

Curriculum Vitae

Personal information **Rosanna Botta**

Work experience

1. Senior Researcher
 - Start date: 2022
 - Current
 - Istituto Superiore di Sanità - National Center for National Center for Drug Research and Evaluation
 - City: Rome - Country: Italy
 - Main activities held:
 - Quality and Non-Clinical assessment of Clinical Trial Applications with ATMPs and Biological Medicinal Products (Reg. 536-2014).
 - Italian Delegate of CTP (Cell Therapy Products) working group of the European Pharmacopoeia, Strasbourg, France
 - Assessment of non-clinical studies and of the 3R compliance according to Dir 2010/63/UE (Italian Minister of Health)
 - GLP Inspections (Italian Minister of Health) - OCSE area of expertise: ATMP Pharmacodynamics, Pharmacological Toxicity, Safety studies
 - Participation in GMP Inspection as an ATMP Expert
2. Researcher
 - Start date: 2006
 - End date: 2021
 - Istituto Superiore di Sanità - National Center for National Center for Drug Research and Evaluation
 - City: Rome - Country: Italy
 - Main activities held:
 - Quality and Non clinical assessment of Phase-I clinical studies involving ATMP
 - National and EMA Scientific Advices
 - Training courses and Masters on regulatory affairs of ATMP
 - Research activities on Cell Therapy: in vitro and in vivo models for Stem Cell research. Xenograft experiments in immunodeficient mice
 - Experimental Hematology and in vitro Stem Cell Biology studies
3. Research Associate
 - Start date: 2002
 - End date: 2004
 - Thomas Jefferson University, Kimmel Cancer Institute
 - City: Philadelphia - Country: United States
 - Main activities held:
 - Research projects on Normal and Neoplastic Hematopoiesis
 - Gene transfer in hematopoietic stem cells using viral and non viral vectors
 - In vivo models for Stem Cell Research: xenograft experiments with genetically modified human hematopoietic stem cells
 - Translational research. Study of stem cell plasticity in a model of heart infarct
 - NOD SCID Mouse colony generation and maintenance
4. Researcher
 - Start date: 2001
 - End date: 2006
 - Istituto Superiore di Sanità - Hematology and Oncology Department
 - City: Rome - Country: Italy
 - Main activities held:
 - Planning and execution of research projects on Experimental Hematology and Cell biology
 - Study of normal and neoplastic stem cells properties and regenerating/differentiating activity
 - In vivo models for studying stem cell plasticity and ectopic stem cells differentiation
 - Principal Investigator of research projects on stem cell research
 - Supervisor of the xenograft experiments performed at the SPF Animal Facility - San Raffaele South Park of Castel Romano, Rome

Education and training

1. Master's Degree
 - Start date: 2010
 - End date: 2011
 - Organisation: University La Sapienza, Rome, Italy
 - Regulatory affairs on Pharmaceutical products for human use: manufacturing and quality of biological medicinal products and advanced therapies, clinical trial authorization and AIC
2. Visiting Scientist
 - Start date: 2000
 - End date: 2002
 - Organisation: Thomas Jefferson University - Kimmel Cancer Institute, Philadelphia
 - In vivo HSC repopulating assays. Ectopic gene transfer: the role of tyrosine kinase receptors in stem cell activity
3. Scholarship on Cancer Research (Italian Association for Cancer Research)

- Start date: 1996
 - End date: 1998
 - Organisation: Istituto Superiore di Sanità - Hematology/Oncology Department
 - City: Rome, Country: Italy
 - Studies on hematopoietic stem cell activity by in vitro models
 - The role of TAL_1 gene in normal and neoplastic hematopoiesis
4. Internship on Clinical Hematology and Microbiology
- Start date: 1994
 - End date: 1995
 - Organisation: Hematology and Microbiology Department - Ospedale Generale Provinciale
 - City: Rieti, Country: Italy
 - Diagnostic methodologies in hematological, immunological and microbiological field
5. Certification of Biologist (DPR n.980/1982)
- Start date: 1995
 - Organisation: University of Rome Tor Vergata
 - City: Rome, Country: Italy
6. Degree in Biological Sciences with honors
- Start date: 1993
 - Organisation: University of Rome Tor Vergata
 - City: Rome, Country: Italy

