# CURRICULUM VITAE Grazia Paola Nicchia

Date of birth - April 19th 1972

### **ACTUAL POSITION**

• Full Professor of Physiology - BIO/09, Department of Bioscience, Biotechnology and Biopharmaceutics, University of Bari Aldo Moro, Bari, Italy.

• Visiting Professor, Neuroscience Department, A. Einstein College of Medicine (AECOM), Yeshiva University, Bronx, New York, NY. http://www.einstein.yu.edu/faculty/9192/grazia-nicchia/

#### **BIBLIOMETRIC INDICATORS**

(Scopus – April 7th, 2019)

- H-Index: 32
- Citation-Index: 2566
- Number of Publications: 66

# **EDUCATION/POSITION**

- 1995: Degree in Biological Science, University of Bari, Italy (110/110 cum laude)
- 2000: Ph.D. in Physiology, "Federico II" University of Naples, Italy
- 2001-2003: post-doc at the University of Bari, Italy

• 2003-2004: Research Assistant, Albert Einstein College of Medicine (AECOM), Yeshiva University, New York, NY

• 2004-2006: Visiting Instructor at the Neuroscience Department, AECOM, Yeshiva University, Bronx, New York, NY

• 2006-today: Visiting Assistant Professor at the Neuroscience Department, AECOM, Yeshiva University, Bronx, New York, NY

• 2004-2015: Assistant Professor (BIO/09), Department of Bioscience, Biotechnology and Biopharmaceutics, University of Bari Aldo Moro

 • 2014: National Academic Scientific Qualification (ASN, Abilitazione Scientifica Nazionale) for both Associate and Full Professor in Physiology, BIO/09, (Validity from Jan 2014 to Jan 2020)

• 2015-2017: Associate Professor in Physiology (BIO/09), Department of Bioscience, Biotechnology and Biopharmaceutics, University of Bari "Aldo Moro"

• 2017-today: Full Professor in Physiology (BIO/09), Department of Bioscience, Biotechnology and Biopharmaceutics, University of Bari "Aldo Moro"

#### ACADEMIC DUTIES

• 20018 - today: Deputy Director of the Dept of Bioscience, Biotechnology and Biopharmaceutics, University of Bari "Aldo Moro"

• 2004 - today: Component of the Committee of the PhD program in "Functional and Applied Genomics and Proteomics", Dept of Bioscience, Biotechnology and Biopharmaceutics, University of Bari "Aldo Moro"

• 2013 - 2018: Coordinator of the Professor and Student Joint Committee (Commissione Paritetica) of the Dept of Bioscience Biotechnology and Biopharmaceutics, University of Bari "Aldo Moro"

• 2015 - 2017: Member (Deputy of Associate Professors) of the Board (Giunta) of the Dept

of Bioscience Biotechnology and Biopharmaceutics, University of Bari "Aldo Moro"

• 2015 - today: Member of the Organism for the Animal Welfare (OPBA, Organismo Preposto al benessere degli Animali) of the University of Bari "Aldo Moro"

• 2015 - today: Member in charge of the Animal Facility of the Dept of Bioscience Biotechnology and Biopharmaceutics, University of Bari "Aldo Moro"

• 2015 - 2018: Coordinator of the committee for the monitoring of the research of the Dept of Bioscience, Biotechnology and Biopharmaceutics

# NATIONAL AND INTERNATIONAL GRANTS (AS PRINCIPAL INVESTIGATOR)

• 2013-2017 – Scientific Coordinator (and Principal Investigator of Research Unit) of a FIRB project "FUTURO IN RICERCA" funded by MIUR. Title: "Study on the pathophysiological role of D184E mutation in Aquaporin-4 gene". Code: RBFR12SJA8\_001.

 • 2010-2012 – Principal Investigator of a Scientific Project "Progetto IDEA Giovani Ricercatori" funded by the University of Bari. Title: "Studio del ruolo patogenico di una variante proteica di Acquaporina-4 in una forma di sordità non-sindromica ereditaria". Cod GRBA085SIS

• 2007-2009 – Scientific Coordinator of a "Scientific Research Program of National Interest" (PRIN2006) funded by MIUR. Analysis of the physiological role of the water channel protein Aquaporin-1 (AQP1) in the angiogenesis. Prot. 006051375\_001.

