

## Biosketch

<b>Name:</b>	Claudio Russo
<b>Born:</b>	Genova, December 3, 1966
<b>Status:</b>	Married
<b>Previous Position:</b>	Professor of Pharmacology School of Medicine Dept. of Medicine and Health Sciences University of Molise
<b>Actual Position:</b>	Professor of Biochemistry School of Medicine Dept. of Medicine and Health Sciences University of Molise
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## Curriculum Studiorum

- 1986: Classical studies at Liceo Ginnasio Andrea Doria in Genova.
- 1990-1992: Internship at Institute of Pharmacology University of Genova
- 1992: Degree in Chemistry and Pharmaceutical Technologies University of Genova
- 1993: Degree in Pharmacy, University of Genova
- 1993-1994: National Research Council Fellowship. Dept. of Pharmacology at University of Genova.
- 1995-1998: Research Associate at Neuropatology Dept. Case Western Reserve University, Cleveland, U.S.A.
- 1997-2001: Ph.D. in Neurophysiology and Neuropharmacology at Dept. of Oncology, Biology and Genetics, School of Medicine, University of Genova.
- 2001-2005 Research Associate at Dept. of Oncology, Biology and Genetics, School of Medicine, University of Genova.
- 2005 Associate Professor of Pharmacology, Dept. of Medicine and Health Sciences, School of Medicine, University of Molise.

## Academic Assignments

- 2013- Delegate of the Rector for Student's Sport and Welfare Policies
- 2013 Member of the Board of Directors of CUS (University's Sport Center).

## Fellowship and Prizes

- 1994: C.N.R. Fellowship for research in neurosciences.  
1999: Novartis Award in Neuroscience: Alzheimer's Disease  
2000: Italian Interdisciplinary Network on Alzheimer Disease: Bracco Award.

## Recent Grants

- 2004-2006 PI European Community contract N° LSHM-CT-2003-503330/Apopis,  
2004-2006 PI Alzheimer Association IIRG-02-3976.  
2010-2012 PI Progetti di Carattere Prioritario e di Rilievo Nazionale, Regione Molise  
CUP H11J10000050002.  
2014-216 PI Progetti di Carattere Prioritario e di Rilievo Nazionale, Regione Molise

## Scientific Collaborations

- Prof. Pierluigi Gambetti, Dept. of Neuropathology, Case Western Reserve University, Cleveland, USA.  
Prof. Christine Hulette, Duke University Medical Center, Durham, USA  
Prof. Bernardino Ghetti, Dept. of Neuropathology, University of Indiana, Indianapolis, USA.  
Prof. Giuliano Binetti, Laboratorio di Neurobiologia, IRCCS S. Giovanni di Dio Fatebenefratelli, Brescia.  
Prof. Tommaso Russo, Laboratorio di Neurobiologia, CEINGE, Università di Napoli Federico II.  
Prof. Massimo Tabaton, Laboratorio di Neuroscienze, Dipartimento di Neuroscienze, Oftalmologia e Genetica, Università di Genova.  
Prof. Alberto Diaspro, LabMicroscBio, Dipartimento di Fisica, Università di Genova.

## Referee for the following Journals

- Journal of Neurochemistry  
BMC Cell Biology  
European Journal of Pharmacology  
FEBS Letters  
The Journal of Experimental Medicine  
Molecular Medicine  
Journal of Alzheimer Disease (Associate Editor of journal of Alzheimer Disease -2012).

## Main Research Topics:

Neurodegeneration and Alzheimer's Disease.

