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Decreto Rettore Università di Roma “La Sapienza” n 2267 del 2021 codice concorso 2021RTB022

Gabriella Dobrowolny Curriculum Vitae

Rome

Date 28th of September 2021

Part I – General Information

Full Name	Gabriella Dobrowolny
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Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	1998	Sapienza University of Rome	Degree in Biological Science
Post Graduate studies	1998	Sapienza University of Rome	Specialized School course in “Analytical references and Quality Control”
PhD	2004	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	PhD degree in Morphogenetic and Cytological Science
License	2004	Sapienza University of Rome	Biologist license
Specialty	2014	Sapienza University of Rome	Specialized School degree in Clinical Pathology
Post Graduate studies	2015	University of “Roma Tre”	Degree certificate for high school teaching in the field of Natural Science Chemistry Geography and Microbiology
License	2018	ANVUR	Abilitazione Scientifica Nazionale II Fascia-SSD BIO/17

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
05/06/19	today	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	Ricercatore a tempo determinato tipo A (RtdA)
1/08/2012	31/07/2013	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	PostDoc Assegnista di ricerca
1/11/2010	31/3/2012	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	PostDoc - Contrattista di collaborazione coordinata e continuativa
1/08/2006	31/07/2010	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	PostDoc - Assegnista di Ricerca
1/02/2006	31/03/2006	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	PostDoc - Contrattista di collaborazione coordinata e continuativa
1/04/2006	30/06/2006	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	PostDoc - Contrattista di collaborazione coordinata e continuativa
1/11/2005	31/12/2005	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	PostDoc - Contrattista di collaborazione coordinata e continuativa
1/01/2004	31/12/2004	DAHFMO-Unit of Histology and Medical Embryology Sapienza University of Rome	PostDoc - Contrattista di collaborazione coordinata e continuativa

IIIB – Other Appointments

Start	End	Institution	Position
1/09/18	4/06/19	Liceo classico/linguistico Tito Lucrezio Caro-Rom-MIUR	High school teacher in the field of Natural Science Chemistry Geography and Microbiology
01/10/13	31/08/18	Istituto Italiano di Tecnologia (IIT) Foundation-Rome	PostDoc- Contrattista di collaborazione coordinata e continuativa
1/04/12	31/05/12	Pasteur Institute- Cenci Bolognetti Fondation-Rome	Research fellow-Post Doc
1/04/06	31/08/06	St George's University of London-Biomics center-London UK	Research fellow -Post Doc

23/03/03	24/07/03	St George's University of London - Biomics center-London UK	Academic visitor
15/09/98	14/12/98	I.S.S- Rome	Research fellow

Part IV – Teaching experience

Year	Institution	Lecture/Course
2020/21	Sapienza University of Rome	Teacher in Histology and Embryology in Medicine and Surgery HT school degree- Sapienza University
2020/21	Sapienza University of Rome	Teacher in Histology for the “Morphological and functional basis of human body” course- Techniques of medical radiology, imaging and radiotherapy” school degree CdIA – Sapienza University
2020/21	Sapienza University of Rome	Teacher in Histology “Anatomical and physiological basis of human body” course Physiotherapy - CdIC- Sapienza University
2019/20	Sapienza University of Rome	Teacher in Histology for the “Morphological and functional basis of human body” course- Techniques of medical radiology, imaging and radiotherapy school degree CdIA – Sapienza University
2015/16	Sapienza University of Rome	Teacher in Histology for the “Anatomical and physiological basis of human body” course - Nursery school degree- CdIH- Sapienza University of Rome
2011/12	Sapienza University of Rome	Teacher in Histology for the “Anatomical and physiological basis of human body” course - Nursery school degree- CdIB- Sapienza University of Rome
2010/11	Sapienza University of Rome	Teacher in Histology for the “Anatomical and physiological basis of human body” course - Nursery school degree- CdIB- Sapienza University of Rome
2009/10	Sapienza University of Rome	Teacher in Histology for the “Anatomical and physiological basis of human body” course - Nursery school degree- CdIB- Sapienza University of Rome
2008/09	Sapienza University of Rome	Teacher in Histology for the “Anatomical and physiological basis of human body” course of Nursery school degree-CdIB Sapienza University of Rome

2019-today	Sapienza University of Rome	Board member of the PhD Program in “Morphogenesis & Tissue Engineering” Sapienza University
2020/2021	Sapienza University of Rome	Member of the selection board for the admission to the 36 cycle of the Ph.D program in “Morphogenesis & Tissue Engineering”. Sapienza University DR 1998/2020 prot 0054680 del 1/7/2020
2020/2021	Sapienza University of Rome	Teacher for “Let’s Science in Sapienza”-PCTO Dip. SAIMLAL Sapienza University of Rome

Part V - Society memberships, Awards and Honors

Year	Title
2020	Member of “Collegio dei Docenti di Istologia”
2006	Fellowship- Association Française contre les Myopathies (AFM)- Research title “Study of the molecular mechanism of the interplay between muscle and nerve in a mouse model of ALS disease”

