

## 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, Italy

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, Department of Plant Biology, University of Havana, Cuba

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, biotechnology

Master degree with the mark of 110 cum laude / 110. Title of experimental thesis: *“Development of a new Resveratrol pharmaceutical liquid formulation and studies of 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. Pellicchia", Cassino (FR), Italy

High school scientific lyceum diploma

## WORK EXPERIENCE

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

**12/ 2017 – 11/ 2018**

Department of Bioorganic Chemistry, Leibniz Institute of Plant Biochemistry (IPB-Halle), Halle (Saale), Germany

Leibniz-DAAD post-doctoral fellowship. Title of the project: "Metabolomics-based Elucidation of the Bioactive Principles of Endemic Cuban Medicinal Plants"

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

**02/ 2017 – 12/ 2017**

Department of Biochemical Sciences "Rossi A. Fanelli"; Sapienza University of Rome, and "GNOSIS" S.p.a.

Post-doctoral research project: 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, Italy

Teaching assistant of molecular biology exercises for high school students in "Bioform project 2015-2017" (Foundation for the Advancement of Research in Molecular Medicine – 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, Italy

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

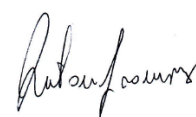
Tutor for the course of Pharmaceutical Biotechnology

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

**2010 - 2012**

Pharmaceutical company "NOOS" S.r.l.

Consultant



- Dates (from – to) **2009- 2010**
- Name and address of employer School of Medicine, University "La Sapienza ", Rome, Italy
- Occupation, main activities and responsibilities 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, Italy
- Occupation, main activities and responsibilities Assistant at the "Museum of Pathological Anatomy"

**PERSONAL SKILLS AND COMPETENCES**

MOTHER TONGUE  
OTHER LANGUAGES

**ITALIAN**

**ENGLISH**

- Reading skills EXCELLENT
- Writing skills GOOD
- Verbal skills GOOD

**SPANISH**

- Reading skills EXCELLENT
- Writing skills GOOD
- Verbal skills EXCELLENT

**FRENCH**

- Reading skills GOOD
- Writing skills ELEMENTARY
- Verbal skills ELEMENTARY

**ARABIC**

- Reading skills NO
- Writing skills NO
- Verbal skills GOOD

**GERMAN**

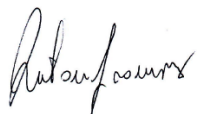
- Reading skills ELEMENTARY
- Writing skills ELEMENTARY
- Verbal skills ELEMENTARY

ORGANISATIONAL SKILLS  
AND COMPETENCES

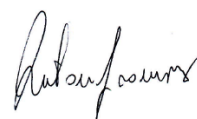
Project and/or groups management.  
Good social interaction.  
Organizational skills due to experience as counselor and teacher for students

ARTISTIC SKILLS

Singing and playing music; dancing; sailing



RESEARCH ACTIVITIES:	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 organic compounds
TECHNICAL SKILLS AND COMPETENCES	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, circular dichroism and NMR. Cell cultures, viability and toxicity evaluation, neuroactivity assays. Mono- and bi-dimensional electrophoresis, Western blotting.
FUNDING AND GRANTS	<ul style="list-style-type: none"> <li>- "Graduated Excellent" award 2013 from the Dean of "Sapienza" University of Rome, Italy</li> <li>- Winner of the project "Start to research" part of the <i>Ateneo 2014</i> financing of "Sapienza" University of Rome, Italy</li> <li>- Winner of the project "Start to research" part of the <i>Ateneo 2015</i> financing of "Sapienza" University of Rome</li> <li>- Fellowship from the "FILAS" project 2016: "Chemical and biological studies on <math>\beta</math>-hexachlorocyclohexane, a persistent environmental pollutant of Valle del Sacco" financing of "Regione Lazio", Italy</li> <li>- Winner of "Leibniz-DAAD Research Fellowship 2017" from German government</li> </ul>
	<p>Excellent knowledge of :</p> <ul style="list-style-type: none"> <li>• Microsoft Office <sup>TM</sup> (Word <sup>TM</sup>, Excel <sup>TM</sup> and PowerPoint <sup>TM</sup>).</li> <li>• Origin Pro (Origin Lab Corporation)</li> <li>• Graphic design applications (Adobe Illustrator <sup>TM</sup>, ImageJ).</li> <li>• Internet, databank and bioinformatic analysis and chemical structure design (ACD labs; ChemDraw, XCalibur, MestreNova)</li> <li>• Windows OS.</li> </ul>
DRIVING LICENCE(S)	A3 and B



