

CURRICULUM VITAE

Virginia Barone

Name: Virginia Barone
Date of birth: February 19th, 1968
Place of birth: Genova-Italy
Nationality: Italian
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Educational Background

- 1990** Degree in Biological Science, University of Genova: 110/110 e lode.
Experimental thesis title: "Identification of a cellular model for the study of the Cystic Fibrosis molecular defect"
- 1996** Ph.D. in Human Genetics, . Thesis title: "Identification and characterization of genes involved in Hirschsprung disease"
- 1998** Specialization in Genetics. Thesis title: "Generation and functional analysis of knockout mice carrying a targeted disruption of ryanodine receptor type 1 and type 3 genes"

Professional Experience

From 2008: researcher at the Department of Molecular Medicine and Development, University of Siena (director prof V. Sorrentino)

2005 – 2007: research associate at the Laboratory of Tissue Engineering, Istituto Dermatologico dell'Immacolata, Roma (director prof. L. Korkina)

2003 – 2005: research associate at DIBIT, molecular and cellular neurophysiology Unit, San Raffaele Scientific Institute, Milano (director prof. G. Casari)

1996 – 2002: post-doctoral training at DIBIT, Growth factors and intracellular signaling Unit, San Raffaele Scientific Institute, Milano (director prof. V. Sorrentino)

1991 - 1995: Ph.D. training at the Institute G. Gaslini, Molecular Genetics laboratory, Genova. Subject of the Ph.D. training: identification and characterization of genes involved in Hirschsprung disease (director prof. G. Romeo)

1990 - 1991: research activity at the same laboratory

1988 - 1990: pre-graduate studentship at the Institute G. Gaslini, Molecular Genetics laboratory, Genova (director prof. G. Romeo)

Histology for degree in Medicine and Dentistry

2010-2011

Histology for Nursing and for Radiographers degrees

Histology for Biotechnology degree

2009-2010

Histology for Nursing and for Radiographers degrees

2008-200

teaching collaboration at the Histology course of the Medicine Faculty

Scientific Publications:

Weber E, Aglianò M, Bertelli E, Gabriele G, Gennaro P, Barone V. Lymphatic Collecting Vessels in Health and Disease: A Review of Histopathological Modifications in Lymphedema. **Lymphat Res Biol**. 2022 Oct;20(5):468-477. doi: 10.1089/lrb.2021.0090. Epub 2022 Jan 17. PMID: 35041535; PMCID: PMC9603277.

Bianchi L, Altera A, Barone V, Bonente D, Bacci T, De Benedetto E, Bini L, Tosi GM, Galvagni F, Bertelli E. Untangling the Extracellular Matrix of Idiopathic Epiretinal Membrane: A Path Winding among Structure, Interactomics and Translational Medicine. **Cells**. 2022 Aug 15;11(16):2531. doi: 10.3390/cells11162531. PMID: 36010606; PMCID: PMC9406781.

Altera A, Barone V, Kondova I, Langermans JAM, Gentile M, Pin C, Nicoletti C, Bertelli E. Light-Induced Smooth Endoplasmic Reticulum Rearrangement in a Unique Interlaced Compartmental Pattern in Macaca mulatta RPE. **Invest Ophthalmol Vis Sci**. 2021 Dec 1;62(15):32. doi: 10.1167/iovs.62.15.32. PMID: 34967853; PMCID: PMC8727310.

Paola Marcolongo, Alessandra Gamberucci, Gabriella Tamasi, Alessio Pardini, Claudia Bonechi, Claudio Rossi, Roberta Giunti, Virginia Barone, Annalisa Borghini, Paolo Fiorenzani, Maria Frosini, Massimo Valoti, Federica Pessina (2020). Chemical characterization and antihypertensive effects of ocular gel and serum of *Lycopersicon esculentum* L. var. "Camone" tomato in spontaneously hypertensive rats. **Molecules**, vol. 25, ISSN: 1420-3049, doi: 10.3390/molecules25163758

Barone, Virginia, Borghini, Annalisa, Tedone Clemente, Erica, Aglianò, Margherita, Gabriele, Guido, Gennaro, Paolo, Weber, Elisabetta (2020). New Insights into the Pathophysiology of Primary and Secondary Lymphedema: Histopathological Studies on Human Lymphatic Collecting Vessels. **Lymphat Res Biol**, ISSN: 1539-6851, doi: 10.1089/lrb.2020.0037