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

Year	Title	Program	Grant value
2020	“Circadian restoration of metabolic homeostasis as a novel strategy to counteract ALS disease”	PI-Responsabile-Progetti di Ricerca Medi Ateneo- La Sapienza University of Rome RM120172A9047D57	33787 E
2019	“Design and testing of an experimental system for assessing adherent single-cell stiffness in tension”	I-Componente- Progetti di Ricerca Medi Ateneo - La Sapienza University of Rome RM11916B792AEFF7	36987 E
2019	“Intravital two-photon microscopy coupled with electrophysiology setup: a unique tool to longitudinally study cell morphology and function in awake animal models”.	I- Componente - Progetti Grandi attrezzature scientifiche GA12017304B57367	546.077 E
2009	“Characterization of the molecular trigger of muscle atrophy and denervation in a novel ALS mouse model”	PI-Istituto Italiano Miologia –(IIM)	15000 E

Part VII – Research Activities

Keywords

ALS
IGF1
Oxidative stress
Muscle homeostasis
Neurodegenerative disease
Muscle Atrophy

Brief Description

During the first years of the scientific career, candidate's research activity was mainly focused on the study of the role of the Insulin like Growth Factor 1 (IGF1) in muscle wasting and neurodegeneration. In particular her studies were focused on the analysis of the molecular pathways activated by IGF1 to counteract muscle atrophy associated with aging and with Amyotrophic Lateral Sclerosis (ALS), a neurodegenerative disorder.

During the Post Doc period, the scientific research was focused on the study of the contribute of skeletal muscle in ALS pathogenesis and on the effects of localized accumulation of oxidative stress in muscle and nerve interplay by the generation of new transgenic animal models. Moreover, the professional experience at the Biomixs Centre of the St. George's University of London leads the candidate to develop cutting edge proteomic techniques to dissect the molecular mechanism underpinning skeletal muscle and nervous tissue communication. More recently candidate move to clinical studies on ALS disease, studying non-invasive, stimulation technique to counteract ALS progression and discovering circulating microRNAs as reliable biomarkers for disease prognosis and progression in ALS human patients.

Recently candidate scientific interest is focused on the studies of the metabolic profile during muscle and nerve differentiation in physiological and pathological condition; in particular her recent studies are focused on the molecular analysis of the relation between metabolic defects and circadian rhythm and in ALS onset and progression.

This scientific work leads to the publication of 36 papers, some of which has been published in high impact scientific journal such as those for the Nature Publishing Groups [Nat. Gen. (2001), Sci. Rep. (2019), Cell Death and Discov. (2021)] and others like Cell Metab. (2008), Aging Cell (2019), ARS (2018), JCB (2005), PNAS (2004).

Moreover during her scientific career candidate participated to scientific research activity granted by: Fondazione Roma, Telethon (GGP14066), (GGP06004), Progetti Ateneo, ASI (grant no. 2013-088-R.0), PRIN (grant no. 2010R8JK2X), AFM, MDA, AIRC, MIUR as attested by the scientific publications

Scientific collaborations

During the research activity candidate has developed several scientific collaborations with both italian and foreigner scientist, as documented by scientific production. Among the collaborators candidate can praise:

-Prof- Irene Bozzoni Department of Biology and Biotechnology Charles Darwin University of Rome- Sapienza

-Prof. Marco Sandri, Dept. of Biomedical Science, University of Padova

-Prof. Feliciano Protasi G. d' Annunzio University of Chieti.

-Prof. Gigliola Sica e Prof. Bianca Maria Scicchitano Dept. of Histology and Embryology Università Cattolica del Sacro Cuore, Fondazione Policlinico Universitario A. Gemelli IRCCS, Roma.

-Dr. Simone De Panfilis-Center for Life Nano Science at Sapienza, Istituto Italiano di Tecnologia in Rome

