

Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Sara Biagiotti**

Address(es)

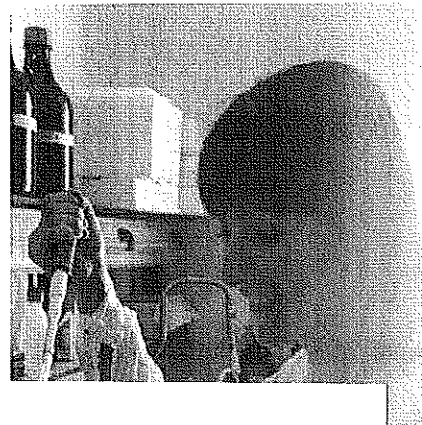
Telephone(s)

E-mail

Nationality

Date of birth

Gender



Work experience

- January 2015 – December 2016 **Postdoc fellowship**
Dept. Molecular Medicine, Sapienza University
Research project: Mechanism of action of Dexamethasone in Ataxia Telangiectasia
- April 2014 - December 2014 **Research Bursary**
Dept. Of Biomolecular Sciences, University of Urbino
Research project: Translational research in Ataxia Telangiectasia, biomolecular studies and new therapeutic strategies
- March 2012 – February 2014 **Research Bursary**
Dept. Of Biomolecular Sciences, University of Urbino
Research project: Translational research in Ataxia Telangiectasia, biomolecular studies and new therapeutic strategies
- February 2010 – Jan. 2012 **Research Bursary**
Dept. Of Biomolecular Sciences, University of Urbino
Research project: Translational research in Ataxia Telangiectasia, biomolecular studies and new therapeutic strategies
- November 2006 – Feb. 2009 **Doctoral research**
Dept. Of Biomolecular Sciences, University of Urbino
Research project: Delivery of the immunosuppressant Tacrolimus through erythrocytes
- November 2004 – Feb. 2006 **Undergraduate research**
Dept. Of Biomolecular Sciences, University of Urbino
Research project: Administration of Dexamethasone through autologous erythrocytes in IBD patients

Didactic qualifications

- April 2015-present **Teaching assistant in Laboratory of Biotechnology 2**
University of Urbino, Degree in Biotechnology
- February 2013-present **Teaching assistant in Laboratory of Biomolecular Methodologies**
University of Urbino, Degree in Biology
- February 2010 –present **Teaching assistant in Systematic Human Biochemistry**
University of Urbino, Degree in Biology

- October 2012 **Co-advisor**
Dissertation: Expression, purification and characterization of the mini-ATM protein: new variant with clinical interest
Student Francesco Musmeci
- October 2010 **Co-advisor**
Dissertation: Red blood cells as a delivery system for the immunosuppressant Cyclosporin A
Student: Filomena Porchia
- October 2010 **Co-advisor**
Dissertation: Red blood cells as a delivery system for the immunosuppressant Cyclosporin A
Student: Filomena Porchia

Education and training

- February 2010 **Ph.D. In Biochemistry and pharmacology**
University of Urbino, Urbino, Italy
Dissertation title: Delivery of the immunosuppressant Tacrolimus through erythrocytes
Advisor: Prof. Luigia Rossi
- June 2010 **Authorization for Biologist**
University of Urbino
- September 2009 **Training course**
Nano- and bio-technologies for diagnostic and therapeutics
University of Urbino, Campus Scientifico ex-Sogesta, Urbino 10-11th September 2009
- July 2008 **Training course**
The contribution of biotechnology in the development of new therapeutic strategies"
University of Urbino, "La Vela" College, Urbino 7-8th July 2008
- November 2007-june 2008 **Training course FSE [220 hours]**
From the university to the enterprise: the research for business
University of Urbino
Funded by Provincia Pesaro-Urbino
- December 2007 **Workshop**
From the laboratory to clinical application: Production and marketing authorization of biotechnological drugs
University of Urbino, Campus Scientifico ex-Sogesta, Urbino 14th december 2007
- February 2006 **B.Sc. Cum laude in Biology**
University of Urbino, Urbino, Italy
Thesis title: Interleukin Determination of Dexamethasone plasmatic levels administered through erythrocytes in IBD patients
Advisor: Prof. Luigia Rossi

Personal skills and competences

Mother tongue(s) Italian

Other language(s)

Self-assessment

European level (*)

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent user	C1	Proficient user	B1	Independent user	B1	Independent user	C1	Proficient user
A2	Basic user	A2	Basic user	A1	Basic user	A1	Basic user	A1	Basic user

(*) Common European Framework of Reference for Languages

Social skills and competences Good social and communication skills, good attitude to work in team acquired through the practice of team sports such as volleyball)

