

LIST OF SCIENTIFIC CONTRIBUTIONS

<https://pubmed.ncbi.nlm.nih.gov/?term=D%27Amico+AG>

1. Scuderi S, **D'Amico AG**, Castorina A, Imbesi R, Carnazza ML, D'Agata V. Ameliorative effect of PACAP and VIP against increased permeability in a model of outer blood retinal barrier dysfunction. *Peptides*. 2013 Jan;39:119-24. doi: 10.1016/j.peptides.2012.11.015.
2. **D'Amico AG**, Scuderi S, Saccone S, Castorina A, Drago F, D'Agata V. Antiproliferative effects of PACAP and VIP in serum-starved glioma cells. *J Mol Neurosci*. 2013 Oct;51(2):503-13. doi: 10.1007/s12031-013-0076-7.
3. **D'Amico AG**, Castorina A, Leggio GM, Drago F, D'Agata V. Hippocampal neurofibromin and amyloid precursor protein expression in dopamine D3 receptor knockout mice following passive avoidance conditioning. *Neurochem Res*. 2013 Mar;38(3):564-72. doi: 10.1007/s11064-012-0949-0.
4. Castorina A, **D'Amico AG**, Scuderi S, Leggio GM, Drago F, D'Agata V. Dopamine D3 receptor deletion increases tissue plasminogen activator (tPA) activity in prefrontal cortex and hippocampus. *Neuroscience*. 2013 Oct 10;250:546-56. doi:10.1016/j.neuroscience.2013.07.053
5. **D'Amico AG**, Scuderi S, Leggio GM, Castorina A, Drago F, D'Agata V. Increased hippocampal CREB phosphorylation in dopamine D3 receptor knockout mice following passive avoidance conditioning. *Neurochem Res*. 2013 Dec;38(12):2516-23. doi: 10.1007/s11064-013-1164-3.
6. Castorina A, Scuderi S, **D'Amico AG**, Drago F, D'Agata V. PACAP and VIP increase the expression of myelin-related proteins in rat schwannoma cells: involvement of PAC1/VPAC2 receptor-mediated activation of PI3K/Akt signaling pathways. *Exp Cell Res*. 2014 Mar 10;322(1):108-21. doi:10.1016/j.yexcr.2013.11.003.
7. Scuderi S, **D'Amico AG**, Castorina A, Federico C, Marrazzo G, Drago F, Bucolo C, D'Agata V. Davunetide (NAP) protects the retina against early diabetic injury by reducing apoptotic death. *J Mol Neurosci*. 2014 Nov;54(3):395-404. doi: 10.1007/s12031-014-0244-4.
8. **D'Amico AG**, Scuderi S, Maugeri G, Cavallaro S, Drago F, D'Agata V. NAP reduces murine microvascular endothelial cells proliferation induced by hyperglycemia. *J Mol Neurosci*. 2014 Nov;54(3):405-13. doi: 10.1007/s12031-014-0335-2.
9. Scuderi S, **D'Amico AG**, Federico C, Saccone S, Magro G, Bucolo C, Drago F, D'Agata V. Different Retinal Expression Patterns of IL-1 α , IL-1 β , and Their Receptors in a Rat Model of

- Type 1 STZ-Induced Diabetes. *J Mol Neurosci.* 2015 Jun;56(2):431-9. doi: 10.1007/s12031-015-0505-x.
10. Maugeri G, **D'Amico AG**, Magro G, Salvatorelli L, Barbagallo GM, Saccone S, Drago F, Cavallaro S, D'Agata V. Expression profile of parkin isoforms in human gliomas. *Int J Oncol.* 2015 Oct;47(4):1282-92. doi: 10.3892/ijo.2015.3105
11. **D'Amico AG**, Maugeri G, Reitano R, Bucolo C, Saccone S, Drago F, D'Agata V. PACAP Modulates Expression of Hypoxia-Inducible Factors in Streptozotocin-Induced Diabetic Rat Retina. *J Mol Neurosci.* 2015 Dec;57(4):501-9. doi: 10.1007/s12031-015-0621-7.
12. **D'Amico AG**, Maugeri G, Magro G, Salvatorelli L, Drago F, D'Agata V. Expression pattern of parkin isoforms in lung adenocarcinomas. *Tumour Biol.* 2015 Jul;36(7):5133-41. doi: 10.1007/s13277-015-3166-z.
13. Maugeri G, La Cognata V, Scuderi S, **D'Amico AG**, Cavallaro S, D'Agata V. Expression Profile of Human PARK2 Splicing Isoforms in Peripheral Blood Cells and Isolated Lymphomonocytes. *ARC Journal of Neuroscience Volume 1, Issue 3, 2016, PP 1-9 ISSN No. DOI: http://dx.doi.org/10.20431/2456-057X.0103001*
14. Maugeri G, **D'Amico AG**, Reitano R, Saccone S, Federico C, Cavallaro S, D'Agata V. Parkin modulates expression of HIF-1 α and HIF-3 α during hypoxia in glioblastoma-derived cell lines in vitro. *Cell Tissue Res.* 2016 Jun;364(3):465-74. doi: 10.1007/s00441-015-2340-3.
15. Maugeri G, **D'Amico AG**, Rasà DM, Reitano R, Saccone S, Federico C, Parenti R, Magro G, D'Agata V. Expression profile of Wilms Tumor 1 (WT1) isoforms in undifferentiated and all-trans retinoic acid differentiated neuroblastoma cells. *Genes Cancer.* 2016 Jan;7(1-2):47-58. doi: 10.18632/genesandcancer.94
16. **D'Amico AG**, Maugeri G, Reitano R, Cavallaro S, D'Agata V. Proteomic Analysis of Parkin Isoforms Expression in Different Rat Brain Areas. *Protein J.* 2016 Oct;35(5):354-362. doi: 10.1007/s10930-016-9679-5.
17. Amadio M, Pascale A, Cupri S, Pignatello R, Osera C, D'Agata V, **D'Amico AG**, Leggio GM, Ruozzi B, Govoni S, Drago F, Bucolo C. Nanosystems based on siRNA silencing HuR expression counteract diabetic retinopathy in rat. *Pharmacol Res.* 2016 Sep;111:713-720. doi: 10.1016/j.phrs.2016.07.042.
18. Maugeri G, **D'Amico AG**, Reitano R, Magro G, Cavallaro S, Salomone S, D'Agata V. PACAP and VIP Inhibit the Invasiveness of Glioblastoma Cells Exposed to Hypoxia through the Regulation of HIFs and EGFR Expression. *Front Pharmacol.* 2016 May 31;7:139. doi: 10.3389/fphar.2016.00139