-Prof. Roger A. Bannister-Department of Medicine-Cardiology Division, -University of Colorado School of Medicine-USA
-Dr. Camilla Bernardini- Dept. of Anatomy and Cellular Biology, Cattolica University in Rome
-Dr.Mariano Bizzarri del Dept. of Experimental Medicine, University of Rome-Sapienza, and Alessandra Cucina Dept. of Surgery “P. Valdoni”, University of Rome- Sapienza
-Prof. Cristina Limatola and Prof. Francesca Grassi - Dept. of Physiology and Pharmacology, University of Rome -Sapienza
-Dr. Sabata Pierno - University of Bari -Aldo Moro
-Prof. Zaccaria Del Prete, Dept. Mechanical Engineering, University of Rome -Sapienza.
Prof Gary Coulton St George’s University of London - Biomics center- London UK
During the scientific activity candidate has been selected for oral communication for the contributions:
-"Localized accumulation of oxidative stress triggers the dismantlement of neuromuscular junction via PKC-theta". Collegio dei Docenti di Istologia ed Embriologia – Scientific Session 23-02-2018
“Local expression of SOD1G93A mutant protein triggers neuromuscular junction dismantlement” 70th national congress SIAI (Società Italiana di Anatomia ed Istologia) Rome 15-17/09/2016
“Local expression of SOD1G93A mutant protein triggers neuromuscular junction dismantlement” IIM 2014
“Muscle-nerve interplay in physical exercise and in neuromuscular disease: the ALS case” ANaSMes 2007
“Localized expression of a mutant SOD1G93A gene causes muscle atrophy and induces pre-symptomatic signs of ALS IIM 2007
“IGF1 attenuates muscle wasting associated to Amyotrophic Lateral Sclerosis, a neurogenerative disease” ABCD 2006
“A new animal model of skeletal muscle and nervous tissue interplay: the MLC/SODG93A mice” IIM 2006
“The contribution of the hypertrophic skeletal muscle to motor neuron survival in an ALS mouse model” IIM 2005
“Transgenic mouse models of muscle wasting and regeneration” IIM 2004
Publications
During the scientific activity candidate published the following papers:
1. Circulating myomiRs in Muscle Denervation: From Surgical to ALS Pathological Condition. Casola I, Scicchitano BM, Lepore E, Mandillo S, Golini E, Nicoletti C, Barberi L, Dobrowolny G*, Musarò A*.Cells. 2021 Aug 10;10(8):2043. doi: 10.3390/cells10082043. *co-corresponding author
Impact factor 2020: 6.6 <i>source Journal Citation Report</i>
Citation N.D

2. Fenretinide Beneficial Effects on Amyotrophic Lateral Sclerosis-associated SOD1G93A Mutant Protein Toxicity: In Vitro and In Vivo Evidences. Orienti I, Armida M, Dobrowolny G, Pepponi R, Sollazzini G, Pezzola A, Casola I, Musarò A, Popoli P, Potenza RL. <i>Neuroscience</i> . 2021 Aug 5;473:1-12. doi: 10.1016/j.neuroscience.2021.07.033
Impact factor 2020: 3.590 <i>source Journal Citation Report</i>
Citation N.D
3. Age-Related Alterations at Neuromuscular Junction: Role of Oxidative Stress and Epigenetic Modifications. Dobrowolny G, Barbiera A, Sica G, Scicchitano BM. <i>Cells</i> . 2021 May 24;10(6):1307. doi: 10.3390/cells10061307
Impact factor 2020: 6.6 <i>source Journal Citation Report</i>
Citation 1 <i>source Isi web of science</i>
4. A longitudinal study defined circulating microRNAs as reliable biomarkers for disease prognosis and progression in ALS human patients. Dobrowolny G, Martone J, Lepore E, Casola I, Petrucci A, Inghilleri M, Morlando M, Colantoni A, Scicchitano BM, Calvo A, Bisogni G, Chiò A, Sabatelli M, Bozzoni I, Musarò A. <i>Cell Death Discov</i> . 2021 Jan 11;7(1):4. doi: 10.1038/s41420-020-00397-6
Impact factor 2020: 5.241 <i>source Journal Citation Report</i>
Citation 5 <i>source Isi web of science 4 Scopus</i>
5. Taurine Attenuates Catabolic Processes Related to the Onset of Sarcopenia. Barbiera A, Sorrentino S, Lepore E, Carfì A, Sica G, Dobrowolny G, Scicchitano BM. <i>Int J Mol Sci</i> . 2020 Nov 23;21(22):8865. doi: 10.3390/ijms21228865.
Impact factor 2020: 5.923 <i>source Journal Citation Report</i>
Citation 1 <i>source Isi web of science 1 Scopus</i>
6. Neuromuscular Junction as an Entity of Nerve-Muscle Communication. Lepore E, Casola I, Dobrowolny G, Musarò A. <i>Cells</i> . 2019 Aug 16;8(8):906. doi: 10.3390/cells8080906.
Impact factor 2019: 4.366 <i>source Journal Citation Report</i>
Citation 23 <i>source Isi web of science</i>
7. Effects of IGF-1 isoforms on muscle growth and sarcopenia. Ascenzi F, Barberi L, Dobrowolny G, Villa Nova Bacurau A, Nicoletti C, Rizzuto E, Rosenthal N, Scicchitano BM, Musarò A. <i>Aging Cell</i> . 2019 Jun;18(3):e12954. doi: 10.1111/accel.12954
Impact factor 2019: 7.238 <i>source Journal Citation Report</i>
Citation 41 <i>source Isi web of science 54 Scopus</i>
8. Elucidating the Contribution of Skeletal Muscle Ion Channels to Amyotrophic Lateral Sclerosis in search of new therapeutic options.