**Prion Diseases.**

**Pharmacovigilance**

**Pharmaceutical policies**

### **Selected Peer Reviewed Publications**

1. PENNA I, VASSALLO I, NIZZARI M, RUSSO D, COSTA D, MENICHINI P, POGGI A, RUSSO C, DIECI G, FLORIO T, CANCEDDA R, PAGANO A. (2013). A novel snRNA-like transcript affects amyloidogenesis and cell cycle progression through perturbation of Fe65L1 (APBB2) alternative splicing.. BIOCHIMICA ET BIOPHYSICA ACTA-MOLECULAR CELL RESEARCH, vol. 1833, p. 1511-1526,
2. AMBROSINO P, SOLDOVIERI MV, RUSSO C, TAGLIALATELA M. (2013). Activation and desensitization of TRPV1 channels in sensory neurons by the PPAR $\alpha$  agonist palmitoylethanolamide. BRITISH JOURNAL OF PHARMACOLOGY, vol. 168, p. 1430-1444,
3. CIARLO E, MASSONE S, PENNA I, NIZZARI M, GIGONI A, DIECI G, RUSSO C, FLORIO T, CANCEDDA R, PAGANO A. (2013). An intronic ncRNA-dependent regulation of SORL1 expression affecting A $\beta$  formation is upregulated in post-mortem Alzheimer's disease brain samples. DISEASE MODELS & MECHANISMS, vol. 6, p. 424-433,
4. NIZZARI M, BARBIERI F, GENTILE MT, PASSARELLA D, CAORSI V, DIASPRO A, TAGLIALATELA M, PAGANO A, COLUCCI-D'AMATO L, FLORIO T, RUSSO C. (2012) Amyloid- $\beta$  ProteinPrecursor Regulates Phosphorylation and Cellular Compartmentalization of Microtubule Associated Protein Tau. J Alzheimers Dis. vol. 29, p. 211-227.
5. PENNA I, VELLA S, GIGONI A, RUSSO C, CANCEDDA R, PAGANO A. (2011) Selection of candidate housekeeping genes for normalization in human postmortem brain samples.  
Int J Mol Sci.;12(9):5461-70.
6. MASSONE S, VASSALLO I, CASTELNUOVO M, FIORINO G, GATTA E, ROBELLO M, BORGHI R, TABATON M, RUSSO C, DIECI G, CANCEDDA R, PAGANO A. (2011) RNA polymerase III drives alternative splicing of the potassium channel-interacting protein contributing to brain complexity and neurodegeneration. J Cell Biol. ;193(5):851-66.
7. DAVINELLI S, INTRIERI M, RUSSO C., DI COSTANZO A, ZELLA D, BOSCO P, SCAPAGNINI, G (2011). The "Alzheimer's disease signature": potential perspectives for novel biomarkers. IMMUNITY & AGEING, vol. 8, ISSN: 1742-4933

