

Procedura di valutazione comparativa per una posizione di Ricercatore a Tempo Determinato (RTD) tipologia B nel Dipartimento di FISIOLOGIA E FARMACOLOGIA “VITTORIO ERSPAMER” – Settore Concorsuale 05/D1, Settore Scientifico Disciplinare BIO/09.

ALL. B

Decreto Rettore Università di Roma “Sapienza” n. 2825/2019 del 26/09/2019

## GIUSEPPINA D’ALESSANDRO

### Curriculum Vitae

Rome

12<sup>th</sup> November 2019

#### **Part I – General Information**

Full Name	Giuseppina D’Alessandro		
Spoken Languages	Italian, English		

#### **Part II – Education**

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2004	University of Naples “Federico II”	Biotechnology degree
Specialty	2008	Mario Negri Institute of Milan	Specialization in Pharmacology Research
PhD	2013	University of Rome “Sapienza”	Neurophysiology PhD

#### **Part III – Appointments**

##### IIIA – Academic Appointments

Start	End	Institution	Position
2009	2012	University of Rome “Sapienza”	PhD Student
2012	2018	University of Rome “Sapienza”	Post-doc
2018	today	University of Rome “Sapienza”	Researcher
05/2019	05/2020	Ministry of Education, University and Research	National Academic Qualification as Associate Professor

##### IIIB – Other Appointments

Start	End	Institution	Position
11/2005	10/2009	Mario Negri Institute of Milan	Research Fellow
01/2016	12/2016	Neuromed (Isernia)	Research Fellow
01/07/2017	21/07/2017	Lancaster University	Visiting Researcher
06/2018	06/2019	G.B. Baroni Foundation	Research Fellow

## Part IV – Teaching experience

Year	Institution	Lecture/Course
2019-2020	University of Rome “Sapienza”	Nursing / Anatomical and Physiological Basis of the Human Body- Human Physiology BIO/09 2 CFU
2019-2020	University of Rome “Sapienza”	Pediatric Nursing/ Anatomical and Physiological Basis of the Human Body- Human Physiology BIO/09 2 CFU
2018-2019	University of Rome “Sapienza”	Nursing / Anatomical and Physiological Basis of the Human Body- Human Physiology BIO/09 2 CFU
2018-2019	University of Rome “Sapienza”	Pediatric Nursing/ Anatomical and Physiological Basis of the Human Body- Human Physiology BIO/09 2 CFU
2017-2018	University of Rome “Sapienza”	Nursing / Anatomical and Physiological Basis of the Human Body- Human Physiology BIO/09 2 CFU
2016-2017	University of Rome “Sapienza”	Obstetrics/ Anatomical and Physiological Basis of the Human Body- Human Physiology BIO/09 3 CFU

## Part V - Society memberships, Awards and Honors

Year	Title
2019	Member of the Italian Society of Physiology
8/8/2019	Co-inventor of International Patent n. WO2019/149962 “Compounds for use in the treatment of brain diseases”
2018-today	Member of scientific committee of the annual international meeting “BraYn” THE ANNUAL SCIENTIFIC MEETING OF YOUNG NEUROSCIENTISTS
2016-today	Reviewer for international scientific journals (Cell Death and Disease, Oncotarget, Experimental Cell Research, Glia, Oxidative Medicine and Cellular Longevity)

## Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2016	PI: Potassium channels as therapeutical targets for Amyotrophic Lateral Sclerosis	Italian Ministry of Health	450.000 eur

2015	<b>I:</b> New strategies to fight against glioma: in vivo studies to reprogram tumor-infiltrating microglia/macrophages	AIRC	200.00 eur
2012	<b>I:</b> Role of Ca <sup>2+</sup> -dependent K <sup>+</sup> channels in glioblastoma invasiveness: an in vivo study.	AIRC	150.000 eur

## Part VII – Research Activities

Keywords	Brief Description
Ion channels, murine neuronal and microglial primary cultures, establishment of human primary cultures from biopsies , in vivo model of brain disease (glioma)	Study of the role of Ca <sup>2+</sup> activated K <sup>+</sup> channels in cell migration, proliferation in physiological and pathological models (brain tumors)
Ion channel, microglia, ALS	Study of the role of Ca <sup>2+</sup> activated K <sup>+</sup> channels in microglia phenotyping in physiological and neurodegenerative states
Microbiota, innate immunity, microglia, NK cells	Study of the role of Microbiota in the gut-brain axis and modulation of brain cellular landscape and innate immunity.

## Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	<b>20</b>	<b>SCOPUS</b>	<b>2009</b>	<b>2019</b>
Papers [national]				
Books [scientific]				
Books [teaching]				

Total Impact factor	<b>99,65</b>
Total Citations	<b>505</b>
Average Citations per Product	<b>25,25</b>
Hirsch (H) index	<b>11</b>
Normalized H index*-	<b>0,8</b> (/years from degree)- <b>1,1</b> (/academic seniority)

\*H index divided by the academic seniority.