• 2007 - Principal Investigator of a Research Agreement with the Johnson and Johnson/Pharmaceutical Research and Development to study the effect of an "unknown" molecule on astrocyte migration.

#### NATIONAL AND INTERNATIONAL ACKNOWLEDGMENTS

# National

• 2005: Awarded "SIF award 2005" - for best young Italian scientist in Physiology - by the Italian Society of Physiology.

• 2008-today: Member of the Italian Society of Physiology

• 2017-2018: Small grant (20.000 euros) to held the Summer School in "Physiology and Biophysics of Water and Ion Channels" (Acronym SPYWATCH). 18-22 June 2018, at University of Bari, Bari, Italy. References for the grant: CALL FOR PROPASALS N. 2/PAC/2017. Action Plan: Promotion of Summer Schools offered by Apulian Universities. PROMOTER: Università degli Studi di Bari. Director: Prof. Grazia Paola Nicchia. Partner: MASMEC S.p.A.

Summer School website:

http://www.uniba.it/didattica/corsi-universitari-di-formazione-finalizzata/summerwinter-school/summer-school-a-a-2017-2018/Spywatch

• Results "VQR 2011-2014": Score 2 (Both Excellent valutation)

# International

• From 2006 up today: Visiting Assistant Professor at the Neuroscience Department, Albert Einstein College of Medicine (AECOM), Yeshiva University, Bronx, New York, NY, USA.

(http://www.einstein.yu.edu/faculty/9192/grazia-nicchia/)

• 2004-2006: Visiting Instrutor at the Neuroscience Department, AECOM, Yeshiva University, Bronx, New York, NY, USA.

• 2017: Member of the European Association for the Study of Diabetes

• Chairman of the session "Aquaporins in brain edema and in CSF production and drainage" at the 1st International Meeting on Brain Aquaporins 9 – 10 June 2008. New insight in brain edema, stroke, spinal cord injury, meningitis, epilepsy, and multiple sclerosis.

• Chairman of the session "Cancer" at the 18th World Congress of Basic and Clinical Pharmacology (WCP2018)– July 1 to 6, 2018, in Kyoto, Japan.

# **Dedicated Covers**

1. ROSSI A, PISANI F, NICCHIA GP, et al. (2009). Evidences for a leaky scanning mechanism for the synthesis of the shorter M23 protein isoform of aquaporin-4: implication in orthogonal array formation and neuromyelitis optica antibody interaction. J Biol Chem. vol. 285 pp. 4562-4569.

2. NICCHIA GP, et al. (2008). Actin cytoskeleton remodeling governs aquaporin-4 localization in astrocytes. GLIA, vol. 56 pp. 1755-1766.

3. NICCHIA GP, et al. (2000). Aquaporin-4 containing astrocytes sustain a temperature and mercury-insensitive swelling in vitro. GLIA. vol. 31 pp. 29-38.

4. FRIGERI A, NICCHIA GP, et al. (2001). Aquaporin-4 deficiency in skeletal muscle and brain of dystrophic mdx-mice. FASEB JOURNAL. vol. 15 pp. 90-98.

# SEMINARS AND INVITED ORAL PRESENTATIONS

G.P. Nicchia. Orthogonal Arrays of Particles alter cytoskeleton and cell invasion dynamics in GBM and glioma cells. 18th World Congress of Basic and Clinical Pharmacology (WCP2018) to be held from July 1 to 6, 2018, in Kyoto, Japan.

G.P. Nicchia. "Aquaporin-4 Supramolecular Structures: Insights From a Novel Aquaporin-4 Knock-in Mouse Model". Department of Cell Biology and Anatomy. New York Medical College, Valhalla, New York, NY, USA. Basic Sciences Building (BSB)Room 210. March 28, 2018, 2 – 3 pm.https://www.nymc.edu/departments/academic-departments/graduateschool-of-basic-medical-sciences/cell-biology/cell-biology-calendar/#/?i=1

G.P. Nicchia. "Stem Cells: the ethics of a new world". Meeting-Debate organized by Link

Campus Bari, University of Bari "Aldo Moro", bari, November 30, 2017

G.P. Nicchia. "Biotechnology for the study of the physiological role of the molecular aggregates of Acquaporin-4: generation of animal models through CRISPR / Cas9". Seminars of the Department 2017, Dept of Bioscience, Biotechnology and Biopharmaceutics, University of Bari "Aldo Moro", Bari, March 21, 2017.