19. Maugeri G, **D'Amico AG**, Gagliano C, Saccone S, Federico C, Cavallaro S, D'Agata V. VIP Family Members Prevent Outer Blood Retinal Barrier Damage in a Model of Diabetic Macular Edema. *J Cell Physiol.* 2017 May;232(5):1079-1085. doi: 10.1002/jcp.25510.
20. Maugeri G, **D'Amico AG**, Saccone S, Federico C, Cavallaro S, D'Agata V. PACAP and VIP Inhibit HIF-1 α -Mediated VEGF Expression in a Model of Diabetic Macular Edema. *J Cell Physiol.* 2017 May;232(5):1209-1215. doi: 10.1002/jcp.25616.
21. **D'Amico AG**, Maugeri G, Bucolo C, Saccone S, Federico C, Cavallaro S, D'Agata V. NAP Interferes with Hypoxia-Inducible Factors and VEGF Expression in Retina of Diabetic Rats. *J Mol Neurosci.* 2017 Feb;61(2):256-266. doi: 10.1007/s12031-016-0869-6.
22. Maugeri G, **D'Amico AG**, Rasà DM, La Cognata V, Saccone S, Federico C, Cavallaro S, D'Agata V. Caffeine Prevents Blood Retinal Barrier Damage in a Model, In Vitro, of Diabetic Macular Edema. *J Cell Biochem.* 2017 Aug;118(8):2371-2379. doi: 10.1002/jcb.25899.
23. Rasà DM, **D'Amico AG**, Maugeri G, Cavallaro S, D'Agata V. WT1 Alternative Splicing: Role of Its Isoforms in Neuroblastoma. *J Mol Neurosci.* 2017 Jun;62(2):131-141. doi: 10.1007/s12031-017-0930-0.
24. Maugeri G, **D'Amico AG**, Rasà DM, La Cognata V, Saccone S, Federico C, Cavallaro S, D'Agata V. Nicotine promotes blood retinal barrier damage in a model of human diabetic macular edema. *Toxicol In Vitro.* 2017 Oct;44:182-189. doi: 10.1016/j.tiv.2017.07.003.
25. **D'Amico AG**, Maugeri G, Rasà DM, Bucolo C, Saccone S, Federico C, Cavallaro S, D'Agata V. Modulation of IL-1 β and VEGF expression in rat diabetic retinopathy after PACAP administration. *Peptides.* 2017 Nov;97:64-69. doi: 10.1016/j.peptides.2017.09.014.
26. Maugeri G, Longo A, **D'Amico AG**, Rasà DM, Reibaldi M, Russo A, Bonfiglio V, Avitabile T, D'Agata V. Trophic effect of PACAP on human corneal endothelium. *Peptides.* 2018 Jan;99:20-26. doi: 10.1016/j.peptides.2017.
27. La Cognata V, Maugeri G, **D'Amico AG**, Saccone S, Federico C, Cavallaro S, D'Agata V. Differential expression of PARK2 splice isoforms in an in vitro model of dopaminergic-like neurons exposed to toxic insults mimicking Parkinson's disease. *J Cell Biochem.* 2018 Jan;119(1):1062-1073. doi: 10.1002/jcb.26274.
28. **D'Amico AG**, Maugeri G, Rasà DM, La Cognata V, Saccone S, Federico C, Cavallaro S, D'Agata V. NAP counteracts hyperglycemia/hypoxia induced retinal pigment epithelial barrier breakdown through modulation of HIFs and VEGF expression. *J Cell Physiol.* 2018 Feb;233(2):1120-1128. doi: 10.1002/jcp.25971.
29. Bonaventura G, Iemmolò R, **D'Amico AG**, La Cognata V, Costanzo E, Zappia M, D'Agata V, Conforti FL, Aronica E, Cavallaro S. PACAP and PAC1R are differentially expressed in

