

**Europas
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**Personal
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Rita Businaro

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Sapienza University of Rome
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Nationality

Italian

Date of birth

11/25/1954

Gender

female

(S s/d)

**Occupatio
nal field**

BIO/16

**Work
experience**

Dates

2000-2017 Professor of Human Anatomy, Sapienza University of Rome, Italy
1982-2000 Assistant Professor of Human Anatomy, Sapienza University of Rome, Italy
1980-81 Associate Scientist Wistar Institute of Anatomy and Biology, Philadelphia, Pennsylvania, USA
1978-80 Fellow, Laboratory of Cell Biology, CNR, Rome, Italy

Occupation or
position held

Main activities and responsibilities
Head of the Laboratory of Neuromorphology, of the Department of Medico-Surgical Sciences and Biotechnologies, Sapienza University, Rome.
Responsible for the Executive Protocol Agreement between Sapienza University of Rome, Italy and Rutgers University, New Brunswick / Piscataway, USA
2014-17 Vice-President Fulbright Italian Association
2010-14 Member of the Executive board of Fulbright Italian Association
2011-2017 Director of the II level Master: "Stress, sport, nutrition: new diagnostic and therapeutic advances for wellness, fitness, prevention and rehabilitation"
2005-2014 Coordinator of II level Master: Neuroimmunology, University of Rome La Sapienza, Italy
2007-2017 Vice-President of Radiology graduate school
2001-2017 Professor of Human Anatomy, School of Medicine, Faculty of Pharmacy and Medicine, Sapienza University of Rome
2000-2017 Coordinator of integrated courses of histology, anatomy and physiology for the students of the School of Medicine and for other health I level degrees
-2017 Professor of Human Anatomy in the I level degree courses: "Neuro-psychomotor therapy of developmental age", "Radiology Techniques and Radiotherapies", "Physiotherapists", "Laboratory Technicians", "Dental hygienists"
2008-2017 Member of the technical pedagogical board of the School of Medicine, Polo Pontino, Sapienza University of Rome, Italy
2011-14 member of the Doctoral School in "Innovative Technologies in Translational Medicine"
Coordinator of the Erasmus Program with Université d'Artois, France; Athens University, Greece; Gothenborg University, Sweden.
Invited Speaker at the international School of Neuroimmunopharmacology, University of Insubria, Varese

MAIN RESEARCH TOPICS

Study of comorbidity of Alzheimer's disease and cerebrovascular disorders
Role of the cell populations and mediators of the immune response in the etiopathogenesis of atherosclerosis
Cross-talk Central Nervous System-Immune System
Development of new methods for regenerative medicine

GRANTS:

2016 PRIN Prot. 2015KMMKBN Endocannabinoid Signaling in Alzheimer's Disease: A Novel Target for Mechanistic Understanding and Potential Therapeutics. Sapienza Unit leader

2016 Sapienza University of Rome NPY and its receptors in atherosclerosis progression PI

2016 Grant from Milmed, Sweden PI

2015 MAE "Nutritional protocols for the treatment of Alzheimer's disease" PI

2015 Italy-USA Bilateral agreement AI2615BE38 "Macrophage pro-inflammatory activity in tissue injury" PI

2015 C26A15FHES Sapienza University of Rome "Anti-inflammatory activity of polyphenolic compounds in chronic diseases" PI

2014 C26A14M7PS Sapienza University of Rome "Hierarchical role of classes of cytokines in chronic inflammatory diseases: axis IL-23-IL-17 in atherosclerosis" PI

2014 C26G142PSY "Advanced video confocal microscopy system with high resolution for the understanding of complex pathophysiological mechanisms" PI

2013 C26A13CT5H Sapienza University of Rome "Neurotransmitters and cytokines involved in inflammation associated with development and degenerative diseases" PI

2013 C26G13WLNT Sapienza University of Rome "Development of a P2 laboratory for the genetic manipulation of prokaryotic and eukaryotic cells for biomedical and translational purposes"

2012 C26I12KKHK Sapienza University of Rome FARI PI

2011 ASP (150/2008) "Social emerging diseases related to nutrition disorders with particular interest on persons with neuro-psycho-relational disabilities"

2011 C26G11SN3K Sapienza University of Rome "Quantitative analysis of the image at high resolution in modern biomedical research: a platform for numerous applications"