Organisational skills and competences	Good ability to organize work acquired mainly in the daily lab practice
Technical skills and competences	<p><u>Molecular biology</u>: cloning, transformation/transfection in prokaryotic/eukaryotic cells, screening and construction of gene libraries, expression and purification of recombinant proteins in prokaryotic and eukaryotic cells.</p> <p><u>Genomics</u>: HRM analysis for genotyping.</p> <p><u>Transcriptomics</u>: northern blotting, RNA protection assay, quantitative real-time PCR and microarray for analysis of gene expression.</p> <p><u>Proteomics</u>: electrophoresis of nucleic acids/proteins, western blotting, bi-dimensional electrophoresis, immuno-blotting, dot blot, ELISA.</p> <p><u>Metabolomics</u>: metabolite extraction and mass spectrometric techniques.</p> <p><u>Biochemistry</u>: cell cultures, chromatographic techniques, spectrophotometric/fluorimetric assays for enzyme activity and intermediate compounds.</p> <p><u>Biotechnology and engineering</u>: pharmacokinetic and drug monitoring, slow delivery of drugs through red blood cells; targeting of drugs to RES.</p>
Computer skills and competences	Good knowledge of MS office, Pubmed, Reference Manager, Ncbi, GEO, Reactome, GeneSifter, Bioedit, Perl-primer.
Artistic skills and competences	Piano
Driving licence	B driving licence
Additional information	<p><i>References names</i></p> <p>Magnani mauro, Ph.D. Full professor of biochemistry Dept. Biomolecular sciences University of Urbino Urbino (pu) Italy Phone: +39 0722 305211 e-mail: mauro.magnani@uniurb.it</p> <p>Rossi luigia, Ph.D. Associate professor of biochemistry Dept. Biomolecular sciences University of Urbino Urbino (pu) Italy Phone: +39 0722 305201 e-mail: luigia.rossi@uniurb.it</p> <p>Luciana Chessa, MD University La Sapienza, Rome, Hospital Agency S. Andrea Via di Grottarossa 1035, 00189 Rome, Italy Phone: +39 06 33774737; +39 3358384672/3805219090 e-mail: luciana.chessa@uniroma1.it</p> <p><i>Funding</i> Current: A-T Society, Action for A-T; Sparks Past: Fanoateneo and Associazione Nazionale A-T.</p>
Annexes	Lists of publications, patents and participation at international congress

List of publications (*co-first author)

1. Menotta M, **Biagiotti S**, Streppa L, Rossi L, Magnani M. Label-free quantification of Tacrolimus in biological samples by atomic force microscopy. *Anal Chim Acta*. 2015 Jul 16;884:90-6. doi: 10.1016/j.aca.2015.05.014. Epub 2015 May 12. PubMed PMID: 26073814.
2. **Biagiotti S**, Menotta M, Giacomini E, Radici L, Bianchi M, Bozzao C, Chessa L, Magnani M. Forward subtractive libraries containing genes transactivated by dexamethasone in ataxia-telangiectasia lymphoblastoid cells. *Mol Cell Biochem*. 2014 Jul;392(1-2):13-30. doi: 10.1007/s11010-014-2013-7. Epub 2014 Mar 14. PubMed PMID: 24627244.
3. Menotta M, **Biagiotti S**, Bianchi M, Chessa L, Magnani M. Dexamethasone partially rescues ataxia telangiectasia-mutated (ATM) deficiency in ataxia telangiectasia by promoting a shortened protein variant retaining kinase activity. *J Biol Chem*. 2012 Nov 30;287(49):41352-63. doi:10.1074/jbc.M112.344473. Epub 2012 Oct 10. PubMed PMID: 23055520; PubMed Central PMCID: PMC3510833.
4. **Biagiotti S**, Paoletti MF, Fraternale A, Rossi L, Magnani M. Drug delivery by red blood cells. *IUBMB Life*. 2011 Aug;63(8):621-31. doi: 10.1002/iub.478. Epub 2011 Jul 15. Review. PubMed PMID: 21766411.
5. **Biagiotti S**, Rossi L, Bianchi M, Giacomini E, Pierigè F, Serafini G, Conaldi PG, Magnani M. Immunophilin-loaded erythrocytes as a new delivery strategy for immunosuppressive drugs. *J Control Release*. 2011 Sep 25;154(3):306-13. doi:10.1016/j.jconrel.2011.05.024. Epub 2011 May 27. PubMed PMID: 21640771
6. Magnani M, Serafini S, Fraternale A, Antonelli A, **Biagiotti S**, Pierigè F, Sfara C and Rossi L. Red Blood Cell-based delivery of drugs and nanomaterials for therapeutic and diagnostic applications. In *Encyclopedia of Nanoscience and Nanotechnology*, 2011 Nalwa HS, American Scientific Publishers, volume 22 pp.309-354.
7. Pierigè F, De Marco C, Orlotti N, Dominici S, **Biagiotti S**, Serafini S, Zaffaroni N, Magnani M, Rossi L. Cytotoxic activity of 2-Fluoro-ara-AMP and 2-Fluoro-ara-AMP-loaded erythrocytes against human breast carcinoma cell lines. *Int J Oncol*. 2010 Jul;37(1):133-42. PubMed PMID: 20514405.

