



## ROBERTA PAROLISI

### Personal Data

Current position Neuroscience Institute Cavalieri Ottolenghi,  
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Date and place of birth 23/01/1985, Turin, Italy

Citizenship Italian

### Education

January 2012 - February 2016: PhD course in Veterinary Sciences for Animal Health and Food Safety, Department of Veterinary Sciences, University of Turin. Thesis title: "Postnatal and Adult Neurogenesis in Dolphins". PI: Prof. Luca Bonfanti (Adult Neurogenesis, University of Turin).

December 2010: Master degree in Medical Biotechnology, University of Turin (110/110 and dignity of print). Thesis title: "Role in the neuronal process of amyloidosis in the hippocampus of a mouse model of Alzheimer's disease". PI: Prof. Filippo Tempia (Fisiology Laboratory, Neuroscience Department, University of Turin).

July 2008: Bachelor in Biotechnology, University of Turin (96/100). Thesis title: "Role of Calsenilina/DREAM/KKP3 in Alzheimer's disease." PI: Prof. Filippo Tempia (Fisiology Laboratory, Neuroscience Department, University of Turin).

### Research Experiences

January 2016 - present: Postdoc position, Neuroscience Institute Cavalieri Ottolenghi (NICO), University of Turin (Italy). PI: Dr. Annalisa Buffo.

June 2016 - October 2016: Stay aboard (during the PhD) in the laboratory of Comparative Neurobiology. PI: Prof. Jose Manuel Garcia Verdugo, Full Professor of Cell Biology, University of Valencia (Spain).

January 2012 - February 2016: PhD training under the supervision of prof. Luca Bonfanti at the Neuroscience Institute Cavalieri Ottolenghi (NICO), University of Turin (Italy).

February 2011 - December 2011: fellowship as graduate student in the Neuroscience Institute Cavalieri Ottolenghi (NICO), University of Turin (Italy). PI: Dr. Annalisa Buffo.

April 2007 - December 2010: internship as undergraduate student in Fisiology Laboratory, Neuroscience Department, University of Turin (Italy). PI: Prof. Filippo Tempia.

### Teaching and Training Experiences

March 2013 – present: Practical training of undergraduate students during their stages in the laboratory. Students: 1 master's degree student, 3 bachelor degree students.

2011-2012: Didactic assistant in Physiology Course, Faculty of Dietician, University of Turin.

### **Personal Skills and Expertise**

- Molecular biology (purification RNA and DNA, extraction proteins, polymerase chain reaction [PCR], Real-Time PCR; genotyping);
- Histology (perfusion, tissue fixation, cryostat and vibratome sectioning, immunohistochemistry, immunofluorescence);
- Microscopy (brightfield, fluorescence, confocal, stereological counting)
- Electron Microscopy techniques;
- Behaviour tests (rotarod test, footprinting test, fixed bar test, environment enrichment);
- Computer skills and application of statistical analysis (PC based applications; Microsoft Word, Microsoft Excel, Microsoft Powerpoint, Adobe Photoshop and NeuroLucida softwares, SPSS; GraphPad, Excel statistical software)
- Good command of Microsoft Office™ tools
- Editing of images/photos (Photoshop; ImageJ)
- Preparation of posters and figures using vector graphics (Photoshop)

### **Language Skills**

Mother tongue: Italian

Other Language: English

### **List of publications**

Lattanzi W, **Parolisi R**, Barba M, Bonfanti L. (2015) Osteogenic and neurogenic stem cells in their own place: unraveling differences and similarities between niches. *Front. Cell. Neurosci.* doi: 10.1002/elps.201500504. Q1 (NEUROSCIENCES; 54/252). IF: 4,3

**Parolisi R**, Peruffo A, Messina S, Panin M, Montelli S, Giurisato M, Cozzi B, Bonfanti L. (2015). Forebrain neuroanatomy of the neonatal and juvenile dolphin (*T. truncatus* and *S. coeruleoalba*). *Front. Neuroanat.* 9:140. Q1 (ANATOMY & MORPHOLOGY; 3/20) IF: 3,5

Crociara P, **Parolisi R**, Conte D, Fumagalli M, Bonfanti L. (2013) Cellular and molecular characterization of multipolar Map5-expressing cells: a subset of newly generated, stage-specific parenchymal cells in the mammalian central nervous system. *PLoS One* 8(5):e63258. Q1 (MULTIDISCIPLINARY SCIENCES; 8/55) IF: 3,5

Montarolo F, **Parolisi R**, Hoxha E, Boda E, Tempia F. (2013) Early Enriched Environment Exposure Protects Spatial Memory and Accelerates Amyloid Plaque Formation in APP(Swe)/PS1(L166P) Mice. *PLoS One* 8(7):e69381. Q1 (MULTIDISCIPLINARY SCIENCES; 8/55) IF: 3,5

Rolando C, **Parolisi R**, Boda E, Schwab M, Rossi F, Buffo A. (2012) Distinct roles of Nogo-a and Nogo receptor 1 in the homeostatic regulation of adult neural stem cell function and neuroblast migration. *J. Neurosci.* 32(49):17788-99. Q1 (NEUROSCIENCES; 25/252) IF: 6,3

Hoxha E, Boda E, Montarolo F, **Parolisi R**, Tempia F. (2012). Excitability and synaptic alterations in the cerebellum of APP/PS1 mice. *PLoS One* 7(4):e34726. Q1 (MULTIDISCIPLINARY SCIENCES; 8/55) IF: 3,5

### **Book Chapters**

Bonfanti L; Ponti G; Luzzati F; Crociara P; **Parolisi R**; Armentano M. (2013) Parenchymal Neuro-Glio-Genesis Versus Germinal Layer- Derived Neurogenesis: Two Faces of Central Nervous System Structural Plasticity. From book: Neural Stem Cells: New Perspectives (Intech Open Access Publisher). 241-268.