2009 C26F09XYBM Sapienza University of Rome "Chemiotactic and proinflammatory factors involved in the progression of atherosclerotic plaques" PI

2009 C26G09ERP2, 2008 C26G08NBBX Sapienza University of Rome "Genomic alterations in human diseases"

2008 C26A08TAB9, 2007 C26A07C23J, 2006 C26A06SK7E Sapienza University of Rome "Proteinase receptors and their inhibitors involved in inflammatory and degenerative processes"

Referee for the following journals:

Neuroscience & Biobehavioral Reviews IF 10.24

Molecular Cell Research IF 6.9

Journal of Neuroimmune Pharmacology IF 4.212

Neuroscience & Biobehavioral Reviews IF 10.24

Journal of Neural Transmission IF 2.9

Journal of Immunological Methods IF 2.087

Journal of Diabetes and its complications IF 1.5

Name and address of employer Sapienza University of Rome

Sector Medical School

Education and training

Dates Add separate entries for each relevant course you have completed, starting from the most recent.

Title of qualification awarded MD cum laude, University La Sapienza, Rome, Italy
Specialization cum laude General Pathology, University La Sapienza, Rome, Italy
PhD Immunobiology of tumors, University La Sapienza, Rome, Italy
Post-doctoral course "Immunology", Institute for Medical Research, Camden, New Jersey, USA

Name and type of organisation

providing education and training

Name and type of organisation providing education and training

Personal skills and competences

Cell Biology
Morphological and morphometric analyses
Immunochemical and immunohistochemical analyses
Neurotrophic and Neurotoxic factors
Stress-related disorders

Mother tongue(s) **Specify mother tongue**
Italian

Other language(s) **French, english**

Self-assessment

European level (*)

Language

Language

French

English

Understanding		Speaking		Writing			
Listening		Reading		Spoken interaction		Spoken production	
C1	C1	C1	C1	C1	C1	C1	C1
C1	C1	C1	C1	C1	C1	C1	C1

(*) [Common European Framework of Reference for Languages](#)

Additional information

Include here any other information that may be relevant, for example contact persons, references, etc.

Receiving

Annexes

List any items attached.

Businaro R, Corsi, Asprino R, Di Lorenzo C, Laskin D, Corbo RM, Ricci S, Pinto A. Modulation of inflammation as a way of delaying Alzheimer's disease progression: the diet's role. *Current Alzheimer Research*. In corso di stampa IF 3.89

Capoano R, **Businaro R**, Tesori MC, Donello C, Lombardo F, Lo Vasco VR, Capriotti L, Corsi M, Di Raimo T, Leopizzi M, Salvati B, Ricci S. Wounds difficult to heal: an effective treatment strategy. *Curr Vasc Pharmacol*. 2017. doi: 10.2174/1570161115666170301122216 IF2.97

Di Raimo T, Leopizzi M, Mangino G, Rocca CD, **Businaro R**, Longo L, Lo Vasco VR. Different expression and subcellular localization of Phosphoinositide-specific Phospholipase C enzymes in differently polarized macrophages. *J Cell Commun Signal*. 2016 Dec;10(4):283-293 IF 3.123

Businaro R, Corsi M, Di Raimo T, Marasco S, Laskin DL, Salvati B, Capoano R, Ricci S, Siciliano C, Frati G, De Falco E. Multidisciplinary approaches to stimulate wound healing. *Ann N Y Acad Sci*. 2016 Aug;1378(1):137-142. IF 4.383

Malaviya R, Sunil VR, Venosa A, Vayas KN, **Businaro R**, Heck DE, Laskin JD, Laskin DL. Macrophages and inflammatory mediators in pulmonary injury induced by mustard vesicants. *Ann N Y Acad Sci*. 2016 Jun;1374(1):168-75 IF 4.383

Businaro R, Corsi M, Azzara G, Di Raimo T, Laviola G, Romano E, Ricci L, Maccarrone M, Aronica E, Fuso A, Ricci S. Interleukin-18 modulation in autism spectrum disorders. *J Neuroinflammation*. 2016 Jan 5;13:2. IF 5.366

Corsi M, Di Raimo T, Di Lorenzo C, Rapp-Ricciardi M, Archer T, Ricci S, **Businaro R**. Cognitive disability in Alzheimer's disease and its management. *Clin Ter*. 2016 Sep-Oct;167(5):e123-e126. IF 2.925