Ozturk Yagmur, Barone Virginia, Barone Lavinia (2018). Examining the impact of maternal individual features on children's behavioral problems in adoptive families: The role of maternal temperament and neurobiological markers. **International Journal Of Environmental Research And Public Health**, vol. 15, p. 1-8, ISSN: 1661-7827, doi: 10.3390/ijerph15020196, 2018

Barone, Lavinia, Barone, Virginia, Dellagiulia, Antonio, Lionetti, Francesca (2018). Testing an Attachment-Based Parenting Intervention-VIPP-FC/A in Adoptive Families with Post-institutionalized Children: Do Maternal Sensitivity and Genetic Markers Count?. **Frontiers In Psychology**, vol. 9, ISSN: 1664-1078, doi: 10.3389/fpsyg.2018.00156, 2018

Rossi Daniela, Palmio Johanna, EvilÃ±a Anni, Galli Lucia, Barone Virginia, Caldwell Tracy A. Policke, Rachel A., Aldkheil, Esraa, Berndsen, Christopher E., Wright, Nathan T., Malfatti, Edoardo, Brochier, Guy, Pierantozzi Enrico, Jordanova Albena, Guergueltcheva Velina, Romero, Norma Beatriz, Hackman Peter, Eymard Bruno, Udd Bjarne, Sorrentino Vincenzo (2017). A novel FLNC frameshift and an OBSCN variant in a family with distal muscular dystrophy. **PLOS ONE**, vol. 12, ISSN: 1932-6203, doi: 10.1371/journal.pone.0186642, 2017

Barone Virginia, Del Re Valeria, Gamberucci Alessandra, Polverino Valentina, Galli Lucia, Rossi Daniela, Costanzi Elisa, Toniolo Luana, Berti Gianna, Malandrini Alessandro, Ricci Giulia, Siciliano Gabriele, Vattemi Gaetano, Tomelleri Giuliano, Pierantozzi Enrico, Spinozzi Simone, Volpi Nila, Fulceri Rosella, Battistutta Roberto, Reggiani Carlo, Sorrentino Vincenzo (2017). Identification and characterization of three novel mutations in the CASQ1 gene in four patients with tubular aggregate myopathy. **Human Mutation**, vol. 38, p. 1761-1773, ISSN: 1059-7794, doi: 10.1002/humu.23338, 2017

V. Barone, D. Randazzo, V. Del Re, V. Sorrentino, D. Rossi. Organization of junctional sarcoplasmic reticulum proteins in skeletal muscle fibers. **J Muscle Res Cell Motil** DOI 10.1007/s10974-015-9421-5, 2015

V. Barone, E. Mazzoli, I.Kunic, D. Rossi, S. Tronolone, V. Sorrentino. Yip1B isoform is localized at ER–Golgi intermediate and *cis*-Golgi compartments and is not required for maintenance of the Golgi structure in skeletal muscle. **Histochem Cell Biol** 143:235-243, 2014.

D. Rossi, B. Vezzani, L. Galli, C. Paolini, L. Toniolo, E. Pierantozzi, S. Spinozzi, V. Barone, E. Pegoraro, L. Bello, G. Cenacchi, G. Vattemi, G. Tomelleri, G. Ricci, G. Siciliano, F. Protasi, C. Reggiani, V. Sorrentino. A Mutation in the CASQ1 Gene Causes a Vacuolar Myopathy with Accumulation of Sarcoplasmic Reticulum Protein Aggregates. **Hum Mut** 35:1163-1170, 2014

L. Leo, L. Gherardini, V. Barone, M. De Fusco, D. Pietrobon, T. Pizzorusso, G. Casari. Increased Susceptibility to Cortical Spreading Depression in the Mouse Model of Familial Hemiplegic Migraine Type 2. **PLoS Genet** 7(6): e1002129.