## Part IX– Selected Publications

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

1. Giuseppina D'Alessandro, Deborah Quaglio, Lucia Monaco, Clotilde Lauro, Francesca Ghirga, Cinzia Ingallina, Michela De Martino, Sergio Fucile, Alessandra Porzia, Maria Amalia Di Castro, Federica Bellato, Francesca Mastrotto, Mattia Mori, Paola Infante, Paola Turano, Stefano Salmaso, Paolo Caliceti, Lucia Di Marcotullio, Bruno Botta, Veronica Ghini, Cristina Limatola. *<sup>1</sup>H-NMR metabolomics reveals the Glabrescione B exacerbation of glycolytic metabolism beside the cell growth inhibitory effect in glioma.* Cell Communication and Signalling 2019. **IF: 5.111, CITATIONS:0**
2. Giuseppina D'Alessandro, Lucia Monaco, Luigi Catacuzzeno, Fabrizio Antonangeli, Antonio Santoro, Vincenzo Esposito, Fabio Franciolini, Heike Wulff, Cristina Limatola. *Radiation Increases KCa3.1 Functional Expression and Invasiveness in Glioblastoma.* Cancers 2019. **IF:6.162. CITATIONS:1**
3. Barbara Colella, Fiorella Faienza, Marianna Carinci, Giuseppina D'Alessandro, Myriam Catalano, Antonio Santoro, Francesco Cecconi, Cristina Limatola, Sabrina Di Bartolomeo. *Autophagy induction impairs Wnt/β-catenin signalling through β-catenin relocalisation in glioblastoma cells.* Cellular Signalling (2019) 53: 357-364. . **IF:3.388. CITATIONS: 3**
4. Francesca Lepore\*, Giuseppina D'Alessandro\*, Fabrizio Antonangeli, Antonio Santoro Vincenzo Esposito, Cristina Limatola\* and Flavia Trettel\*. *CXCL16/CXCR6 axis drives microglia/macrophages phenotype in physiological conditions and plays a crucial role in glioma.* Frontiers in Immunology 2018. \*Gli autori hanno contribuito equamente. **IF:4.716. CITATIONS: 4**
5. Germana Cocozza, Maria Amalia di Castro, Laura Carbonari, Alfonso Grimaldi, Fabrizio Antonangeli, Stefano Garofalo, Alessandra Porzia, Michele Madonna, Fabrizio Mainiero, Angela Santoni, Francesca Grassi, Heike Wulff, Giuseppina D'Alessandro\*, Cristina Limatola\*. *Ca<sup>2+</sup>-activated K<sup>+</sup> channels modulate microglia affecting motor neuron survival in hSOD1<sup>G93A</sup> mice.* Brain Behavior and Immunity 2018 Jul 3. pii: S0889-1591(18)30288-5. \*Gli autori hanno contribuito equamente. **IF:6.170. CITATIONS: 2**
6. Alfonso Grimaldi\*, Giuseppina D'Alessandro\*, Maria Amalia Di Castro, Clotilde Lauro, Vikrant Singh, Francesca Pagani, Luigi Sforza, Francesca Grassi, Silvia Di Angelantonio, Luigi Catacuzzeno, Heike Wulff, Cristina Limatola, Myriam Catalano. *Kv1.3 activity perturbs the homeostatic properties of astrocytes in glioma.* Sci Rep. 2018 May 16;8(1):7654. \*Gli autori hanno contribuito equamente. **IF:4.011 CITATIONS: 2**
7. Giuseppina D'Alessandro, Cristina Limatola, Myriam Catalano. *Functional roles of the Ca<sup>2+</sup>-activated K<sup>+</sup> channel, KCa3.1, in brain tumors.* Curr Neuropharmacol. 2018. **IF:4.568. CITATIONS: 5**
8. Stefano Garofalo, Alfonso Grimaldi, Giuseppina Chece, Alessandra Porzia, Stefania Morrone, Fabrizio Mainiero, Giuseppina D'Alessandro, Vincenzo Esposito, Barbara Cortese, Silvia Di Angelantonio, Flavia Trettel, and Cristina Limatola. *The glycoside oleandrin reduces glioma growth with direct and indirect effects on tumor cells.* Journal of Neuroscience, 2017, pii: 2296-16. . **IF:5.971. CITATIONS: 5**
9. Irene Onorato, Giuseppina D'Alessandro, Maria Amalia Di Castro, Massimiliano Renzi, G Dobrowolny, Antonio Musarò, M Salvetti, Cristina Limatola, Andrea Crisanti, Francesca Grassi. *Noise Enhances Action Potential Generation in Mouse Sensory Neurons via Stochastic Resonance* PLoS One. 2016 ;11(8):e0160950. doi: 10.1371/journal.pone.0160950. eCollection 2016. . **IF:2.806. CITATIONS: 7**
10. Giuseppina D'Alessandro , Alfonso Grimaldi , Giuseppina Chece , Alessandra Porzia , Vincenzo Esposito, Antonio Santoro , Maurizio Salvati , Fabrizio Mainiero , Davide Ragazzino , Silvia Di Angelantonio , Heike Wulff ,

