Europass Curriculum Vitae

Personal Information

First and Last Name	**Alberto Granzotto**
Date and place of birth	Montebelluna (TV) 06/08/1985
E-mail	alberto.granzotto@unich.it [redacted]
Phone number	[redacted]
Citizenship	Italian

Work experiences

Date **February 2020 → Ongoing**

Type A Researcher (RTD-A)
Center for Advanced Sciences and Technology (CAST)
University G. d'Annunzio of Chieti-Pescara
Dept. of Neuroscience, Imaging, and Clinical Sciences

Date **February 2020 → March 2022**

Project Scientist – Marie Skłodovska-Curie Actions fellow
University of California – Irvine (UCI)
Dept. of Neurobiology and Behavior
Supervisor: **Prof. Mathew Blurton-Jones**
E-mail: mblurton@uci.edu

And

University of California – Irvine (UCI)
Dept. of Neurobiology and Behavior
Supervisor: **Prof. Ian Parker**
Email: iparker@uci.edu

Date **September 2013 → January 2020**

Postdoctoral fellow
Center for Advanced Sciences and Technology (CAST)
University G. d'Annunzio of Chieti-Pescara
Dept. of Neuroscience, Imaging, and Clinical Sciences
Supervisor: **Prof. Stefano Sensi**
E-mail: ssensi@uci.edu

Date **January 2011 → August 2013**

Visiting student
Center for Advanced Sciences and Technology (CAST)
University G. d'Annunzio of Chieti-Pescara
Dept. of Neuroscience, Imaging, and Clinical Sciences
Supervisore: **Prof. Stefano Sensi**

E-mail: ssensi@uci.edu

Date **February 2010 → December 2012**

PhD in "Biology and Medicine of Regeneration"
CNR – Institute of Biomedical Technologies
University of Padua
Dept. of Pharmacological Sciences
Supervisor: **Prof. Paolo Zatta**
E-mail: zatta@bio.unipd.it

Date **October 2010 → November 2010**

Visiting student
Dept. of Chemical Sciences
University of Concepcion
Supervisor: **Prof. Mario Suwalsky**
E-mail: msuwalsk@udec.cl

Date **February 2009 → January 2010**

Experimental thesis: *"Modelli sperimentali per lo studio della malattia di Alzheimer come patologia conformaionale: aggregazione di β-amiloide in presenza di ioni metallici"*
CNR – Institute of Biomedical Technologies
University of Padua
Dept. of Biological Sciences
Supervisor: **Prof. Paolo Zatta**
E-mail: zatta@bio.unipd.it

Education

Date **January 2013**
PhD in "Biology and Medicine of Regeneration"
Dept. of Pharmacological Sciences, University of Padua, Italy

Date **November 2010**
Pharmacy Professional License
University of Padua, Italy

Date **October 2004 – October 2009**
Master's degree in pharmacy, PharmD (Oct. 2009)
University of Padua, Italy

Date **1999 – 2004**
High School Diploma
Liceo scientifico "G. Marconi"

Professional skills

Mother Tongue: Italian

Other languages: English (Level B1 – Oxford First Certificate)

Schools and conferences

Schools and continuing education: **2016:** HarvardX Course in Cell Biology: Mitochondria (MCB61.1x), Harvard University, Certified Online Course
2015: Certification for the use of laboratory animals for scientific and

educational purposes, Teramo (Italy)
2010: XIV School of Pure and Applied Biophysics in Molecular Mechanisms of Neurodegeneration, Venice (Italy)