8. ERRICO F, NISTICO' R, NAPOLITANO F, OLIVA AB, ROMANO R, BARBIERI F, FLORIO T, RUSSO C, MERCURI NB, USIELLO A (2011). Persistent increase of d-aspartate in d-aspartate oxidase mutant mice induces a precocious hippocampal age-dependent synaptic plasticity and spatial memory decay. *NEUROBIOLOGY OF AGING*, vol. 32; p. 2061-2074, ISSN: 0197-4580
9. MASSONE S, VASSALLO I, CASTELNUOVO M, FIORINO G, GATTA E, ROBELLO M, BORGHI R, TABATON M, RUSSO C., DIECI G, CANCEDDA R, PAGANO A (2011). RNA polymerase III drives alternative splicing of the potassium channel-interacting protein contributing to brain complexity and neurodegeneration. *THE JOURNAL OF CELL BIOLOGY*, vol. 193; p. 851-866, ISSN: 0021-9525
10. MASSONE S, VASSALLO I, FIORINO G, CASTELNUOVO M, BARBIERI F, BORGHI R, TABATON, M, ROBELLO M, GATTA E, RUSSO C., FLORIO T, DIECI G, CANCEDDA R, PAGANO A (2011). 17A, a novel non-coding RNA, regulates GABA B alternative splicing and signaling in response to inflammatory stimuli and in Alzheimer disease. *NEUROBIOLOGY OF DISEASE*, vol. 41; p. 308-317,
11. VILLA V, TONELLI M, THELLUNG S, CORSARO A, TASSO B, NOVELLI F, CANU C, PINO A, CHIOVITTI K, PALUDI D, RUSSO C., SPARATORE A, ACETO A, BOIDO V, SPARATORE F, FLORIO T (2011). Efficacy of Novel Acridine Derivatives in the Inhibition of hPrP90-231 Prion Protein Fragment Toxicity. *NEUROTOXICITY RESEARCH*, vol. 19; p. 556-574,
12. CORSARO A, THELLUNG S, CHIOVITTI K, VILLA V, SIMI A, RAGGI F, PALUDI D, RUSSO C., ACETO A, FLORIO T (2009). Dual modulation of ERK1/2 and p38 MAP kinase activities induced by minocycline reverses the neurotoxic effects of the prion protein fragment 90-231. *NEUROTOXICITY RESEARCH*, vol. 15; p. 138-154,
13. CHIOVITTI K, CORSARO A, THELLUNG S, VILLA V, PALUDI D, D'ARRIGO C, RUSSO C., PERICO A, IANIERI A, DI COLA D, VERGARA A, ACETO A, FLORIO T (2007). Intracellular accumulation of a mild-denatured monomer of the human PrP fragment 90-231, as possible mechanism of its neurotoxic effects. *JOURNAL OF NEUROCHEMISTRY*, vol. 103; p. 2597-2609,
14. NIZZARI M, VENEZIA V, BIANCHINI P, CAORSI V, DIASPRO A, REPETTO E, THELLUNG S, CORSARO A, SCHETTINI G, CARLO P, FLORIO T, RUSSO C. (2007). Amyloid precursor protein and Presenilin 1 interaction studied by FRET in human H4 cells. *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*, vol. 1096; p. 249-257
15. NIZZARI M, VENEZIA V, REPETTO E, CAORSI V, MAGRASSI R, GAGLIANI MC, CARLO P, FLORIO T, SCHETTINI G, TACCHETTI C, RUSSO T, DIASPRO A, RUSSO C. (2007). Amyloid precursor protein and Presenilin1 interact with the adaptor GRB2 and modulate ERK 1,2 signaling. *THE JOURNAL OF BIOLOGICAL CHEMISTRY*, vol. 282; p. 13833-13844, ISSN: 0021-9258

16. PALUDI D, THELLUNG S, CHIOVITTI K, CORSARO A, VILLA V, RUSSO C., IANIERI A, BERTSCH U, KRETZSCHMAR HA, ACETO A, FLORIO T (2007). Different structural stability and toxicity of PrP(ARR) and PrP(ARQ) sheep prion protein variants. *JOURNAL OF NEUROCHEMISTRY*, 2007 Dec;103(6):2291-300
17. PICCINI A, ZANUSSO G, BORGHI R, NOVIELLO C, MONACO S, RUSSO R, DAMONTE G, ARMIROTTI A, GELATI M, GIORDANO R, ZAMBENEDETTI P, RUSSO C., GHETTI B, TABATON M (2007). Association of a presenilin 1 S170F mutation with a novel Alzheimer disease molecular phenotype. *ARCHIVES OF NEUROLOGY*, vol. 64; p. 738-745, ISSN: 0003-9942
18. THELLUNG S, CORSARO A, VILLA V, VENEZIA V, NIZZARI M, BISAGLIA M, RUSSO C., SCHETTINI G, ACETO A, FLORIO T (2007). Amino-terminally truncated prion protein PrP90-231 induces microglial activation in vitro. *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*, vol. 1096; p. 258-270,
19. THELLUNG S, VILLA V, CORSARO A, PELLISTRI F, VENEZIA V, RUSSO C., ACETO A, ROBELLO M, FLORIO T (2007). ERK1/2 and p38 MAP kinases control prion protein fragment 90-231-induced astrocyte proliferation and microglia activation. *GLIA*, vol. 55; p. 1469-1485,
20. VENEZIA V, NIZZARI M, CARLO P, CORSARO A, FLORIO T, RUSSO C. (2007). Amyloid precursor protein and presenilin involvement in cell signaling. *NEURODEGENERATIVE DISEASES*, vol. 4; p. 101-111,
21. CORSARO A, PALUDI D, VILLA V, D'ARRIGO C, CHIOVITTI K, THELLUNG S, RUSSO C., DI COLA D, BALLERINI P, PATRONE E, SCHETTINI G, ACETO A, FLORIO T (2006). Conformation dependent pro-apoptotic activity of the recombinant human prion protein fragment 90-231. *INTERNATIONAL JOURNAL OF IMMUNOPATHOLOGY AND PHARMACOLOGY*, vol. 19; p. 339-356,
22. VENEZIA V, NIZZARI M, REPETTO E, VIOLANI E, CORSARO A, THELLUNG S, VILLA V, CARLO P, SCHETTINI G, FLORIO T, RUSSO C. (2006). Amyloid precursor protein modulates ERK1/2 signaling. *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*, vol. 1090; p. 455-465,
23. VILLA V, CORSARO A, THELLUNG S, PALUDI D, CHIOVITTI K, VENEZIA V, NIZZARI M, RUSSO C., SCHETTINI G, ACETO A, FLORIO T (2006). Characterization of the proapoptotic intracellular mechanisms induced by a toxic conformer of the recombinant human prion protein fragment 90-231. *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*, vol. 1090; p. 276-291,
24. PICCINI A., RUSSO C., GLIOZZI A., RELINI A., VITALI A., BORGHI R., GILIBERTO L., ARMIROTTI A., D'ARRIGO C., BACHI A., CATTANEO A., CANALE C., TORRASSA S., SAIDO T.C., MARKESBERY W., GAMBETTI P.,