G.P. Nicchia. "Aquaporin-1 inhibition reduces tumour dissemination and increases survival in a mouse model of melanoma". 67th Congress of the Italian Physiological Society (SIF), Catania, September 21-23, 2016.

G.P. Nicchia. "What is the future for animal research?". Meeting-Debate "Animal research today: from European principles to alternative methods and new rules" in collaboration with antivivisection league from Rome and Bari. Department of Veterinary Medicine, University of Bari "Aldo Moro", Bari, May 20, 2016.

G.P. Nicchia. "Aquaporin-4 supramolecular organization in physiology and pathophysiology (Neuromyelitis Optica)". Dominick P. Purpura, Department of Neuroscience. 901 Kennedy Center. July 3, 2014.

G.P. Nicchia. "Aquaporin-4 supramolecular structures: applications in diagnosis and therapy of Neuromielitis Optica". Istituto per la Sintesi Organica e la Fotoreattività (ISOF)
- CNR Area della Ricerca di Bologna - Via P. Gobetti 101. May 9, 2014.

Nicchia GP, Stigliano C, Rossi A, Frigeri A, Svelto M. "Impairment of tumor angiogenesis and growth by in vivo Aquaporin-1 RNA interference", 62nd Annual Meeting of the Italian Physiological Society, Sorrento, September 25-27, 2011.

Nicchia GP, Rossi A, Pisani F, Svelto M, Frigeri A. "Regulation of the aquaporin-4 gene expression through leaky scanning mechanism and involvement in neuromyelitis optica", 44th Annual Scientific Meeting of the European Society for Clinical Investigation, Bari, Italy February 24-27, 2010.

Nicchia GP, Rossi A, Svelto M, Frigeri A. "Plasma membrane assembling of the Dystrophin Associated Proteins and Aquaporin-4 during the differentiation of a glial progenitor cell into a mature astrocyte", Neuroscience 2008, Societ for Neuroscience, SfN, 38th Annual Meeting, Washington, DC, November 15-19, 2008.

Nicchia GP, Rossi A, Frigeri A, Svelto M. "AQP4 in astrocyte migration", 58th Annual Meeting of the Italian Physiological Society, Lecce, September 19-21, 2007.

Nicchia GP, Mola MG, Rossi A, Svelto M, Frigeri A. "Relationship between aquaporin-4 and cytoskeleton", Neuroscience 2006, Society for Neuroscience, SfN, 36th Annual Meeting, Atlanta, Georgia, October 14-18, 2006.

Nicchia GP, Frigeri A, Svelto M. "Relationship between AQP4 and cytoskeleton", 26th European Winter Conference on Brain Research (EWCBR), Villars sur Ollon, Switzerland, March 4-11, 2006.

Nicchia GP, Frigeri A, Liuzzi GM, Svelto M. "Aquaporin-4 inhibition by RNA interference (RNAi) determines morphological changes in cultured astrocytes", 53rd Annual Meeting of the Italian Physiological Society, Ferrara, September 16-19, 2002.

Nicchia GP, Frigeri A, Nico B, Svelto M. "Tissue distribution and membrane localization of rat aquaporin-9 water channel: evidence for sex-linked differences in liver", 52nd Annual Meeting of the Italian Physiological Society, Ancona, September 25-28, 2001.

Nicchia GP, Frigeri A, Cantatore C, Desaphy JF, Pierno S, De Luca AM, Conte Camerino D, Svelto M. "Changes in AQP4 expression in rat skeletal muscle during development and after hindlimb suspension", 51st Annual Meeting of the Italian Physiological Society, Catania, September 25-27, 2000.

# **REVIEWER ACTIVITY**

Prof Nicchia is external reviewer for the following journals:

- 1. Acta Physiologica
- 2. Acta Neuropathologica
- 3. Muscle and Nerve

- 4. PLoS One
- 5. Frontiers in Cellular Neuroscience
- 6. Neuroscience
- 7. European Journal of Neuroscience
- 8. Journal of Neurochemistry
- 9. Journal of Alzheimer's Disease
- 10. Journal of Cellular Biochemistry
- 11. Journal of Clinical and Experimental Pathology
- 12.Molecular Pharmaceutics
- 13.Tohoku Journal of Experimental Medicine