Lo Vasco VR, Leopizzi M, Puggioni C, Della Rocca C, **Businaro R**. Neuropeptide Y reduces the expression of PLCB2, PLCD1 and selected PLC genes in cultured human endothelial cells. *Mol Cell Biochem*. 2014 Sep;394(1-2):43-52 IF 2.388

Buttari B, Profumo E, Segoni L, D'Arcangelo D, Rossi S, Facchiano F, Saso L, **Businaro R**, Iuliano L, Riganò R. Resveratrol counteracts inflammation in human M1 and M2 macrophages upon challenge with 7-oxo-cholesterol: potential therapeutic implications in atherosclerosis. *Oxid Med Cell Longev*. 2014;2014:257543 IF 3.363

Buttari B, Profumo E, Domenici G, Tagliani A, Ippoliti F, Bonini S, **Businaro R**, Elenkov I, Riganò R. Neuropeptide Y induces potent migration of human immature dendritic cells and promotes a Th2 polarization. *FASEB J*. 2014 Jul;28(7):3038-49 IF 5,48

Lo Vasco VR, Leopizzi M, Puggioni C, Della Rocca C, **Businaro R**. Fibroblast growth factor acts upon the transcription of phospholipase C genes in human umbilical vein endothelial cells. *Mol Cell Biochem*. 2014;388(1-2):51-9 IF 2.33

Troili GM, **Businaro R**, Massoni F, Ricci L, Petrone L, Ricci P, Ricci S. Investigation on a group of autistic children: risk factors and medical social considerations. *Clin Ter*. 2013;164(4):e273-8. IF0.33

Buttari B, Profumo E, **Businaro R**, Saso L, Capoano R, Salvati B, Riganò R. Oxidized haemoglobin-driven endothelial dysfunction and immune cell activation: novel therapeutic targets for atherosclerosis. *Curr Med Chem*. 2013;20(37):4806-14. IF 4.322

Gabriele L, Schiavoni G, Mattei F, Sanchez M, Sestili P, Butteroni C, **Businaro R**, Mirchandani A, Niedbala W, Liew FY, Afferni C. Novel allergic asthma model demonstrates ST2-dependent dendritic cell targeting by cypress pollen. *J Allergy Clin Immunol*. 2013 Sep;132(3):686-695.e7. IF 12.047

Ricci S, **Businaro R**, Ippoliti F, Lo Vasco VR, Massoni F, Onofri E, Troili GM, Pontecorvi V, Morelli M, Rapp Ricciardi M, Archer T. Altered cytokine and BDNF levels in autism spectrum disorder. *Neurotox Res*. 2013 Nov;24(4):491-501. IF 2.865

Lo Vasco VR, Leopizzi M, Chiappetta C, Puggioni C, Della Rocca C, Polonia P, **Businaro R**. Lypopolysaccharide downregulates the expression of selected phospholipase C genes in cultured endothelial cells. *Inflammation*. 2013;36(4):862-8. IF 2.457

Ippoliti F, Canitano N, **Businaro R**. Stress and obesity as risk factors in cardiovascular diseases: a neuroimmune perspective. *J Neuroimmune Pharmacol*. 2013;8(1):212-26. IF 3.802

Businaro R. Neuroimmunology of the atherosclerotic plaque: a morphological approach. *J Neuroimmune Pharmacol*. 2013; 8(1):15-27. IF 3.802

Businaro R, Tagliani A, Buttari B, Profumo E, Ippoliti F, Di Cristofano C, Capoano R, Salvati B, Riganò R. Cellular and molecular players in the atherosclerotic plaque progression. *Ann N Y Acad Sci*. 2012;1262:134-41. IF4.364

Businaro R, Ippoliti F, Ricci S, Canitano N, Fuso A. Alzheimer's disease promotion by obesity: induced mechanisms-molecular links and perspectives. *Curr Gerontol Geriatr Res*. 2012;2012:986823. IF 0.33

Profumo E, Buttari B, Tosti ME, Tagliani A, Capoano R, D'Amati G, **Businaro R**, Salvati B, Riganò R. Plaque-infiltrating T lymphocytes in patients with carotid atherosclerosis: an insight into the cellular mechanisms associated to plaque destabilization. *J Cardiovasc Surg* 2013;54(3):349-57. IF 1.51