Invited Speaker

June 2022: Center of Excellence on Aging (CEA) Meeting – Seminar: Should I stay or should I go. Microglia motility in health and disease – Chieti (Italy)
February 2022: UC Irvine Neurodegeneration Community Workshop - Mechanisms of resilience to excitotoxic challenges. A focus on NADPH-diaphorase neurons – Online (USA)
September 2021: Neurowebinars – Zinc in the brain: The dark (and bright) side of the ion – Neuromed – Online (Italy)
April 2021: Moving Forward – Modelling neurodegeneration...moving beyond (mouse) neurons – Online (Italy)
December 2019: PhDay Meeting - Post-doc: the (one) way ahead – Chieti (Italy)
July 2019: University G. d'Annunzio Grant Lectures – MSCA-IF-Global Fellowship - A personal perspective. Revised. – Chieti (Italy)
July 2019: Giornate Scientifiche del DST – Strategie neuroprotettive nella demenza di Alzheimer. The program GLP-1.exe is running - University of Sannio – Benevento (Italy)
June 2019: 4th International Brain Research School – Intracellular zinc mobilization is required for nNOS (+) neuron loss. Role of zinc in the excitotoxic cascade – Isparta (Turkey)
May 2016: 6th FESTEM Symposium on Trace Elements and Minerals – Metal homeostasis in dementia – Catania (Italy)
April 2016: European Workshop on Cell Death – Pyruvate prevents the development of age-dependent cognitive deficits in a mouse model of Alzheimer's disease – Fiuggi (Italy)

Congresses

June 2022: European Workshop on Cell Death Poster presentation Fiuggi (Italy)
September 2019: ISZB 2019 Meeting Poster presentation Kyoto (Japan)
May 2018: European Workshop on Cell Death Poster presentation Fiuggi (Italy)
March 2017: SINDEM Poster presentation Firenze (Italy)
March 2013: ADPD 2013 Poster presentation Firenze (Italy)
October 2012: SIB 2012 Società Italiana di Biochimica e Biologia Molecolare Poster presentation Chieti (Italy)
November 2011: Neuroscience 2011 Posters presentation Washington DC (USA)
July 2011: ICAD 2011 Alzheimer's Association International Congress Poster presentation Paris (France)
September 2010: "20th National Congress SIBPA" Italian Society of Pure and Applied Biophysics. Poster presentation Arcidosso (Italy)

Research Fundings

- Marie Skłodovska-Curie Actions fellowship (MSCA-IF GF 2018)
  Budget: € 269 002,56
- "Più Ricerca e Innovazione" PO FSE Fellowship (2015)
  Budget: € 10 000
- SIBPA (Italian Society of Pure and Applied Biophysics) fellowship (2010)
  Budget: € 500,00 (Travel Grant)