Additional information

Publications

- Bellino S, La Salvia A, Cometa MF, Botta R. Cell-based medicinal products approved in the European Union: current evidences and perspectives. *Front Pharmacol.* 2023 Jul 31;14:1200808.
- R. Botta and G. Migliaccio: Cell_based Treatments: Advanced Therapies and Transplants. *Transplantation Proceedings*, 2011 Jan_Feb; 43(1):338_40C. Carella, F. Capone, R. Botta e G. Migliaccio. European regulations of MSC for clinical use. *Regenerative Medicine and Cell Therapy. Biomedical and Health Research*, Nov 2012, Vol.77
- N. Felli, L. Fontana, E. Pelosi, R. Botta, et al. (2005). MicroRNAs 221 and 222 inhibit normal erythropoiesis and erythroleukemic cell growth via Kit receptor downmodulation. *PNAS* Dec 13;102(50):18081_6. Epub 2005 Dec 5
- R. Botta et al, (2004). Heart Infarct in NOD_SCID mice: Therapeutic vasculogenesis by transplantation of human CD34+ cells and low dose CD34+KDR+ cells. *FASEB J.* Sep;18(12):1392
- E. Pelosi, M. Valtieri, S. Coppola, R. Botta, et al. (2002). Identification of the hemangioblast in postnatal life. *Blood.* 100 (9) 3203_3208
- Peschle C., Botta R., Muller R., Valtieri M., and Ziegler B.L. (2001) Purification and functional assay of pluripotent hematopoietic stem cells. *Reviews in Clinical and Experimental Hematology.* 5(1):3_14
- R. Botta, M. Valtieri, R. Muller, D. Brambilla, B. Masella, G. Marziali, A. Eramo, L. Luchetti, B. Ziegler, C. Peschle (2000). Dedifferentiation of CD34+KDR_ progenitors by FLK1 gene transfer _ Suppression of clonogenic activity and rescue of engrafting capacity. *Experimental Hematology* 01/2000; 28(12)
- Grignani F, Valtieri M., Gabbianelli M., Gelmetti V., Botta R., Luchetti L., Masella B., Morsilli O., Pelosi E., Samoggia P., Pelicci PG., Peschle C. (2000) PML/RAR alpha fusion protein expression in normal human hematopoietic progenitors dictates myeloid commitment and the promyelocytic phenotype. *Blood.* 96(4): 1531_7
- Valtieri M., Tocci A., Gabbianelli M., Luchetti L., Masella B., Botta R., Testa U., Condorelli G.L., and Peschle C. (1998). Enforced TAL_1 expression stimulates primitive, erythroid and megakaryocytic progenitors but blocks the granulopoietic differentiation program. *Cancer Res.* 58:562_569
- Condorelli G.L., Tocci A., Botta R., Facchiano F., Testa U., Vitelli L., Valtieri M., Croce C.M., and Peschle C. (1997). Ectopic TAL_1/SCL expression in phenotypically normal or leukemic myeloid precursors: proliferative and antiapoptotic effects coupled with differentiation blockade. *Mol. Cell. Biol.* 17: 2954_2969
- Botta R., and Gustavino B. (1997). Relationship between chromatin bridges in anaphase and chromosomal aberrations induced by TMP + UVA (365 nm) in CHO cells. *Mutat. Res.* 374: 253_259
- F. Capone, C. Carella, R. Botta, G. Migliaccio. Cellule staminali da cordone ombelicale. Donazione o uso proprio? *Avvenire medico.* Aprile 2010; 27_28
- Rosanna Botta, Maria Elena Fabucci, Giovanni Migliaccio. Staminali: mercato e sogni. *Rivista sulla sicurezza sanitaria.* Agosto_Ottobre 2007

Projects

- 2005: Principal Investigator of the project: Innovative strategies for regenerative therapies based on the use of stem cells. National Institute of Health _ Italy.
- 2003_2005: Co_Investigator of the project: Ischemic cardiovascular and degenerative diseases _ study of mechanisms of differentiation and therapeutic application of post_natal hematopoietic stem cells. National Program on Stem Cells, Italy.
- 2003: Principal Investigator of the project: In vivo repopulating assays for hematopoietic stem cells. National Institute of Health _ Italy.
- 1999: Principal Investigator of the project: TAL_1 induced leukemogenesis: Identification and mechanism of action of the target genes of TAL_1 ectopically expressed. Italian Foundation for Cancer Research _ FIRC.
- 1996_98 Principal Investigator of the project: Gene transfer of hematopoietic stem cells in oncology". Italian Association for Cancer Research _ AIRC.

Memberships

Other Relevant Information