List of patents

1. Magnani M, Rossi L, **Biagiotti S**, Bianchi M. "Drug delivery systems". Patent application GB0909754.4.

List of presentations at international congress

1. **Sara Biagiotti**, Michele Menotta, Sara Orazi, Luigia Rossi, Luciana Chessa and Mauro Magnani Dexamethasone effects in Ataxia-Telangiectasia cell metabolism. 16th Ataxia-Telangiectasia Workshop (ATW), CNU University, Oct. 11-14th, 2015, Beijing, China.
2. Michele Menotta, **Sara Biagiotti**, Sara Orazi, Luigia Rossi, Luciana Chessa and Mauro Magnani. Dexamethasone effects on blood gene expression in Ataxia Telangiectasia. 16th Ataxia-Telangiectasia Workshop (ATW), CNU University, Oct. 11-14th, 2015, Beijing, China.
3. Sara Biagiotti, Michele Menotta, Luigia Rossi, Alessandra Fraternale, Serena Brundu, Luciana Chessa and Mauro Magnani. Dexamethasone effects on oxidative stress in Ataxia Telangiectasia cells. 58th National meeting of the Italian Society of Biochemistry and Molecular Biology (SIB), University of Urbino, September 14-16, 2015.
4. **Sara Biagiotti**, Michele Menotta, Marzia Bianchi, Luigia Rossi, Luciana Chessa and Mauro Magnani. Gene expression profiling of Dexamethasone treatment on Ataxia-Telangiectasia cells. Oral presentation. ATW2013, University of Birmingham, 28th-31st July 2013, Birmingham (UK).
5. Michele Menotta, **Sara Biagiotti**, Marzia Bianchi, Luciana Chessa and Mauro Magnani. Dexamethasone action in Ataxia-Telangiectasia: seeking the molecular mechanism of phenotype reversion. ATW2013, University of Birmingham, 28th-31st July 2013, Birmingham (UK).
6. Michele Menotta, **Sara Biagiotti**, Marzia Bianchi, Luigia Rossi, Laura Streppa and Mauro Magnani. Label-free quantification of Tacrolimus by Atomic Force Microscopy. CNBXL 27th-29th June 2012, Varese.
7. **Biagiotti S**, Menotta M, Bianchi M, Giacomini E, Crinelli R, Savio C, Rossi L, Chessa L, Magnani M "New applications for old drugs: molecular mechanism involved in glucocorticoid analogue action in the treatment of Ataxia Telangiectasia" 36th FEBS Congress "Biochemistry for Tomorrow's Medicine" Torino, 25-30 June 2011.
8. **Biagiotti S**, Menotta M, Giacomini E, Carloni E, Crinelli R, Bianchi M, Rossi L, Savio C, Chessa L, Magnani M "Molecular mechanism involved in glucocorticoid analogue action in Ataxia Telangiectasia: differentially expressed genes in AT cell lines in response to Dexamethasone" 55th National Meeting of the Italian Society of Biochemistry and Molecular Biology (SIB), University of Milan, 14th-17th September 2010.
9. Pierigè F, **Biagiotti S**, Serafini S, Ambrosi L, Menotta M, Giorgi L, Rossi L and Magnani M "Single walled carbon nanotubes for delivery of therapeutic molecules" 2nd International Nanobiotechnology Conference, Roma 7-9- luglio 2009.
10. **Biagiotti S**, Pierigè F, Bianchi M, Giacomini E, Serafini G, Rossi L and Magnani M "Delivery of the immunosuppressant Tacrolimus through erythrocytes: in vitro studies" 22a Riunione Nazionale "A. Castellani" dei Dottorandi in Discipline Biochimiche, Brallo di Pregola (PV) 9-12 Giugno 2009.
11. **Biagiotti S**, Giacomini E, Pierigè F, Bianchi M, Serafini G, Rossi L, Bertuzzi F and Magnani M "FKBP-12 loaded erythrocytes as a potential delivery system for the immunosuppressant Tacrolimus" X Congresso Nazionale di Biotecnologie, Perugia 17-19 settembre 2008.