## ADDITIONAL INFORMATION

### Scientific publications:

*Anti-inflammatory activity of polyphenolic extract from Arabidopsis thaliana in Alzheimer's disease models*

Mattioli R<sup>#</sup>, **Francioso A<sup>#</sup>**, D'Erme M, Trovato M, Mancini P, Piacentini L, Casale A.M., Wessjohann L, Gazzino R, Costantino P and Mosca L  
*Redox Biology* (2018) submitted

*2,4,6-trihydroxyphenanthrene, a trans-resveratrol photoreaction byproduct:*

*first evidences of genotoxic risk*

**Francioso A<sup>\*</sup>**, Mosca L, Menéndez-Perdomo I, Fanelli S, Fontana M, D'Erme M, Fuentes-Leon F and Sanchez-Lamar A  
*Phytochem. Lett.* (2018) in press (December 2018)

*Iridoids and volatile pheromones of Tapinoma darioi ant: Chemical differences to the closely related Tapinoma magnum*

D'Eustacchio D, Centorame M, Fanfani A, Senczuk G, Jiménez-Alemán G, Vasco-Vidal A, Méndez Y, Ehlrich A, Wessjohann L and **Francioso A<sup>\*</sup>**  
*Chemoecology* (2018), in press (December 2018)

*Thiotaurine: from Chemical and Biological Properties to Role in H<sub>2</sub>S Signaling*

Baseggio Conrado A, Capuozzo E, Mosca L, **Francioso A**, Fontana M  
*Adv. Exp. Med. Biol.* (2018) Taurine 11, in press (August 2018)

*Hyaluronan-Based Nanohydrogels for Targeting Intracellular S. Aureus in Human Keratinocytes*

Montanari E, Oates A, Di Meo C, Meade J, Cerrone R, **Francioso A**, Devine D, Coviello T, Mancini P, Mosca L, Matricardi P  
*Adv. Healthcare Mater.* (2018), 1701483

*Erythrocyte's aging in microgravity highlights how environmental stimuli shape metabolism and morphology*

Dinarelli S, Longo G, Dietler G, **Francioso A**, Mosca L, Pannitteri G, Boumis G, Bellelli A, Girasole M  
*Sci. Rep.* (2018) 8 (1), 5277

*Behind Resveratrol Stabilization by Carboxymethylated (1,3/1,6)-β-d-Glucan: Does the Polyphenol Play a Role in Polymer Structural Organization?*

**Francioso A<sup>\*</sup>**, 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)-β-D-Glucan Association for Aerosol Pharmaceutical Applications.*

**Francioso A<sup>\*</sup>**, 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<sup>\*</sup>**, Fanelli S, Vigli D, Ricceri L, Cavallaro RA, BaseggioConrado 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, Maffei 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

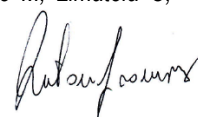
Aureli C, Cassano T, Masci A, **Francioso A**, Martire S., Cocciolo A, Chichiarelli S, Romano A, Gaetani S, Mancini P, Fontana M, d'Erme M, Mosca L

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

\* = **Corresponding author**

# = **Equal authors contribution**

#### **BIBLIOMETRIC INDICES:**

H-INDEX:

**6**

AUTHOR IMPACT FACTOR:

**54.491**

TOTAL NUMBER OF CITATIONS:

**141**

#### **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 October 2014, I.N.F.N. Frascati, Italy
- - "Nanoscience and Nanotechnology annual meeting 2015", Sept 28<sup>th</sup>- Oct 2<sup>nd</sup> 2015, I.N.F.N. Frascati, Italy
- - "International Taurine meeting 2016" 23-27 May 2016 Seoul, South Korea
- - "10<sup>th</sup> World Congress on Polyphenols Applications" 29 June - 1 July 2016 Porto, Portugal
- - National congress "Doctors for the Environment" 7-8 October 2016 in Arezzo, Italy
- - "Natural products: Chemistry, Biology and Ecology" 20 April 2018 in Bayreuth, Germany
- - "Leibniz Conference on Bioactive Compounds 2018" 23-24 April 2018 in Halle(Saale), Germany
- - 11<sup>th</sup> "International Symposium on Chromatography of Natural Products" 4-7 June 2018, Lublin, Poland
- 3<sup>rd</sup> "European Congress of Natural Products" 2 - 5 September 2018 DECHEMA-Haus, Frankfurt am Main, Germany