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* These authors contributed equally to this work

D. Rossi, V. Barone, E. Giacomello, V. Cusimano, V. Sorrentino. The sarcoplasmic reticulum: an organized patchwork of specialized domains. **Traffic** 9:1044-9, 2008

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MT Bassi, N Bresolin, A Tonelli, K Nazos, F Crippa, C Baschirotto, C Zucca, A Bersano, D Dolcetta, FM Boneschi, V. Barone, G Casari. A novel mutation in the ATP1A2 gene causes alternating hemiplegia of childhood. **J Med Genet**. 41(8):621-8, 2004

P. Bagnato*, V. Barone*, D. Rossi, V. Sorrentino: Binding of ankyrin-1 isoform to the C-terminus of Obscurin identifies a molecular link between sarcoplasmic reticulum and myofibrils in striated muscle. **J Cell Biol** 160(2):245-253, 2003

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M. Salanova, G. Priori, V. Barone, E. Intravaia, B. Flucher, F. Ciruela, R. A. J. McIlhinney, J. B. Parys, K. Mikoshiba, V. Sorrentino: Homer proteins and InsP3 receptors co-localise in the longitudinal sarcoplasmic reticulum of skeletal muscle fibres. **Cell Calcium** 32(4), 193–200, 2002

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V. Barone, O. Massa, E. Intravaia, A. Bracco, A. Di Martino, V. Tegazzin, S. Cozzolino, V. Sorrentino: Mutation screening of the RYR1 gene and identification of two novel mutations in Italian Malignant Hyperthermia families. **J Med Genet** 36:115-118, 1999

V. Barone, F. Bertocchini, R. Bottinelli, F. Protasi, P. D. Allen, C. Franzini Armstrong, C. Reggiani, V. Sorrentino: Contractile impairment and structural alterations of skeletal muscles from knockout mice lacking type 1 and type 3 ryanodine receptors. **FEBS Letters** 422(2):160-164, 1998

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F. Bertocchini, A. Conti, V. Barone, C. Ovitt, H. Schoeler, R. Bottinelli, C. Reggiani, V. Sorrentino: Requirement of the Ryanodine receptor type 3 isoform of the Ca²⁺ release channel for efficient contraction in neonatal skeletal muscle. **EMBO J** 16:6956-6963, 1997

V. Barone, A. Bracco, S. Cozzolino, O. Massa, V. Sorrentino: Il contributo della genetica nella diagnostica della I.M. e delle malattie neuromuscolari. **Minerva Anestesiologica** 63 (9):239-243, 1997

V. Barone, D. Weber, L. Yin, V. Brancolini, M. Devoto, G. Romeo: Exclusion of linkage between *RET* and Neuronal Intestinal Dysplasia Type B. **Am J Med Genet** 62:195-198, 1996

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A. Rasola, L.J.V. Galietta, V. Barone, G. Romeo, S. Bagnasco: Molecular cloning and functional characterization of a GABA/betaine transporter from human kidney. **FEBS Letters** 373:229-233, 1995

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L. Yin, I. Ceccherini, B. Pasini, I. Matera, M. P. Bicocchi, V. Barone, R. Bocciardi, H. Kaariainen, D. Weber, M. Devoto, G. Romeo: Close linkage with the *RET* proto-oncogene and boundaries of deletion mutations in autosomal dominant Hirschsprung disease. **Human Molecular Genetics** 2:1803-1808, 1993

L.J.V. Galietta, V. Barone, D.C. Gruenert, G. Romeo: A chloride conductance evoked by hypotonic shock in epithelial cells. **Adv Exp Med Biol** 290:307-317, 1991

L.J.V. Galietta, V. Barone, M. de Luca, G. Romeo: Characterization of chloride and cation channels in cultured human keratinocytes. **Pfluegers Archiv** 418:18-25, 1991

L.J.V. Galietta, A. Rasola, V. Barone, D.C. Gruenert, G. Romeo: A forskolin and verapamil sensitive potassium current in human tracheal cells. **Biochem Biophys Res Commun** 179: 1155-1160, 1991

L.J.V. Galietta, V. Barone, T. Mastrocola, M. de Luca, S. Bondanza, R. Cancedda, G. Romeo: Uso dei cheratinociti umani in coltura come modello per lo studio elettrofisiologico del difetto molecolare della fibrosi cistica. Atti del IV Congresso FISME, Milano 27-29 Settembre, Monduzzi ed. Bologna, 1989

Siena 8-03-2023

Firma

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