Publications

1. Avan A, Członkowska A, Gaskin S, **Granzotto A**, Sensi SL, Hoogenraad TU (2022) The Role of Zinc in the Treatment of Wilson's Disease. Int J Mol Sci 23, 9316.
2. **Granzotto A**, d'Aurora M, Bomba M, Gatta V, Onofrj M, Sensi SL (2022) Long-term dynamic changes of NMDA receptors following an excitotoxic challenge. Cells 11(5), 911
3. Jairaman A*, McQuade A*, **Granzotto A**, Kang YJ, Chadarevian JP, Gandhi S, Parker I, Smith I, Othy S, Cho H, Blurton-Jones M, Cahalan MD (2022) TREM2 regulates purinergic receptor-mediated calcium signaling and motility in human iPSC-derived microglia. eLife 11: e73021 ** Co-first authors*
4. **Granzotto A**, Weiss JH, Sensi SL (2022) Editorial: Excitotoxicity Turns 50. The Death That Never Dies. Front Neurosci 15:831809
5. Massetti M*, Russo M*, Franciotti R*, Nardini D, Mandolini G, **Granzotto A**, Bomba M, Delli Pizzi S, Mosca A, Scherer R, Onofrj M, Sensi SL for the Alzheimer's Disease Neuroimaging Initiative (ADNI) (2022) A Machine Learning-Based Holistic Approach to Predict the Clinical Course of Patients within the Alzheimer's Disease Spectrum. J Alz Dis 85(4), 1639–1655 ** Co-first authors*
6. Squitti R, Ventriglia, M, **Granzotto A**, Sensi SL, Rongioletti MCA (2021) Non-Ceruloplasmin Copper as a Stratification Biomarker of Alzheimer's Disease Patients: How to Measure and Use It. Curr Alz Res 18(7): 533-545
7. Squitti R, Faller P, Hureau C, **Granzotto A**, White AR, Keep KP (2021) Copper imbalance in Alzheimer's disease and its link with the amyloid hypothesis: Towards a combined clinical, chemical, and genetic etiology. J Alz Dis 83(1): 23-41
8. Carrarini C, Russo M, Dono F, Barbone F, Rispoli M, Ferri L, Di Pietro M, Digiovanni A, Ajdinaj P, Speranza R, **Granzotto A**, Frazzini V, Thomas A, Pilotto A, Padovani A, Onofrj M, Sensi SL, Bonanni L (2021) Agitation and Dementia: Prevention and Treatment Strategies in Acute and Chronic Conditions. Front Neurol 12: 480
9. **Granzotto A**, Canzoniero LM, Sensi SL (2020) A Neurotoxic Ménage-à-trois: Glutamate, calcium, and Zinc in the Excitotoxic cascade. Front Mol Neurosci 13: 225
10. Delli Pizzi S, **Granzotto A**, Bomba M, Frazzini V, Onofrj M, Sensi SL (2020) Acting Before; A Combined Strategy to Counteract the Onset and Progression of Dementia. Curr Alz Res 17(9): 790-804
11. **Granzotto A**, Sensi SL (2020) Minocycline – A lesson from a failure. JAMA Neurol 77(8): 1037-1038
12. **Granzotto A**, Bomba M, Castelli V, Navarra R, Massetti N, Onofrj M, Cicalini I, del Boccio P, Cimini A, Piomelli D and Sensi SL (2019) Inhibition of de novo ceramide biosynthesis affects aging phenotype in an in vitro model of neuronal senescence. Aging 11(16): 6336–6357
13. Bomba M*, **Granzotto A***, Castelli V, Onofrj M, Lattanzio R, Cimini A, And Sensi SL (2019) Exenatide reverts the high-fat-diet-induced impairment of BDNF signaling and inflammatory response in an animal model of Alzheimer's disease. J Alz Dis 70(3): 793–810 ** Co-first authors*
14. **Granzotto A** (2019) Intracellular zinc mobilization is required for nNOS (+) neuron loss. Role of zinc in the excitotoxic cascade. J Cell Neurosci and Oxid Stress 11:5-5
15. Sensi SL, **Granzotto A**, Siotto MC, Squitti R (2018) Copper and Zinc dysregulation in Alzheimer's Disease. Trends Pharmacol Sci.
16. Frazzini V*, **Granzotto A***, Bomba M, Massetti N, Castelli V, D'Aurora M,

Punzi M, Iorio M, Mosca A, Delli Pizzi S, Gatta V, Cimini A, Sensi SL (2018) The pharmacological perturbation of brain zinc impairs BDNF-related signaling and the cognitive performances of young mice. Sci Rep 8:9768 *Co-first authors*

