chemical and biochemical extractions, purifications and analytical general methods. Chromatography: HPLC, reverse phase, gel filtration, ion exchange, hydrophilic interaction. Mass Spectrometry: UHPLC-MS. Capillary electrophoresis: CE, CZE, MEKC. Spectroscopy: spectrophotometry, spectrofluorimetry, infrared spectroscopy and circular dichroism. Cell cultures. Mono- and bi-dimensional electrophoresis, Western blotting.

FUNDING AND GRANTS

“Graduated Excellent” award 2013 from the Dean of “Sapienza” University of Rome

Winner of the project “Start to research” part of the *Ateneo 2014* financing of “Sapienza” University of Rome

Winner of the project “Start to research” part of the *Ateneo 2015* financing of “Sapienza” University of Rome

Winner of “Leibniz-DAAD Research Fellowship 2017” from German government

Excellent knowledge of :

- Microsoft Office <sup>™</sup> (Word <sup>™</sup>, Excel <sup>™</sup> and PowerPoint <sup>™</sup>).
- Origin Pro (Origin Lab Corporation)
- Graphic design applications (Adobe Illustrator <sup>™</sup>, ImageJ).
- Internet, data bank and bioinformatic analysis and chemical structure design (ACD labs; ChemDraw)
- Windows OS.

DRIVING LICENCE(S)

A3 and B

## ADDITIONAL INFORMATION

### Scientific publications:

Behind Resveratrol Stabilization by Carboxymethylated (1,3/1,6)- $\beta$ -D-Glucan: Does the Polyphenol Play a Role in Polymer Structural Organization?

Francioso A, Dinarelli S, Girasole M, Cervoni L, D'Erme M, Mura F, Boffi A, Montanari E, Mosca L.

*Int. J. Mol. Sci.* (2017) 18(9), 2006

Studies on Trans-Resveratrol/Carboxymethylated (1, 3/1, 6)- $\beta$ -D-Glucan Association for Aerosol Pharmaceutical Applications.

Francioso A, Cossi R, Fanelli S, Mastromarino P, Mosca L

*Int. J. Mol. Sci.* (2017) 18(5), 967.

ATP release during cell swelling activates a Ca<sup>2+</sup>-dependent Cl<sup>-</sup> current by autocrine mechanism in mouse hippocampal microglia

Murana E., Pagani F., Basilico B., Sundukova M., Batti L., Di Angelantonio S., Cortese B., Grimaldi A., Francioso A., Heppenstall P., Bregestovski P., Limatola C., Ragozzino D.

*Sci. Rep.* (2017) 7: 4184

HPLC determination of bioactive sulfur compounds, amino acids and biogenic amines in biological specimens

Francioso A, Fanelli S, Vigli D, Ricceri L, Cavallaro RA, Baseggio Conrado A, Fontana M, D'Erme M, Mosca L

*Adv Exp Med Biol* (2017) Taurine 10, 535-549

Carbonate anion radical generated by the peroxidase activity of copper, zinc superoxide dismutase: scavenging of radical and protection of enzyme by hypotaurine and cysteine sulfinic acid

Baseggio Conrado A, Maina S, Moseley H, Francioso A, Mosca L, Capuozzo E, Fontana M

*Adv Exp Med Biol* (2017) Taurine 10, 551-561

Hyaluronan acid-cholesterol nanohydrogels: characterization and effectiveness in carrying Alginate Lyase enzyme

Montanari E, Di Meo C, Sennato S, Francioso A, Marinelli AL, Ranzo F, Schippa S, Coviello T, Bordi F, Matricardi P

*New Biotechnology* (2017) 37, 80-89

A Novel Direct Method for Determination of Riboflavin in Alcoholic Fermented Beverages

Bonamore A, Gargano M, Calisti L, Francioso A, Mosca L, Boffi A, Federico R

*Food Anal. Meth.* (2016) 9 (4), 840-844

Resveratrol inhibits rhinovirus replication and expression of inflammatory mediators in nasal epithelia

Mastromarino P, Capobianco D, Cannata F, Nardis C, Mattia E, De Leo A, Restignoli R, Francioso A, Mosca L

*Antiviral Res.*(2015) 123, 15-21

$\beta$ -Sheet interfering molecules acting against  $\beta$ -amyloid aggregation and fibrillogenesis

Francioso A, Punzi P, Boffi A, Lori C, Martire S, Giordano C, D'Erme M, Mosca L

*Bioorg. Med. Chem.*(2015) 23: 8, 1671-1683

Halogenated triazinediones behave as antagonists of PKR<sub>1</sub>: in-vitro and in-vivo pharmacological characterization

Lattanzi R, Congiu C, Onnis V, Deplano A, Salvadori S, Marconi V, Maftei D, Francioso A, Ambrosio C, Casella I, Costa T, Caltabiano G, Matsoukas MT, Balboni G, Negri L

*Int. J Pharm.Sci. Res.*(2014) 5:11, 5064

Isolation and identification of 2,4,6-trihydroxyphenanthrene as a byproduct of *trans*-resveratrol photochemical isomerization and electrocyclization

Francioso A, Boffi A, Villani C., Manzi L, d'Erme M, Macone A, Mosca L

*J. Org. Chem.* (2014) 79:9381-4.