Camerino GM, Fonzino A, Conte E, De Bellis M, Mele A, Liantonio A, Tricarico D, Tarantino N, Dobrowolny G, Musarò A, Desaphy JF, De Luca A, Pierno S. <i>Sci Rep.</i> 2019 Feb 28;9(1):3185. doi: 10.1038/s41598-019-39676-3.
Impact factor 2019: 3.998 <i>source Journal Citation Report</i>
Citation 16 <i>source Isi web of science</i> 15 <i>Scopus</i>
9. Neuromuscular magnetic stimulation counteracts muscle decline in ALS patients: results of a randomized, double-blind, controlled study. Musarò A, Dobrowolny G, Cambieri C, Onesti E, Ceccanti M, Frasca V, Pisano A, Cerbelli B, Lepore E, Ruffolo G, Cifelli P, Roseti C, Giordano C, Gori MC, Palma E, Inghilleri M. <i>Sci Rep.</i> 2019 Feb 26;9(1):2837. doi: 10.1038/s41598-019-39313-z.
Impact factor 2019: 3.998 <i>source Journal Citation Report</i>
Citation 9 <i>source Isi web of science</i> 4 <i>Scopus</i>
10. Levetiracetam enhances the temozolomide effect on glioblastoma stem cell proliferation and apoptosis. Scicchitano BM, Sorrentino S, Proietti G, Lama G, Dobrowolny G, Catizone A, Binda E, Larocca LM, Sica G. <i>Cancer Cell Int.</i> 2018 Sep 10;18:136. doi: 10.1186/s12935-018-0626-8.
Impact factor 2018: 3.439 <i>source Journal Citation Report</i>
Citation 18 <i>source Isi web of science</i> 19 <i>Scopus</i>
11. Molecular Insights into Muscle Homeostasis, Atrophy and Wasting. Scicchitano BM, Dobrowolny G, Sica G, Musarò A. <i>Curr Genomics.</i> 2018 Aug;19(5):356-369. doi: 10.2174/1389202919666180101153911.
Impact factor 2018: 2.236 <i>source Journal Citation Report</i>
Citation 24 <i>source Isi web of science</i> 21 <i>Scopus</i>
12. Metabolic changes associated with muscle expression of SOD1G93A” Gabriella Dobrowolny*, Elisa Lepore, Martina Martini, Laura Barberi, Abigal Nunn, Bianca Maria Scicchitano and Antonio Musarò* <i>Front Physiol.</i> 2018 Jul 10;9:831. doi: 10.3389/fphys.2018.00831; *co-corresponding author
Impact factor 2018: 3.439 <i>source Journal Citation Report</i>
Citation 23 <i>source Isi web of science</i> 21 <i>Scopus</i>
13. Muscle expression of SOD1G93A triggers the dismantlement of neuromuscular junction via PKC-theta”. Dobrowolny G., Martini M., Scicchitano BM, Romanello V, Boncompagni S, Nicoletti C, Pietrangelo L, De Panfilis S, Catizone A, Bouchè M, Sandri M, Rudolf R, Protasi F, Musarò A. <i>Antioxid Redox Signal.</i> 2018 Apr 20;28(12):1105-1119. doi: 10.1089/ars.2017.7054.
Impact factor 2018: 5.828 <i>source Journal Citation Report</i>
Citation 32 <i>source Isi web of science</i> 29 <i>Scopus</i>

14. Noise Enhances Action Potential Generation in Mouse Sensory Neurons via Stochastic Resonance". Onorato I, D'Alessandro G, Di Castro MA, Renzi M, Dobrowolny G, Musarò A, Salvetti M, Limatola C, Crisanti A, Grassi F. PLoS One. 2016 Aug 15;11(8):e0160950. doi: 10.1371/journal.pone.0160950.
Impact factor 2016: 2.806 source <i>Journal Citation Report</i>
Citation 9 source <i>Isi web of science</i> 11 <i>Scopus</i>
15. Progressive impairment of CaV1.1 function in the skeletal muscle of mice expressing a mutant type 1 Cu/Zn superoxide dismutase (G93A) linked to amyotrophic lateral sclerosis". Beqollari D, Romberg CF, Dobrowolny G, Martini M, Voss AA, Musarò A, Bannister RA. Skelet Muscle. 2016 23;6:24. doi: 10.1186/s13395-016-0094-6.
Impact factor 2016: 3.738 source <i>Journal Citation Report</i>
Citation 8 source <i>Isi web of science</i> 8 <i>Scopus</i>
16. Muscle Expression of SOD1(G93A) Modulates microRNA and mRNA Transcription Pattern Associated with the Myelination Process in the Spinal Cord of Transgenic Mice". Dobrowolny G, Bernardini C, Martini M, Baranzini M, Barba M, Musarò A. Front Cell Neurosci. 2015 Dec 1;9:463. doi: 10.3389/fncel.2015.00463.
Impact factor 2015: 4.609 source <i>Journal Citation Report</i>
Citations: 17 source <i>Scopus</i> , 17 source <i>ISI-Web of Science</i>
17. Postmitotic Expression of SOD1(G93A) Gene Affects the Identity of Myogenic Cells and Inhibits Myoblasts Differentiation". Martini M*, Dobrowolny G*, Aucello M, Musarò A. Mediators Inflamm. 2015;537853. doi: 10.1155/2015/537853. *co-first authors.
Impact factor 2015: 3.418 Impact factor 2017: 3.549 source <i>Journal Citation Report</i>
Citations: 9 source <i>Scopus</i> , 8 source <i>ISI-Web of Science</i> .
18. R-spondin 1/dickkopf-1/beta-catenin machinery is involved in testicular embryonic angiogenesis". Caruso M, Ferranti F, Corano Scheri K, Dobrowolny G, Ciccarone F, Grammatico P, Catizone A, Ricci G. PLoS One. 2015 Apr 24;10(4): e0124213. doi: 10.1371/journal.pone.0124213. eCollection 2015.
Impact factor 2015: 3.057 source <i>Journal Citation Report</i>
Citations: 3 sources <i>Scopus</i> e 4 <i>ISI-Web of Science</i>
19. Melatonin down-regulates MDM2 gene expression and enhances p53 acetylation in MCF-7 cells". Proietti S, Cucina A, Dobrowolny G, D'Anselmi F, Dinicola S, Masiello MG, Pasqualato A, Palombo A, Morini V, Reiter RJ, Bizzarri M. J Pineal Res. 2014 Aug;57(1):120-9. doi: 10.1111/jpi.12150.
Impact factor 2014: 9.6 source <i>Journal Citation Report</i>
Citations: 71 source <i>Scopus</i> 61 source <i>ISI-Web of Science</i>