TABATON M. (2005). Beta amyloid is different in normal aging and in Alzheimer's disease. THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 280; p. 34186-34192,

25. RUSSO C., VENEZIA V., REPETTO E., NIZZARI M., VIOLANI E., CARLO P., SCHETTINI G. (2005). The amyloid precursor protein and its network of interacting proteins: physiological and pathological implications. BRAIN RESEARCH REVIEWS, vol. 48; p. 257-264,

26. BISAGLIA M., VENEZIA V., BIGLIERI M., RUSSO C., MANCINI F., MILANESE C., SCHETTINI G. (2004).  $\alpha$ -Glycerylphosphorylethanolamine rescues astrocytes from mitochondrial impairment and oxidative stress induced by amyloid  $\beta$ -peptides. NEUROCHEMISTRY INTERNATIONAL, vol. 44; p. 161-170,

27. REPETTO E., RUSSO C., VENEZIA V., NIZZARI M., NITSCH R., SCHETTINI G. (2004). Bace overexpression regulates amyloid precursor protein cleavage and interaction with ShcA adapter. ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, vol. 1030; p. 330-338, ISSN: 0077-8923

28. VENEZIA V., RUSSO C., REPETTO E., NIZZARI M., MARCHETTI B., SCHETTINI G. (2004). Apoptotic cell death and Amyloid Precursor Protein signaling in neuroblastoma SH-SY5Y cells. ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, vol. 1030; p. 339-347, ISSN: 0077-8923

29. VENEZIA V., RUSSO C., REPETTO E., SALIS S., DOLCINI V., GENOVA F., NIZZARI M., MUELLER U., SCHETTINI G. (2004). Apoptotic cell death influences the signaling activity of the Amyloid Precursor Protein through ShcA and Grb2 adaptor proteins in neuroblastoma SH-SY5Y cells. JOURNAL OF NEUROCHEMISTRY, vol. 90; p. 1359-1370, ISSN: 0022-3042

30. BARBIERO L., BENUSSI L., GHIDONI R., ALBERICI A., RUSSO C., SCHETTINI G., PAGANO S.F., PARATI E.A., MAZZOLI F., NICOSIA F., SIGNORINI S., FEUDATARI E., BINETTI G. (2003). BACE-2 is overexpressed in Down's syndrome. EXPERIMENTAL NEUROLOGY, vol. 182; p. 335-345, ISSN: 0014-4886