Improved stability of *trans*-resveratrol in aqueous solutions by carboxymethylated (1,3/1,6)- $\beta$ -D-glucan

Francioso A, Mastromarino P, Restignoli R, Boffi A, d'Erme M, Mosca L  
*J. Agric. Food Chem.*, (2014) 62:1520–15255

Chemistry, stability and bioavailability of resveratrol

Francioso A, Mastromarino P, Masci A, d'Erme M, Mosca L  
*Med. Chem.* (2014) 10:237-45.

5-S-Cysteinyldopamine neurotoxicity: influence on the expression of  $\alpha$ -Synuclein and of ERp57 in cellular and animal models of Parkinson's disease

Aureli C, Cassano T, Masci A, Francioso A, Martire S., Cocciolo A, Chichiarelli S, Romano A, Gaetani S, Mancini P, Fontana M, d'Erme M, Mosca L  
*J. Neurosci. Res.* (2014) 92:347-58

Transient increase in neuronal chloride concentration by neuroactive amino acids released from glioma cells

Bertollini C, Murana E, Mosca L, D'Erme M, Scala F, Francioso A, Catalano M, Limatola C, Bregestovski P, Di Angelantonio S, Ragozzino D  
*Frontiers Mol. Neurosci.* (2012) 5:100

Modulation of the expression and aggregation of alpha-synuclein and of ERp57 in cellular and animal models of Parkinson disease

Aureli C, Francioso A, Masci A, Faraldi M, Martire S, Ferraro A, Fontana M, Cassano T, D'Erme M, Mosca L  
*The Febs Journal.* (2011) 278: 257

#### **Abstracts and conferences:**

HPLC method for the determination of sulfur-containing biogenic amines in biological specimens

Francioso A, Fanelli S, Vigli D, Cavallaro R, Ricceri L, Napoletani G, Fontana M, Baseggio Conrado A, D'Erme M, Mosca L  
*International Taurine meeting* (2016) Seoul, South Korea

Improved Stability of *trans*-Resveratrol in Aqueous Solutions by Carboxymethylated (1,3/1,6)- $\beta$ -D-Glucan and Antiviral Properties of this Combination

Francioso A, Mastromarino P, Capobianco D, Mattia E, De Leo A, Girasole M, Dinarelli S, Boffi A, d'Erme M, Mosca L  
*Nanoscience & Nanotechnology* (2014) Istituto Nazionale di Fisica Nucleare, Frascati (Italia)

Resveratrol Inhibition of Human Rhinovirus Replication

Mastromarino P, Nardis C, Cannata F, De Leo A, Francioso A, Mosca L  
*2<sup>nd</sup> Antivirals Congress* (2013) Cambridge, MA, USA

Resveratrol Inhibition of Human Rhinovirus Replication

Nardis C, Mattia E, De Leo A, Francioso A, Mosca L, Mastromarino P  
*5<sup>th</sup> European Congress of Virology* (2013) Lyon, France

Cellular response to oxidative stress induced by Amyloid  $\beta$ -peptide: in vitro and in vivo studies

Mosca L, Consalvi V, Chiaraluce R, Martire S, Buoninfante OA, Masci A, Francioso A, d'Erme M  
*Biophysics & Bioeng. Letters* (2012) Vol. 5(2) Roma, Italia

Modulation of the expression and aggregation of alpha-synuclein and of ERp57 in cellular and animal models of Parkinson disease

Aureli C, Francioso A, Masci A, Faraldi M, Martire S, Ferraro A, Fontana M, Cassano T, D'Erme M, Mosca L  
*FEBS JOURNAL* (2011) 278: 257-257.

### **Seminars and congresses attended**

- - “ $\beta$ -sheet breakers in the fibrillogenesis and aggregation of amyloid: an update on chemical mechanisms and potential applications”, 16-17 November 2012, “Sapienza” University of Rome, Italy
- - “7<sup>th</sup> International Symposium: Mass Spectrometry and related techniques in Advanced Analytical Science”, 23-24 April 2013, WATERS, Manchester, United Kingdom
- - “Meetings on Separations Sciences: The Contribution of Separations Sciences to food and environmental issues”, 28-29 November 2013, University of Messina, Italy
- - “Nanoscience and Nanotechnology 2014”, 6-7 Ottobre 2014, I.N.F.N. Frascati, Italy
- - “Nanoscience and Nanotechnology annual meeting 2015”, Sept 28th- Oct 2nd 2015, I.N.F.N. Frascati, Italy
- - “International Taurine meeting 2016” 23-27 May 2016 Seoul, South Korea
- - “10th World Congress on Polyphenols Applications” 29 June - 1 July 2016 Porto, Portugal
- - National congress “Doctors for the Environment” 7-8 October 2016 Arezzo, Italy