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Citations: 32 source *Scopus*, 27 source *ISI-Web of Science*

21. Paracrine effects of IGF-1 overexpression on the functional decline due to skeletal muscle disuse: molecular and functional evaluation in hindlimb unloaded MLC/mIgf-1 transgenic mice". Pierno S, Camerino GM, Cannone M, Liantonio A, De Bellis M, Digennaro C, Gramegna G, De Luca A, Germinario E, Danieli-Betto D, Betto R, Dobrowolny G, Rizzuto E, Musarò A, Desaphy JF, Camerino DC. PLoS One. 2013 Jun 3;8(6):e65167. doi: 10.1371/journal.pone.0065167.

Impact factor 2013: 3.534 source *Journal Citation Report*

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23. Adaptation of mouse skeletal muscle to long-term microgravity in the MDS mission". Sandonà D, Desaphy JF, Camerino GM, Bianchini E, Ciciliot S, Danieli-Betto D, Dobrowolny G, Furlan S, Germinario E, Goto K, Gutschmann M, Kawano F, Nakai N, Ohira T, Ohno Y, Picard A, Salanova M, Schiffli G, Blottner D, Musarò A, Ohira Y, Betto R, Conte D, Schiaffino S. PLoS One. 2012;7(3):e33232. doi: 10.1371/journal.pone.0033232.

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Musarò A. <i>Endocr Dev.</i> 2009;14:29-37. doi: 10.1159/000207474. Review.
Citations: 7 source <i>Scopus</i> , 8 source <i>ISI-Web of Science</i>
26. Localized accumulation of oxidative stress causes muscle atrophy through activation of an autophagic pathway". Aucello M, Dobrowolny G, Musarò A. <i>Autophagy.</i> 2009 May;5(4):527-9.
Impact factor 2009: 6.829 source <i>Journal Citation Report</i>
Citations: 42 source <i>Scopus</i> , 39 source <i>ISI-Web of Science</i>
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Impact factor 2008: 16.107 Impact factor source <i>Journal Citation Report</i>
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28. Local expression of mIgf-1 modulates ubiquitin, caspase and CDK5 expression in skeletal muscle of an ALS mouse model". Dobrowolny G, Aucello M, Molinaro M, Musarò A. <i>Neurol Res.</i> 2008 Mar;30(2):131-6. doi: 10.1179/174313208X281235.
Impact factor 2008: 1.634 source <i>Journal Citation Report</i>
Citations: 35 source <i>Scopus</i> , 40 source <i>ISI-Web of Science</i>
29. Stem cell-mediated muscle regeneration and repair in aging and neuromuscular diseases". Musarò A, Giacinti C, Pelosi L, Dobrowolny G, Barberi L, Nardis C, Coletti D, Scicchitano BM, Adamo S, Molinaro M. <i>Eur J Histochem.</i> 2007;51 Suppl 1:35-43. Review.
Impact factor 2007: 1.261 source <i>Journal Citation Report</i>
Citations: 17 source <i>Scopus</i> , 21 source <i>ISI-Web of Science</i>
30. The neuroprotective effects of a locally acting IGF-1 isoform". Musarò A, Dobrowolny G, Rosenthal N. <i>Exp Gerontol.</i> 2007 Jan-Feb;42(1-2):76-80. Review.
Impact factor 2007: 2.879 source <i>Journal Citation Report</i>
Citations: 35 source <i>Scopus</i> , 31 source <i>ISI-Web of Science</i>
31. Muscle expression of a local Igf-1 isoform protects motor neurons in an ALS mouse model". Dobrowolny G, Giacinti C, Pelosi L, Nicoletti C, Winn N, Barberi L, Molinaro M, Rosenthal N, Musarò A. <i>J Cell Biol.</i> 2005 Jan 17;168(2):193-9.
Impact factor 2005: 10.951 source <i>Journal Citation Report</i>
Citations: 269 source <i>Scopus</i> e 260 source <i>ISI-Web of Science</i>