31. FLORIO T., PALUDI D., VILLA V., ROSSI PRINCIPE D., CORSARO A., MILLO E., DAMONTE G., DARRIGO C., RUSSO C., SCHETTINI G., ACETO A. (2003). Contribution of two conserved glycine residues to fibrillogenesis of the 106-126 prion protein fragment. Evidence that a soluble variant of the 106-126 peptide is neurotoxic. JOURNAL OF NEUROCHEMISTRY, vol. 85; p. 62-72, ISSN: 0022-3042

32. RUSSO C., DOLCINI V., SALIS S., VENEZIA V., VIOLANI E., CARLO P. AND SCHETTINI G (2003). Presenilin1 modulation of amyloid precursor protein processing: occurrence and relevance of N-truncated  $\beta$ -amyloid and carboxy-terminal fragments in AD pathology. In: ED. G. BINETTI, A. ALBERICI, R. GHIDONI, O. ZANETTI.. The Shadow Line from Normal Ageing to Dementia: Clinical, Genetic and Ethical Aspects. vol. 1, p. 107-115, BRESCIA: IRCCS C. S. Giovanni Di Dio Fatebenefratelli

33. BISAGLIA M., VENEZIA V., PICCIOLI P., STANZIONE S., PORCILE C., RUSSO C., MANCINI F., MILANESE C., SCHETTINI G. (2002). Acetaminophen protects hippocampal neurons and PC12 cultures from amyloid  $\beta$ -peptides induced oxidative stress and reduces NF- $\kappa$ B activation. *NEUROCHEMISTRY INTERNATIONAL*, vol. 1176; p. 1-12,
34. CORSARO A., THELLUNG S., RUSSO C., VILLA V., ARENA S., D'ADAMO M.C., PALUDI D., ROSSI PRINCIPE D., DAMONTE G., BENATTI U., ACETO A., TAGLIAVINI F., SCHETTINI G., FLORIO T. (2002). Expression in *E. coli* and purification of recombinant fragments of wild type and mutant human prion protein. *NEUROCHEMISTRY INTERNATIONAL*, vol. 41; p. 55-63,
35. RUSSO C., DOLCINI V., SALIS S., VENEZIA V., VIOLANI E., CARLO P., ZAMBRANO N., RUSSO T., SCHETTINI G. (2002). Signal transduction through tyrosine-phosphorylated carboxy-terminal fragments of APP via an enhanced interaction with Shc/Grb2 adaptor proteins in reactive astrocytes of Alzheimer's disease brain. *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*, vol. 973; p. 323-333,
36. RUSSO C., DOLCINI V., SALIS S., VENEZIA V., ZAMBRANO N., RUSSO T., SCHETTINI G. (2002). Signal transduction through tyrosine-phosphorylated carboxy-terminal fragments of APP via an enhanced interaction with Shc/Grb2 adaptor proteins in reactive astrocytes of Alzheimer's disease brain. *THE JOURNAL OF BIOLOGICAL CHEMISTRY*, vol. 277; p. 35282-35288,
37. RUSSO C., VENEZIA V., SALIS S., DOLCINI V., SCHETTINI G. (2002). Molecular aspects of neurodegeneration in Alzheimer's disease. *FUNCTIONAL NEUROLOGY*, vol. 17; p. 65-70,
38. RUSSO C., VIOLANI E., SALIS S., VENEZIA V., DOLCINI V., DAMONTE G., BENATTI U., CARLO P., SCHETTINI G. (2002). Pyroglutamate-modified amyloid  $\beta$ -peptides -  $\beta$ N3(pE) - strongly affect cultured neuron and astrocyte survival. *JOURNAL OF NEUROCHEMISTRY*, vol. 82; p. 1480-1489,
39. GAMBETTI P., PARCHI P., CAPELLARI S., RUSSO C., TABATON M., TELLER J.K., CHEN S.G. (2001). Mechanisms of phenotypic heterogeneity in prion, Alzheimer and other conformational diseases. *JOURNAL OF ALZHEIMER'S DISEASE*, vol. 3; p. 87-95,
40. RUSSO C., SALIS S., DOLCINI V., VENEZIA V., XIANG S., TELLER J.K., SCHETTINI G. (2001). Identification of amino-terminally and phosphotyrosine modified carboxy-terminal fragments of the amyloid precursor protein in Alzheimer's disease and Down's syndrome brain. *NEUROBIOLOGY OF DISEASE*, vol. 8; p. 173-180,