Lo Vasco VR, Leopizzi M, Chiappetta C, **Businaro R**, Polonia P, Della Rocca C, Litta P. Expression of phosphoinositide-specific phospholipase C enzymes in normal endometrium and in endometriosis. *Fertil Steril*. 2012;98(2):410-4. IF 3.96

Lo Vasco VR, Cosmi E, Visentin S, Di Raimo T, Salmaso R, Zanardo V, Trevisanuto D, **Businaro R**. IL-1 β and IL-23 in amniotic fluids of ultrasound-detected aortic intima/media thickness and growth retardation. *J Reprod Immunol*. 2012; 93(1):64-7. IF 2.47

Ricci S, Fuso A, Ippoliti F, **Businaro R**. Stress-induced cytokines and neuronal dysfunction in Alzheimer's disease. *J Alzheimers Dis*. 2012;28(1):11-24. IF 4.174

Lo Vasco VR, Pacini L, Di Raimo T, D'Arcangelo D, **Businaro R**. Expression of phosphoinositide-specific phospholipase C isoforms in human umbilical vein endothelial cells. *J Clin Pathol*. 2011;64(10):911-5. IF 2.44

Lo Vasco VR, Salmaso R, Zanardo V, **Businaro R**, Visentin S, Trevisanuto D, Cosmi E. Fetal aorta wall inflammation in ultrasound-detected aortic intima/media thickness and growth retardation. *J Reprod Immunol*. 2011;91(1-2):103-7. IF 2.47

Buttari B, Profumo E, Di Cristofano C, Pietraforte D, Lionetti V, Capoano R, Salvati B, **Businaro R**, Di Giammarco G, Riganò R. Haemoglobin triggers chemotaxis of human monocyte-derived dendritic cells: possible role in atherosclerotic lesion instability. *Atherosclerosis*. 2011;215(2):316-22. IF 3.908

Cipollone D, Cozzi DA, **Businaro R**, Marino B. Congenital diaphragmatic hernia after exposure to a triple retinoic acid antagonist during pregnancy. *J Cardiovasc Med (Hagerstown)*. 2010 Nov 23. IF 2.657

Bernardini C, Lattanzi W, **Businaro R**, Leone S, Corvino V, Sorri G, Lauro G, Fumagalli L, Donato FR, Michetti F. Transcriptional effects of 4 α -cholestan-3-one on cultured aortic smooth muscle cells perturb cholesterol homeostasis and interference on the cell cycle. *Gene Expr*. 2010;14(6):345-59. IF 1.967

Businaro R., Profumo E., Tagliani A., Buttari B., Leone S., d'Amati G., Ippoliti F., D'Arcangelo D., Capoano R., Salvati B., Fumagalli L., Riganò R. (2009) HSP90: "a novel autoantigen involved in human carotid atherosclerosis". *Atherosclerosis* 2009; 207(1):74-83 IF 4.9