32. Stem cell-mediated muscle regeneration is enhanced by local isoform of insulin-like growth factor 1". Musarò A, Giacinti C, Borsellino G, Dobrowolny G, Pelosi L, Cairns L, Ottolenghi S, Cossu G, Bernardi G, Battistini L, Molinaro M, Rosenthal N. Proc Natl Acad Sci U S A. 2004 Feb 3;101(5):1206-10
Impact factor 2004:10.452 <i>source Journal Citation Report</i>
Citations: 215 <i>source Scopus</i> , 188 <i>source ISI-Web of Science</i>
33. Biomonitoring of primary aluminium industry workers: detection of micronuclei and repairable DNA lesions by alkaline SCGE". Crebelli R, Carta P, Andreoli C, Aru G, Dobrowolny G, Rossi S, Zijno A. Mutat Res. 2002 Apr 26;516(1-2):63-70.
Impact factor 2002: 1.636 <i>source Journal Citation Report</i>
Citations: 43 <i>source Scopus</i> , 40 <i>source ISI-Web of Science</i>
34. Detection of 1cen--1q12 lesions in different phases of the cell cycle: dual colour FISH analysis of peripheral lymphocytes from subjects with occupational exposure to petroleum fuels". Marcon F, Zijno A, Dobrowolny G, Carere A, Crebelli R. Mutagenesis. 2002 Mar;17(2):157-62.
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Citations: 4 <i>source Scopus</i> , 4 <i>source ISI-Web of Science</i>
35. Influence of donor age on vinblastine-induced chromosome malsegregation in cultured peripheral lymphocytes". Leopardi P, Marcon F, Dobrowolny G, Zijno A, Crebelli R. Mutagenesis. 2002 Jan;17(1):83-8.
Impact factor 2002:1.864 <i>source Journal Citation Report</i>
Citations: 9 <i>source Scopus</i> , 7 <i>source ISI-Web of Science</i>
36. Localized Igf-1 transgene expression sustains hypertrophy and regeneration in senescent skeletal muscle". Musarò A, McCullagh K, Paul A, Houghton L, Dobrowolny G, Molinaro M, Barton ER, Sweeney HL, Rosenthal N. Nat Genet. 2001 Feb;27(2):195-2001 Impact factor 2001: 29.6 <i>source Journal Citation Report</i>
Citations: 844 <i>source Scopus</i> , 785 <i>source ISI-Web of Science</i> .
37 Istologia" Alvin G. Telser, John K. Young, Kate M. Baldwin, italian eds by A. Musaro, U. Armato, in collaboration with C. Giacinti, G. Dobrowolny, IP. Dal Pra, AM Chiarini. 2008 Elsevier-Masson: ISBN 978-88-214-3055-8
Referee and Editor activity.
Candidate recently joins the Editorial Board of Stem Cell Research as Review Editor for Frontiers in Cell and Developmental Biology, Frontiers in Genetics, Frontiers in Oncology and Frontiers in Bioengineering and Biotechnology. Moreover she was Guest Editor for the SI "The Role of Skeletal Muscle in Neuromuscular Diseases: From Cellular and

"Molecular Players to Therapeutic Interventions" of Cells (30 July 2021). Further she has been invited as Referee for the following international journal and foundation: 1) PLOS ONE international journal, 2) Experimental Gerontology 3) The Research Fund - Flanders (FWO) - Fund for Scientific Research., 4) Oxidative Medicine and Cellular Longevity 5) Scientific report

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	36/35	Isi Web of Science/Scopus	2001	2021
Books [teaching]	1	ISBN 978-88-214-3055-8	2008	2008
Total Impact factor	189.77 source JCR			
Total Citations	2259 source ISI web of Science			
	2327 source Scopus			
Average Citations per Product	64.54 source ISI web of Science			
	66.48 source scopus			
Hirsch (H) index	20 source ISI web of Science			
	18 source Scopus			
Normalized H index*	0.98 source ISI web of Science			
	0.87 source Scopus			