41. RUSSO C., SCHETTINI G., SAIDO T.C., GAMBETTI P., TABATON M., TELLER J.K. (2001). N-Terminally truncated amyloid  $\beta$  peptides and Alzheimer's disease. *NEUROBIOLOGY OF AGING*, vol. 22; p. 345,
42. RUSSO C., SCHETTINI G., SAIDO T.C., HULETTE C., LIPPA C., LANNFELT L., GHETTI B., GAMBETTI P., TABATON M., TELLER J.K. (2001). Alzheimer's disease: Molecular consequences of presenilin-1 mutation. *NATURE*, vol. 411; p. 654-655,
43. ZAMBRANO N., BRUNI P., MINOPOLI G., MOSCA R., MOLINO D., RUSSO C., SCHETTINI G., SUDOL M., RUSSO T. (2001). The  $\beta$ -amyloid precursor protein APP is tyrosine phosphorylated in cells expressing a constitutively active form of the Abl oncogene. *THE JOURNAL OF BIOLOGICAL CHEMISTRY*, vol. 276; p. 19787-19792,
44. CAPELLARI S., PARCHI P., RUSSO C., SANFORD J., SY M.S., GAMBETTI P., PETERSEN R.B. (2000). Effect of the E200K mutation on prion protein metabolism. Comparative study of a cell model and human brain. *AMERICAN JOURNAL OF PATHOLOGY*, vol. 157; p. 613-622, ISSN: 0002-9440
45. PASSER B., PELLEGRINI L., RUSSO C., SIEGEL R.M., LENARDO M.J., SCHETTINI G., BACHMANN M., TABATON M., D'ADAMIO L. (2000). Generation of an apoptotic intracellular peptide by gamma-secretase cleavage of Alzheimer's amyloid  $\beta$ -protein precursor. *JOURNAL OF ALZHEIMER'S DISEASE*, vol. 2; p. 289-301, ISSN: 1387-2877
46. RUSSO C., SCHETTINI G., SAIDO T.C., HULETTE C., LIPPA C., LANNFELT L., GHETTI B., GAMBETTI P., TABATON M., TELLER J.K. (2000). Presenilin-1 mutations in Alzheimer's disease. *NATURE*, vol. 405; p. 531-532, ISSN: 0028-0836
47. GAMBETTI P., RUSSO C. (1998). Human brain amyloidoses. *NEPHROLOGY DIALYSIS TRANSPLANTATION*, vol. 13 suppl 7; p. 33-40, ISSN: 0931-0509
48. RUSSO C., ANGELINI G., DAPINO D., PICCINI A., PIOMBO G., SCHETTINI G., CHEN S., TELLER J.K., ZACCHEO D., GAMBETTI P., TABATON M. (1998). Opposite roles of apolipoprotein E in normal brains and in Alzheimer's disease. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, vol. 95; p. 15598-15602, ISSN: 0027-8424
49. RUSSO C., SAIDO T.C., DEBUSK L.M., TABATON M., GAMBETTI P., TELLER J.K. (1997). Heterogeneity of water-soluble amyloid  $\beta$ -peptide in Alzheimer's disease and Down's syndrome. *FEBS LETTERS*, vol. 409; p. 411-416, ISSN: 0014-5793
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amyloid plaque formation in Down's syndrome. NATURE MEDICINE, vol. 2; p. 93-95, ISSN: 1078-8956

51. RUSSO C., MARCHI M., ANDRIOLI G.C., CAVAZZANI P., RAITERI M. (1993). Enhancement of Glycine release from human brain cortex by acetylcholine acting at M<sub>4</sub> muscarinic receptors. JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, vol. 266; p. 142-146, ISSN: 0022-3565

A handwritten signature in black ink, appearing to read "Dr. Mario Marchi".