Bonfanti L; Luzzati F; **Parolisi R**; Crociara P; Ponti G. (2013). Rabbits: Biology, Diet and Eating Habits and Disorders. From book: Rabbits: Biology, Diet and Eating Habits and Disorders (Nova Science Publishers, Inc.). 1-28.

### **Abstract**

**Parolisi R**, Cozzi B, Bonfanti L. Adult neurogenesis in dolphins: reducing our hopes for regenerative neurology? "Frontiers in Regenerative Medicine", 19/20 february 2015, Turin. ((**active participation at poster session**))

**Parolisi R**, Messina S, Peruffo A, Panin M, Cozzi B, Montelli S, Bonfanti L. Periventricular neurogenesis is almost exhausted in early postnatal dolphins with respect to terrestrial mammals. "Adult Neurogenesis: Evolution, Regulation and Function", 6/8 may 2015, Dresden, Germany. (**active participation at poster session**)

Boda E, Viganò F, **Parolisi R**, Fumagalli M, Rosa P, Abbracchio MP, Dimou L and Buffo A. The GPR17 receptor in oligodendroglial cells: cell heterogeneity, maturation and participation in CNS damage. EuroGlia 2011, Prague, September 2011 and 8th World congress of IBRO (International Brain Research Organization), Florence, 14-18 July 2011

Montarolo F, **Parolisi R**, Hoxha E, Tempia F. Effects of neuronal activity on intra- and extra-cellular beta amyloid in a transgenic murine model of Alzheimer's disease. Abstract A407. IBRO Congress 2011, Firenze (Italy).

Crociara P, **Parolisi R**, Conte D, Bonfanti L. Cellular and molecular characterization of multipolar Map5-expressing cells: a subset of stage-specific newly generated, parenchymal cells in the mammalian central nervous system. "Opportunity and challenges in the pharmacological modulation of neural stem cells". 14-15 Dec 2012, Novara (**active participation at poster session**)

**Parolisi R**, Piumatti M, Grindatto A, Crociara P, Corona C, Bonfanti L. Doublecortin+ cells in the sheep brain reveal heterogeneity of structural plasticity in mammals. 9th FENS Forum Neuroscience, 5-9 July 2014, Milan. (**active participation at poster session**)

**Parolisi R**, Cozzi B, Bonfanti L. Adult neurogenesis in aquatic mammals devoid of olfaction. "Adult Neurogenesis: Evolution, Regulation and Function", 6/8 may 2015, Dresden, Germany. (oral exposition)

Hoxha E, Boda E, Montarolo F, **Parolisi R**, Tempia F. GABAergic and excitability deficits in cerebellar Purkinje cells in APPPS1 mice, a murine model of Alzheimer's disease with massive amyloidosis. Abstract 268 Congresso SINS 2009.

Crociara P, **Parolisi R**, Conte D, Fumagalli M, Bonfanti L. Multipolar Map5-expressing cells: a subset of stage-specific newly generated, parenchymal cells in the mammalian central nervous system. "Stem Cell Research Italy" meeting-27-29 June 2013, Brescia. (**active participation at poster session**)

Rolando C, **Parolisi R**, Boda E, Schwab ME, Buffo A. Distinct roles of NOGO-A and NOGO receptor 1 signaling in the homeostatic regulation of adult Neural Stem Cell activity and in neuroblast migration. ABCD Meeting - 4 May 2012. MBC, Turin.

**Parolisi R** . Postnatal Neurogenesis in the Dolphin. Oral session “Neural Development”, congresso Gruppo Embriologico Italiano congress , 7/10 june 2015, Pisa, Italy. (**active oral exposition**)

**Congress**

- Congresso Gruppo Embriologico Italiano Congress , 7/10 june 2015, Pisa, Italy.
- Adult Neurogenesis: Evolution, Regulation and Function, 6/8 may 2015, Dresden, Germany.
- Frontiers in Regenerative Medicine, 19/20 february 2015, Turin.
- 9th FENS Forum Neuroscience, 5-9 July 2014, Milan.
- Stem Cell Research Italy"meeting-27-29 June 2013, Brescia
- Associazione di Biologia Cellulare e del Differenziamento (ABCD) Meeting - Stem Cells, Development and Regenerative Medicine “Neurogenesis and Neural Development” and Development and Disease”. May 2012, MBC, Torino.
- Opportunity and challenges in the pharmacological modulation of neural stem cells. 14-15 Dec 2012, Novara.