17. Mosca A*, Sperduti S*, Pop V, Ciavardelli D, **Granzotto A**, Punzi M, Stuppia L, Gatta V, Assogna F, Banaj N, Piras F, Piras F, Caltagirone C, Spalletta G, Sensi SL (2018) Influence of *APOE* and *RNF219* on Behavioral and Cognitive Features of Female Patients Affected by Mild Cognitive Impairment or Alzheimer's Disease. Front Aging Neurosci 10:(92). ** Co-first authors*
18. Bomba M*, **Granzotto A***, Castelli V, Massetti N, Silvestri E, Canzoniero LM, Cimini A, Sensi SL (2017) Exenatide exerts cognitive effects by modulating the BDNF-TrkB neurotrophic axis in adult mice. Neurobiol Aging 64:33-43. ** Co-first authors*
19. **Granzotto A**, Sensi SL (2015) Intracellular zinc is a critical intermediate in the excitotoxic cascade. Neurobiol Dis. 10.1016/j.nbd.2014.11.013.
20. Isopi E, **Granzotto A**, Corona C, Bomba M, Ciavardelli D, Curcio M, Canzoniero LM, Navarra R, Lattanzio R, Piantelli M, Sensi SL (2014) Pyruvate prevents the development of age-dependent cognitive deficits in a mouse model of Alzheimer's disease without reducing amyloid and tau pathology. Neurobiol Dis doi: 10.1016/j.nbd.2014.11.013.
21. **Granzotto A**, Zatta P (2014) Resveratrol and Alzheimer's disease: message in a bottle on red win and cognition. Front Aging Neurosci 6:(95).
22. D'Aurora M*, Gatta V*, **Granzotto A**, Stuppia L, Sensi SL (2014) Age-dependent changes in gene expression profiles of 3xTg-AD mice. Cell Death Dis 5(2): e1054. ** Co-first authors*
23. Canzoniero LM, **Granzotto A**, Turetsky DM, Choi DW, Dugan LL, Sensi SL. (2013) nNOS(+) striatal neurons possess functional NMDA receptors but fail to generate mitochondrial ROS in response to an excitotoxic challenge. Front Physiol, 4:112.
24. Gatta V*, **Granzotto A***, Fincati K, Drago D, Bolognin S, Zatta P and Sensi SL. (2012) Microarray analysis of gene expression profiles in human neuroblastoma cells exposed to Aβ-Zn and Aβ-Cu complexes. Future Neurology 7(4): 483-497. ** Co-first authors*
25. **Granzotto A**, Zatta P. (2012) Metal ions and Beta amyloid: conformational modifications and biological aspects, book chapter in "Metal ions in neurological systems", editor Linert W. 77-83.
26. **Granzotto A**, Zatta P. (2011) Resveratrol acts not through anti-aggregative pathways but mainly via its scavenging properties against β-amyloid and β-amyloid-metal complexes toxicity. PLoS ONE 6(6): e21565.
27. **Granzotto A**, Suwalsky M, Zatta P. (2011) Physiological cholesterol concentration is a neuroprotective factor against β-amyloid and β-amyloid-metal complexes toxicity. J Inorg Biochem 105(8), 1066-1072.
28. **Granzotto A**, Bolognin S, Scancar J, Milacic R and Zatta P. (2011) Beta-amyloid toxicity increases with hydrophobicity in the presence of metal ions. Monats Chem, 142(4), 421-430.

Reviewer activity

International Journal of Molecular Sciences, Neurochemical Research, Translational Neurodegeneration, Aging, Molecular Biology Reports, Molecular Brain, Frontiers in Behavioral Neuroscience, Frontiers in Psychiatry, Archives of Biochemistry and Biophysics, Colloids and Surfaces B: Biointerfaces, Frontiers in Neuroscience, BMC Neuroscience, Scientific Reports, Monatshafte fur

Chemie – Chemical Monthly, Frontiers in Endocrinology, Frontiers in Neurology, Frontiers in Aging Neuroscience, Frontiers in Cellular Neuroscience, British Journal of Nutrition, PlosONE, Journal of Alzheimer's Disease (JAD)
Certified by Publons (publons.com/a/1371508/)

Editorial Activity

Frontiers in Neuroscience
Certified by Publons (publons.com/a/1371508/)

Teaching

2012 - 2020 – Teaching assistant for the "Laboratory of Applied Neurosciences", Dept. of Psychological Sciences, University G. D'Annunzio, Chieti-Pescara

2021 – Current - "Laboratory of Applied Neurosciences", Dept. of Psychological Sciences, University G. D'Annunzio, Chieti-Pescara

2021 – Current – "Ausili terapeutici in età evolutiva", University G. D'Annunzio, Chieti-Pescara

2021 – Current – "Advanced basis of Occupational Therapy in Psychiatry", University G. D'Annunzio, Chieti-Pescara

2021 – Current – "Third-year Seminars", University G. D'Annunzio, Chieti-Pescara

2021 – Current – "Tools in Occupational Therapy", University G. D'Annunzio, Chieti-Pescara

2021 – Current - "Evaluation in Occupational Therapy", University G. D'Annunzio, Chieti-Pescara

August 30th, 2022

Alberto Granzotto