*H index divided by the academic seniority: 20.58 considering maternity leave

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. "Circulating myomiRs in Muscle Denervation: From Surgical to ALS Pathological Condition". Casola I, Scicchitano BM, Lepore E, Mandillo S, Golini E, Nicoletti C, Barberi L, **Dobrowolny G***, Musarò A*. Cells. 2021 Aug 10;10(8):2043. doi: 10.3390/cells10082043. *co-corresponding author
MDPI Publisher
Impact factor 2020: 6.6 source Journal Citation Report
Citation N.D
2. "A longitudinal study defined circulating microRNAs as reliable biomarkers for disease prognosis and progression in ALS human patients". **Dobrowolny G**, Martone J, Lepore E, Casola I, Petrucci A, Inghilleri M, Morlando M, Colantoni A, Scicchitano BM, Calvo A, Bisogni G, Chiò A, Sabatelli M, Bozzoni I, Musarò A. Cell Death Discov. 2021 Jan 11;7(1):4. doi: 10.1038/s41420-020-00397-6
SPRINGER NATURE Publisher

Impact factor 2020: 5.241 source Journal Citation Report

Citation 5 source Isi web of science 4Scopus

3. "Effects of IGF-1 isoforms on muscle growth and sarcopenia". Ascenzi F, Barberi L, **Dobrowolny G**, Villa Nova Bacurau A, Nicoletti C, Rizzuto E, Rosenthal N, Scicchitano BM, Musarò A. Aging Cell. 2019 Jun;18(3):e12954. doi: 10.1111/ace1.12954 WILEY Publisher

Impact factor 2019: 7.238 source Journal Citation Report

Citation 41 source Isi web of science 54 Scopus

4. "Elucidating the Contribution of Skeletal Muscle Ion Channels to Amyotrophic Lateral Sclerosis in search of new therapeutic options. Camerino GM, Fonzino A, Conte E, De Bellis M, Mele A, Liantonio A, Tricarico D, Tarantino N, **Dobrowolny G**, Musarò A, Desaphy JF, De Luca A, Pierno S. Sci Rep. 2019 Feb 28;9(1):3185. doi: 10.1038/s41598-019-39676-3. NATURE RESEARCH Publisher

Impact factor 2019: 3.998 source Journal Citation Report

Citation 16 source Isi web of science 15 Scopus

5. "Neuromuscular magnetic stimulation counteracts muscle decline in ALS patients: results of a randomized, double-blind, controlled study". Musarò A, **Dobrowolny G**, Cambieri C, Onesti E, Ceccanti M, Frasca V, Pisano A, Cerbelli B, Lepore E, Ruffolo G, Cifelli P, Roseti C, Giordano C, Gori MC, Palma E, Inghilleri M. Sci Rep. 2019 Feb 26;9(1):2837. doi: 10.1038/s41598-019-39313-z. NATURE RESEARCH Publisher

Impact factor 2019: 3.998 source Journal Citation Report

Citation 9 source Isi web of science 4 Scopus

6. "Levetiracetam enhances the temozolomide effect on glioblastoma stem cell proliferation and apoptosis". Scicchitano BM, Sorrentino S, Proietti G, Lama G, **Dobrowolny G**, Catizone A, Binda E, Larocca LM, Sica G. Cancer Cell Int. 2018 Sep 10;18:136. doi: 10.1186/s12935-018-0626-8. BMC-Publisher

Impact factor 2018: 3.439 source Journal Citation Report

Citation 18 source Isi web of science 19 Scopus

7. "Metabolic changes associated with muscle expression of SOD1G93A" **Gabriella Dobrowolny***, Elisa Lepore, Martina Martini, Laura Barberi, Abigail Nunn, Bianca Maria Scicchitano and Antonio Musarò* Front Physiol. 2018 Jul 10;9:831. doi: 10.3389/fphys.2018.00831; *co-corresponding author FRONTIERS MEDIA SA Publisher

Impact factor 2018: 3.439 source Journal Citation Report

Citation 23 source Isi web of science 21 Scopus

8. "Muscle expression of SOD1G93A triggers the dismantlement of neuromuscular junction via PKC-theta". **Dobrowolny G.**, Martini M., Scicchitano BM, Romanello V, Boncompagni S, Nicoletti C, Pietrangelo L, De Panfilis S, Catizone A, Bouchè M, Sandri M, Rudolf R, Protasi F, Musarò A. *Antioxid Redox Signal*. 2018 Apr 20;28(12):1105-1119. doi: 10.1089/ars.2017.7054. MARY ANN LIEBERT, INC Publisher

Impact factor 2018: 5.828 source Journal Citation Report

Citation 32 source Isi web of science 29 Scopus

9. "Progressive impairment of CaV1.1 function in the skeletal muscle of mice expressing a mutant type 1 Cu/Zn superoxide dismutase (G93A) linked to amyotrophic lateral sclerosis". Beqollari D, Romberg CF, **Dobrowolny G**, Martini M, Voss AA, Musarò A, Bannister RA. *Skelet Muscle*. 2016 23;6:24. doi: 10.1186/s13395-016-0094-6. BMC-Publisher