Myriam Catalano *KCa3.1 channel inhibition sensitizes malignant gliomas to temozolomide treatment*. Oncotarget 2016 doi: 10.18632/oncotarget.8761. IF:5.168. CITATIONS: 16

11. Alfonso Grimaldi, Giuseppina D'Alessandro, Maria Teresa Golia, Eva Grössinger, Silvia Di Angelantonio, Davide Ragozzino, Antonio Santoro, Vincenzo Esposito, Heike Wulff, and Myriam Catalano, Cristina Limatola. *KCa3.1 inhibition switches the phenotype of glioma infiltrating microglia/macrophages*. Cell Death and Disease, 2016 Mar 15. 7;7:e2174. doi: 10.1038/cddis.2016.73. IF:5.965. CITATIONS: 22
12. Catalano M, D'Alessandro G, Lepore F, Corazzari M, Caldarola S, Valacca C, Faienza F, Esposito V, Limatola C, Cecconi F, Di Bartolomeo S. *Autophagy induction impairs migration and invasion by reversing EMT in glioblastoma cells*. Molecular Oncology 2015, ;9(8):1612-25. doi: 10.1016/j.molonc.2015.04.016. IF:5.367. CITATIONS: 99
13. Pagani F, Paolicelli R, Murana E, Cortese B, Di Angelantonio S, Zurolo E, Guiducci E, Ferreira TA, Garofalo S, Catalano M, D'Alessandro G, Porzia A, Peruzzi G, Mainiero F, Limatola C, Gross C, Ragozzino D. *Defective microglial development in the hippocampus of Cx3cr1 deficient mice*. Frontiers in cellular Neuroscience 2015 9:111. doi: 10.3389/fncel.2015.00111. IF:3.398 CITATIONS: 31
14. Garofalo S, D'Alessandro G, Chece G, Brau F, Maggi L, Rosa A, Porzia A, Mainiero F, Esposito V, Lauro C, Benigni G, Bernardini G, Santoni A, Limatola C. *Enriched environment reduces glioma growth through immune and non immune mechanisms in mice*. Nature Communications, 2015 . IF:11.329. CITATIONS: 42
15. Sciaccaluga M, D'Alessandro G, Pagani Francesca, Ferrara G, Lopez N, Warr T, Gorello P, Porzia A, Mainiero F, Santoro A, Esposito V, Cantore G, Castigli E, Limatola C. *Functional cross talk between CXCR4 and PDGFR on glioblastoma cells is essential for migration*. PLoS ONE, 2013 Sep 2;8(9):e73426. doi: 10.1371/journal.pone.0073426 . IF:3.534. CITATIONS: 20
16. D'Alessandro G, Catalano M, Sciaccaluga M, Chece G, Cipriani R, Rosito M, Grimaldi A, Lauro C, Cantore G, Santoro A, Fioretti B, Franciolini F, Wulff H, Limatola C. *KCa3.1 channels are involved in the infiltrative behavior of glioblastoma in vivo*. Cell Death and Disease, 2013 Aug 15;4:e773. doi: 10.1038/cddis.2013.279. IF:5.177 CITATIONS: 61
17. D'Alessandro G, Calcagno E, Tartari S, Invernizzi W, Rizzardini M, Cantoni L. *Glutamate and glutathione interplay in a motor neuronal model of amyotrophic lateral sclerosis reveals altered energy metabolism*. Neurobiology of Disease.43(2): 346-55, 2011 . IF:5.403 CITATIONS: 28
18. Sciaccaluga M, Fioretti B, Catacuzzeno L, Pagani F, Bertolini C, Rosito M, Catalano M, D'Alessandro G, Santoro A, Cantore G, Ragozzino D, Castigli E, Franciolini F, Limatola C. *CXCL12-induced glioblastoma cell migration requires intermediate-conductance Ca<sup>2+</sup>-activated K<sup>+</sup> channel activity*. American Journal of Physiology. Cell Physiology, 299(1):C175-84, 2010. IF:4.013. CITATIONS: 74
19. Tartari S, D'Alessandro G, Babetto E, Rizzardini M, Conforti L, Cantoni L. *Adaptation to G93Asuperoxide dismutase 1 in a motor neuron cell line model of amyotrophic lateral sclerosis: the role of glutathione*. FEBS J., 276: 2861-74, 2009. . IF:3.0422. CITATIONS: 11
20. Basso M, Samengo G, Nardo G, Massignan T, D'Alessandro G, Tartari S, Cantoni L, Marino M, Cheroni C, De Biasi S, Salmona M, Bendotti C, Bonetto V. *Characterization of detergent-insoluble proteins in ALS models and patients indicates a possible causal link between nitritative stress and aggregation in disease pathogenesis*. PLoS One, 4(12):e8130, 2009 . IF:4.351. CITATIONS: 72

Autorizzo il trattamento dei miei dati personali in accordo con la vigente legge Italiana sulla salvaguardia dei dati (D. Lgs 196/03).

Roma, 12/11/2019