

## Curriculum Vitae Europass



### Personal information

Name / Surname **Luigia Rossi**  
Address 2, Giovanni Santi, 61029, Urbino Italy  
Phone +39-0722-305201 Mobile: +39.347.1526613  
Fax  
E-mail luigia.rossi@uniurb.it  
Citizenship Italian  
Date of birth 14-12-1959  
Sex Female

### Professional experience

**2001-present:** Associated Professor (BIO/10-Biochemistry), Department of Biomolecular Sciences (DISB), University of Urbino;  
**1996-2001:** Researcher in Biochemistry- (BIO/10-Biochemistry) - Institute of Biological Chemistry "Giorgio Fornaini", University of Urbino;  
**1990-1996:** Laboratory technician, Institute of Biological Chemistry "Giorgio Fornaini", University of Urbino

### Education and formation

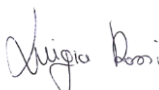
**1990:** Ph. D. in Biochemistry (cycle II), Institute of Biological Chemistry "Giorgio Fornaini", University of Urbino (Florence as administrative seat). Thesis: "Loading of enzymes and antibodies: a new approach to change the metabolic properties of red blood cells";  
**1988-present:** Member of the "Italian Society of Biochemistry"  
**1982-1984:** Training and (1984) Qualification to practice the profession of Biologist  
**1982:** Degree in Biological Sciences, Summa cum laude, University of Urbino (Degree thesis: Hexokinase decay of red cells during maturation of reticulocytes);

### Teaching

**2014-present:** Teacher of "Biochemistry" at the Nutritional Science degree (L-29), University of Urbino.  
**2013-present:** Teacher of "Medical biochemistry" at the Molecular, Health and Nutrition Biology master degree (LM-6), University of Urbino;  
**2009-2012:** Teacher of "Systematic human biochemistry" at the Molecular, Health and Nutrition Biology master degree (LM-6), University of Urbino;  
**2004-2011:** Teacher of "Delivery systems" at the Molecular Biotechnology master degree, University of Urbino;  
**2002-2010:** Teacher of "Applied biochemistry" at the Cellular and Molecular Biology master degree, University of Urbino;  
**2001:** Teacher of "Biological Chemistry II" at the Biological Sciences degree, University of Urbino;  
**1999-2010:** Teacher of "Food biotechnology" at the Biotechnology degree, University of Urbino;  
**1991-1998:** Teacher of "Biology and Genetics" at the Special School for Biomedical Laboratory Technicians and (1998), at the D.U. of Biomedical Laboratory Technicians, University of Urbino;

### Institutional activities

**2016-present:** Representative of the Molecular, Health and Nutrition Biology master degree (LM-6), University of Urbino;  
**2014-present:** Member of OPBA (Organismo Preposto al Benessere degli Animali), (D.R. n.265/2014).

|                                   |   |
|-----------------------------------|---|
|                                   | <p><b>2013-present:</b> Member of the management group of Assurance Quality (Molecular, Health and Nutrition Biology master degree, University of Urbino);</p> <p><b>2006-2009:</b> President of Biological Sciences degree and Cellular and Molecular Biology master degree, Faculty of Sciences and Technology, University of Urbino;</p> <p><b>2006-present:</b> Member of PhD examination board (University of Urbino);</p> <p><b>2003-2014:</b> Member of the "Ethics Committee for Animal Experimentation" (CESA) (D.R. 735bis/2003), University of Urbino;</p> <p><b>2002-present:</b> Responsible of the animal house of University of Urbino (located in Urbino, Via Saffi, 2);</p>  |
| <b>Research areas</b>             | <p>- Development of new procedures involving the loading of human and mammalian erythrocytes with drugs, enzymes, nucleoside analogs, proteins, immunosuppressants and druggable proteins etc. in order to use the engineered red blood cells (RBCs) as a drug delivery system.</p> <p>- Preclinical studies on animal models of metabolic inherited diseases aimed at the evaluation of the possibility to use enzyme-loaded erythrocytes as enzyme replacement therapy.</p> <p>Prof. Rossi also participated in the development of a new loading procedure to be performed by a specially designed apparatus (named Red Cell Loader) for processing, in aseptic and pyrogen-free conditions, a small volume of autologous erythrocytes to be re-infused in the same donor. In particular, she worked on feasibility of the procedure and on pharmacokinetic studies aimed at obtaining a slow and prolonged release of circulating anti-inflammatory drugs in patients with cystic fibrosis and chronic inflammations such as chronic obstructive pulmonary disease, Crohn's disease and ulcerative colitis, obtaining good clinical results. These results have led to the creation of a start-up (EryDel SpA), of which Prof. Rossi is co-founder, whose main purpose is to make this innovative therapeutic strategy available for patients who would benefit of it under different pathological conditions.</p> |
| <b>Scientific activity</b>        | <p>Author of 110 papers in internationally referred journals and 18 papers in books. She is co-inventor of 6 Patents and co-founder of the company EryDel S.p.A. (acronym of ERYthrocyte DELivery), a start-up born in 2007, focused on developing of innovative therapies based on the use of autologous red blood cells as agent carriers and circulating bioreactors.</p> <p><b>Bibliometrics:</b><br/> Citation number: 7492 (Google scholar); 2253 (Scopus)<br/> H index: 39 (Google scholar); 26 (Scopus)</p>   |
| <b>Financed research projects</b> | <p><b>PRIN 2017.</b> Prot. 2017Z5LR5Z_001. Characterization of the hematopoietic niche under physiological and stress conditions by the use of microfluid bioreactors and engineered red blood cells. <b>PRIN 2007.</b> Prot. 2007RKPT9S_002. Determinazioni quantitative, farmacocinetiche e analisi di polimorfismi in pazienti con impianto di stent coronarico trattati con Desametasone rilasciato da eritrociti autologhi per la prevenzione della restenosi. <b>PRIN 2003.</b> Prot. 2003058397_001. NF-kB e i suoi attivatori come bersaglio di nuovi approcci per modulare l'espressione genica". (NF-kB and its activators as targets for new approaches to modulate gene expression). <b>PRIN 2002.</b> Prot. 2002062119_007. Modificazione post-trasduzionale delle proteine eritrocitarie: ubiquitinazione nel corso dell'eritropoiesi. <b>FIRB 2001.</b> Prot. RBNE01TBTR_001. Globuli rossi come drug carriers. <b>European Project NACBO-</b>Novel and Improved Nanomaterials, Chemistries and Apparatus for Nano-Biotechnology Contract no: 500804-2. Project Duration: 1st December 2004 to 30th November 2009 <b>PRIN 1998.</b> Prot. 9805634227_001. Attivazione e modulazione di NF-kB nel comparto endoteliale in risposta a fattori infiammatori rilasciati da macrofagi attivati.</p>   |
| <b>Mother tongue</b>              | Italian   |
| <b>Other languages</b>            | English. Good knowledge of spoken and written language  |
| <b>Informatic ability</b>         | Good use of Microsoft Office computer programs  |
|                                   | <p>Urbino, 30 Giugno 2020</p> <p>Prof. Luigia Rossi</p>    |