Impact factor 2016: 3.738 source Journal Citation Report

Citation 8 source Isi web of science 8 Scopus

10. "Muscle Expression of SOD1(G93A) Modulates microRNA and mRNA Transcription Pattern Associated with the Myelination Process in the Spinal Cord of Transgenic Mice". **Dobrowolny G**, Bernardini C, Martini M, Baranzini M, Barba M, Musarò A. *Front Cell Neurosci*. 2015 Dec 1;9:463. doi: 10.3389/fncel.2015.00463. FRONTIERS MEDIA SA-Publisher

Impact factor 2015: 4.609 source Journal Citation Report

Citations: 17 source Scopus, 17 source ISI-Web of Science

11. "Postmitotic Expression of SOD1(G93A) Gene Affects the Identity of Myogenic Cells and Inhibits Myoblasts Differentiation". Martini M*, **Dobrowolny G***, Aucello M, Musarò A. *Mediators Inflamm*. 2015;537853. doi: 10.1155/2015/537853. *co-first authors. HINDAWI LTD Publisher

Impact factor 2015: 3.418 Impact factor 2017: 3.549 source Journal Citation Report

Citations: 9 source Scopus, 8 source ISI-Web of Science.

12. "Melatonin down-regulates MDM2 gene expression and enhances p53 acetylation in MCF-7 cells". Proietti S, Cucina A, **Dobrowolny G**, D'Anselmi F, Dinicola S, Masiello MG, Pasqualato A, Palombo A, Morini V, Reiter RJ, Bizzarri M. *J Pineal Res*. 2014 Aug;57(1):120-9. doi: 10.1111/jpi.12150. WILEY Publisher

Impact factor 2014: 9.6 source Journal Citation Report

Citations: 71 source Scopus 61 source ISI-Web of Science

13. “Microenvironment promotes tumor cell reprogramming in human breast cancer cell lines”. D'Anselmi F, Masiello MG, Cucina A, Proietti S, Dinicola S, Pasqualato A, Ricci G, **Dobrowolny G**, Catizone A, Palombo A, Bizzarri M. PLoS One. 2013 Dec 30;8(12):e83770. doi: 10.1371/journal.pone.0083770. PUBLIC LIBRARY SCIENCE Publisher
Impact factor 2013: 3.534 source Journal Citation Report
Citations: 32 source Scopus, 27 source ISI-Web of Science
14. “Paracrine effects of IGF-1 overexpression on the functional decline due to skeletal muscle disuse: molecular and functional evaluation in hindlimb unloaded MLC/mIgf-1 transgenic mice”. Pierno S, Camerino GM, Cannone M, Liantonio A, De Bellis M, Digennaro C, Gramegna G, De Luca A, Germinario E, Danieli-Betto D, Betto R, **Dobrowolny G**, Rizzuto E, Musarò A, Desaphy JF, Camerino DC. PLoS One. 2013 Jun 3;8(6):e65167. doi: 10.1371/journal.pone.0065167. PUBLIC LIBRARY SCIENCE Publisher
Impact factor 2013: 3.534 source Journal Citation Report
Citations: 21 source Scopus, 20 source ISI-Web of Science
15. “IPLEX administration improves motor neuron survival and ameliorates motor functions in a severe mouse model of spinal muscular atrophy”. Murdocca M, Malgieri A, Luchetti A, Saieva L, **Dobrowolny G**, de Leonibus E, Filareto A, Quitadamo MC, Novelli G, Musarò A, Sangiuolo F. Mol Med. 2012 Sep 25;18:1076-85. doi: 10.2119/molmed.2012.00056. SPRINGER Publisher
Impact factor 2012: 4.469 source Journal Citation Report
Citations: 25 source Scopus, 23 source ISI-Web of Science
16. “Adaptation of mouse skeletal muscle to long-term microgravity in the MDS mission”. Sandonà D, Desaphy JF, Camerino GM, Bianchini E, Ciciliot S, Danieli-Betto D, **Dobrowolny G**, Furlan S, Germinario E, Goto K, Gutschmann M, Kawano F, Nakai N, Ohira T, Ohno Y, Picard A, Salanova M, Schiffli G, Blottner D, Musarò A, Ohira Y, Betto R, Conte D, Schiaffino S. PLoS One. 2012;7(3):e33232. doi: 10.1371/journal.pone.0033232. PUBLIC LIBRARY SCIENCE Publisher
Impact factor 2012: 3.73 source Journal Citation Report
Citations: 107 source Scopus, 99 source ISI-Web of Science

Part X – Summary of Scientific Achievements for selected publications

Papers selected	16 Isi Web of Science/Scopus
Papers (2016-today)	9 Isi Web of Science/Scopus
Total Impact factor	76.18 source JCR

Average Impact factor per Product	4.76 source JCR
Total Citations (2011-today)	407 source ISI web of Science
	436 source Scopus
Average Citations per Product	25.44 source ISI web of Science
	27.25 source Scopus
Hirsch (H) index (2011-today)	11 source ISI web of Science and Scopus

28/9/2021



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