




PERSONAL INFORMATION

Alessia Forgiarini

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WORK EXPERIENCE

- from 03/2014-till now Post doctoral fellow supported by Pediatric Research Institute “Fondazione Città della Speranza” (Padova, Italy) working on the project “The neuronal role of lipids: from molecular function of genes to identification of biomarker in juvenile spastic paraplegia forms”.
Supervisor: Dr. Genny Orso
- 12/2011 Translation from English to Italian of the 58th chapter “Antiviral Agents (Nonretroviral)” of Goodman and Gilman's, The pharmacological basis of therapeutics (Le basi farmacologiche della terapia), 12th edition, Zanichelli, 2012.

EDUCATION AND TRAINING

- 01/2011-12/2013 PhD at the Doctoral School of Pharmacological Sciences, Course in Pharmacology, Toxicology and Therapeutics at University of Padova, Italy. Thesis: Toxicity of environmental pollutants related to incineration of municipal solid waste: study of the molecular mechanisms in airway epithelial cells (Tossicità di inquinanti ambientali correlati ai processi di incenerimento dei rifiuti solidi urbani: studio dei meccanismi molecolari su cellule del tratto respiratorio). Supervisor: Dr. Maria Carrara.
- 2012 Co-Tutor of the M.sc. Thesis: Studio della citotossicità e dello stress ossidativo indotto da ceneri volatili (fly ash) derivanti da un inceneritore di rifiuti solidi urbani su cellule del tratto respiratorio (Study of cytotoxicity and oxidative stress induced by fly ash collected from a municipal solid waste incinerator on human airway cells). Student: C. Zivelonghi, Tutor: M. Monopoli, Co-Tutors: M. Carrara, A. Forgiarini.
- 2013 Co-Tutor of the M.sc. Thesis: Valutazione della tossicità del fly ash su cellule di epitelio respiratorio umano (Evaluation of the toxicity of fly ash on human respiratory epithelial cells). Student: C. Vianello, Tutor: L. Caparrotta, Co-Tutors: M. Carrara, A. Forgiarini.
- 06/2011 Pharmacy Professional National abilitation.
- 06/07/2010 Degree in Pharmaceutical Chemistry and Technology (Laurea Specialistica in Chimica e Tecnologia Farmaceutiche), score: 100/110, Department of Pharmacology and Anaesthesiology, University of Padova, Italy. Thesis: Apoptosis and cell cycle arrest induced by *Pistacia lentiscus* essential oil (Attivazione di processi apoptotici e blocco del ciclo cellulare ad opera dell'olio essenziale di *Pistacia lentiscus*). Supervisors: Prof. Laura Caparrotta and Dr. Maria Carrara.
- 2008/2009 Internship in pharmacy “Antonelli”, Gemona del Friuli, UD, and in pharmacy “Genta”, Padova, Italy.

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B1	B1	B1	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](http://www.cerl.eu)

Communication skills Good communication skills gained through the experience of Doctoral School.

Organisational / managerial skills Apply methods with precision, design and grow up an experiment. Constancy in work and problem solving. Teamwork capacity even under pressure and for long time requiring experiments. Tutoring of students during PhD and Post-Doc.

Job-related skills

Cellular biology:
 Suspension and adherent cell, preparation and culture of patient primary fibroblasts. Transfection by lipofectamine and electroporation, immunofluorescence. Flow cytometry analysis (apoptosis, cell cycle, ROS, mitochondrial potential), spectrophotometric and luminometric assays (MTT, SRB, ATP, Caspase, tGSH content). Immunocytochemical staining and acquisition.

Molecular biology:
 DNA and RNA extraction from cells and tissues. Primers design, PCR, site directed mutagenesis, enzymatic digestion, DNA ligation, transformation of E. coli by heat shock, purification of vectors (midi, mini preparation). Retro transcription. Real time PCR. Sequence mutations analysis.

Biochemistry:
 SDS-PAGE and western blotting, electrophoresis on agarose gel, test ELISA.

In vivo studies in *Drosophila melanogaster*:
 Fly stocks maintenance and lines manipulation. Dissection of third instar larvae, p-formaldehyde, methanol and acetone fixation, immunohistochemical staining and image analysis. RNA extraction from tissues and real time qPCR. Transmission electron microscopy (TEM) brain samples preparation.

Microscopy:
 Observing and acquiring images from confocal, fluorescence and optical microscopes (Nikon, Leica). Search references by the principal scientific data bases (SciFinder, Pubmed) and order them (Refworks, Write-N-Cite).

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

Good command of office suite (word processor, spread sheet, presentation software), GraphPad, Internet Explorer, ImageJ, Sequencer.

Driving licence B

ADDITIONAL INFORMATION

Conferences

A. Forgiarini

Molecular mechanisms involved in antiproliferative effects induced by two dibenzocyclooctadiene lignans isolated from *Schisandra chinensis* in human cancer cells.

35° National Congress of the Italian Society of Pharmacology (Bologna, Italy, 14-17/09/2011).

A. Forgiarini, F. Natolino, W. Tirler, M. Carrara

Toxicological effect of environmental pollutants: *in vitro* evaluation on pulmonary cells.

16° National Congress of Italian Society of Toxicology (Giardini Naxos, ME, Italy, 21-23/03/2012).

A. Forgiarini, F. Natolino, W. Tirler, M. Carrara

Cytotoxicity and oxidative stress induced by particulate matter (PM) fractions and fly ash from a solid waste incinerator on pulmonary cells.

16° National Seminar for PhD students in Pharmacology and related Sciences (Rimini, Italy, 16-19/09/2012).

A. Forgiarini, M. Carrara

Cytotoxicity, oxidative stress and inflammatory responses induced by fly ash particles in human lung epithelial cells.

49° Congress of the European Societies of Toxicology (Interlaken, Switzerland, 1-4/09/2013).

A. Forgiarini, R. Ceccato, M. Carrara

In vitro evaluation of the toxicological effects induced by fly ash particles in human airway epithelial cells.

36° National Congress of Italian Society of Pharmacology (Torino, Italy, 23-26/10/2013).

A. Forgiarini, D. Catanzaro, C. Vianello, E. Ragazzi, L. Caparrotta, C. Frezza, G. Orso, M. Montopoli

Involvement of mitochondrial metabolism in chemotherapy response: trans-mitochondrial hybrids as cell model.

Cancer and Metabolism Conference 2015 (Cambridge, UK, 28-30/09/2015).

Honours and awards

Best poster Award to Youth Members, unstructured under 38 years "Toxicological effect of

environmental pollutants: *in vitro* evaluation on pulmonary cells" **A. Forgiarini**, F. Natolino, W. Tirler, M.

Carrara, 16° National Congress of Italian Society of Toxicology (Giardini Naxos, ME, Italy, 21-

23/03/2012).

Padova, may 2016