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- Businaro R**, Fabrizio C, Persichini T, Starace G, Ennas MG, Fumagalli L, Lauro GM. Modulation of the alpha 2 macroglobulin receptor/low density lipoprotein receptor related protein by interferon-gamma in human astroglial cells. *J Neuroimmunol.* 1997;72(1):75-81. IF 3.014
- Fumagalli L, **Businaro R**, Nori SL, Toesca A, Pompili E, Evangelisti E, Giannetti S, Ippoliti F, De Renzis G. Protease inhibitors in mouse skeletal muscle: tissue-associated components of serum inhibitors and calpastatin. *Cell Mol Biol (Noisy-le-grand).* 1996;42(4):535-46. IF 1.46
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- Fumagalli L, **Businaro R.**, Nori S.L., Toesca A., Collier W.L., De Renzis G. (1996) Evidence for tissue-associated α 2-macroglobulin in mouse skeletal muscle. *Molecular and Chemical Neuropathology* 27: 211-223. IF 1.163
- Fabrizi C., Colasanti M., Persichini T., **Businaro R.**, Starace G., Lauro G. M. (1994) Interferon gamma up-regulates α 2macroglobulin expression in human astrocytoma cells. *J. Neuroimmunol.* 53: 31-37. IF 3.355
- Nori S.L., **Businaro R.**, Fabrizio C., Moestrup S.K., Starace G., Fumagalli L., Lauro G.M. (1993) Receptor-mediated endocytosis of α 2macroglobulin by a glioma cell line. *Neuroreport* 4 (4):423-426. IF2.49
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- Businaro R.**, Fabrizio C., Fumagalli L., Lauro G.M., (1992) Synthesis and secretion of α 2macroglobulin by human glioma established cell lines. *Exptl. Brain Res.* 88, 213-218. IF 2.05
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- Fiorucci L., De Renzis G., **Businaro R.**, Fumagalli L., Fioretti E., Giardina B., Ascoli F. (1989) Identification and immunohistochemical localization of various bovine pancreatic trypsin inhibitor-isoforms in bovine pituitary gland. *Histochem. J.* 212:721-730. IF 1.56
- Fioretti E., **Businaro R.**, Fumagalli L., Angeletti M., Citro G., De Renzis G., Fiorucci L., Ascoli F. (1988) Specific antibodies as tools for cellular localization of Kunitz-type isoforms in bovine organs. *It. J. Biochem.* 37:233-235. IF 0.379
- Businaro R.**, Fioretti E., Fumagalli L., Citro G., De Renzis G., Ascoli F. (1988) Cellular localization of bovine pancreatic trypsin inhibitor and related molecular forms in bovine lung. *Histochem. J.* 20:187-193. IF 1.56
- Cozza P., **Businaro R.**, Ciano A., Nori S., De Renzis G., Fumagalli L. (1987) L'arcata zigomatico-mascellare come sistema di rinforzo orizzontale nel massiccio facciale dell'uomo. *Riv. It. Odontoiatria e Protesi Dentaria* 2:21-25.
- Businaro R.**, Mannella E., Cochi S., Fioravanti D., Bettazoni S., Ippoliti F. (1987) Inverse relationship between spontaneous interleukin-1 production and mitogen-driven proliferation in patients with pulmonary tuberculosis. *Allergie et Immunologie* 19:189-196.
- Businaro R.**, Fioretti E., Fumagalli L., Citro G., De Renzis G., Ascoli F. (1987) Vascular localization of bovine pancreatic trypsin inhibitor-related molecular forms in bovine spleen. *Eur. J. Biochem.* 165:79-82. IF 3.27
- Diamond L., Perussia B., **Businaro R.**, Perrella F. (1985) HL-60 variant reversibly resistant to induction of differentiation by phorbol esters. *Carcinogen. Compr. Surv.* 10:287-302. IF 3.51
- Butler R., **Businaro R.**, Revoltella R. (1984) Interleukin-1 activity produced by various precursor monocytic cell lines. In: *New Trends in Experimental Haematology. Oncogenes, Stem Cells, Bone Marrow Transplantation*, Peschle C. ed. Sero Symp. Rev. 7:100-104
- Revoltella R., **Businaro R.**, Lauro G., Toesca A. (1982) Tumor-associated neural differentiation antigens detected on C1300 neuroblastoma cells by hybridoma monoclonal auto-antibodies. *Cell. Immunol.* 68:75-92. IF 2.14
- Businaro R.**, Revoltella R. (1982) Different effects of hybridoma antibodies against nerve growth factor in neonatal mice. *Clin. Immunol. and Immunopathol.* 22:1-8. IF 2.56
- Businaro R.**, Butler R., Rubenstein A., Revoltella R. (1981) Monoclonal antibodies against nerve growth factor produced by somatic cell hybrids. *J. Neurosci. Res.* 6:89-98. IF 2.84
- Lauro G., **Businaro R.**, Butler R., Revoltella R. (1980) Protection of mice against syngeneic C1300 neuroblastoma challenge by immunization with membranes of C1300 neuroblastoma cells. *J. Natl. Cancer Inst.* 64:1169-1172. IF 10.33
- Carli M., Bucolo C., Pannunzio M.T., Ongaro G., **Businaro R.**, Revoltella R. (1979) Fluctuation of serum complement levels in children with neuroblastoma. *Cancer* 43:2399-2404. IF 5.2

Works

- Textbooks (Chapters, etc.) Valente M., **Businaro R.**, Tranquilli-Leali F.M., De Renzis G., Fumagalli L. (1989) Sources of dopamine in peripheral tissues. In: Peripheral Dopamine Pathophysiology. Amenta F. ed., CRC Press, pp.3-14.
- Businaro R.**, Pompili E. (2003) Apparato locomotore (osteo-artro-miologia). Linee guida. Piccin editore