- motor cortex of amyotrophic lateral sclerosis patients and support survival of iPSC-derived motor neurons. *J Cell Physiol.* 2018 Apr;233(4):3343-3351. doi: 10.1002/jcp.26182.
30. Maugeri G, **D'Amico AG**, Rasà DM, Saccone S, Federico C, Magro G, Cavallaro S, D'Agata V. Caffeine Effect on HIFs/VEGF Pathway in Human Glioblastoma Cells Exposed to Hypoxia. *Anticancer Agents Med Chem.* 2018;18(10):1432-1439. doi: 10.2174/1871520618666180209151750.
31. Federico C, Gil L, Bruno F, **D'Amico AG**, D'Agata V, Saccone S. Phosphorylated nucleolar Tau protein is related to the neuronal in vitro differentiation. *Gene.* 2018 Jul 20;664:1-11. doi: 10.1016/j.gene.2018.04.051.
32. Maugeri G, **D'Amico AG**, Rasà DM, Saccone S, Federico C, Cavallaro S, D'Agata V. PACAP and VIP regulate hypoxia-inducible factors in neuroblastoma cells exposed to hypoxia. *Neuropeptides.* 2018 Jun;69:84-91. doi: 10.1016/j.npep.2018.04.009.
33. Maugeri G, **D'Amico AG**, Rasà DM, Federico C, Saccone S, Morello G, La Cognata V, Cavallaro S, D'Agata V. Molecular mechanisms involved in the protective effect of pituitary adenylate cyclase-activating polypeptide in an in vitro model of amyotrophic lateral sclerosis. *J Cell Physiol.* 2018 Sep 21. doi: 10.1002/jcp.27328.
34. Maugeri G, **D'Amico AG**, Castrogiovanni P, Saccone S, Federico C, Reibaldi M, Russo A, Bonfiglio V, Avitabile T, Longo A, D'Agata V. PACAP through EGFR transactivation preserves human corneal endothelial integrity. *J Cell Biochem.* 2018 Dec 11. doi: 10.1002/jcb.28293.
35. Maugeri G, **D'Amico AG**, Federico C, Saccone S, Giunta S, Cavallaro S, D'Agata V. Involvement of A3 Adenosine Receptor in Neuroblastoma Progression via Modulation of the Hypoxic/Angiogenic Pathway. *J Mol Neurosci.* 2019 Jun 5. doi: 10.1007/s12031-019-01346-4.
36. **D'Amico AG**, Maugeri G, Rasà D, Federico C, Saccone S, Lazzara F, Fidilio A, Drago F, Bucolo C, D'Agata V. NAP modulates hyperglycemic-inflammatory event of diabetic retina by counteracting outer blood retinal barrier damage. *J Cell Physiol.* 2019 Apr;234(4):5230-5240. doi: 10.1002/jcp.27331.
37. Bianco A, (...), **D'Amico AG**, Thomas E, Musumeci G. The "journal of Functional Morphology and Kinesiology" Journal club series: Highlights on recent papers in overtraining and exercise addiction. *Journal of Functional Morphology and Kinesiology.* 2019. 4,68.
38. Padua E, **D'Amico AG**, Alashram A, Campoli F, Romagnoli C, Lombardo M, Quarantelli M, Di Pinti E, Tonanzi C, Annino G. Effectiveness of Warm-Up Routine on the Ankle Injuries

- Prevention in Young Female Basketball Players: A Randomized Controlled Trial. *Medicina (Kaunas)*. 2019 Oct 16;55(10):690. doi: 10.3390/medicina55100690.
39. Maugeri G, **D'Amico AG**, Bucolo C, D'Agata V. Protective effect of PACAP-38 on retinal pigmented epithelium in an in vitro and in vivo model of diabetic retinopathy through EGFR-dependent mechanism. *Peptides* 2019 Sep;119:170108. doi: 10.1016/j.peptides.2019.170108.
40. Conway de Macario E, Pitruzzella A, **D'Amico AG**. Role of Molecular Chaperones in Carcinogenesis: Mechanism, Diagnosis, and Treatment. *J Oncol.* 2020:7437629. doi: 10.1155/2020/7437629.
41. Gasbarro L, Padua E, Tancredi V, Annino G, Montorsi M, Maugeri G and **D'Amico AG**. Joint Mobility Protection during the Developmental Age among Free Climbing Practitioners: A Pilot Study. *Journal of Functional Morphology and Kinesiology* 2020. 5 (1), 14.
42. **D'Amico AG**, Maugeri G, Saccone S, Federico C, Cavallaro S, Reglodi D and D'Agata V. PACAP Modulates the Autophagy Process in an In Vitro Model of Amyotrophic Lateral Sclerosis. *Int. J. Mol. Sci.* 2020, 21(8), 2943; doi.org/10.3390/ijms21082943.
43. Maugeri G, **D'Amico AG**, Amenta A, Saccone S, Federico C, Reibaldi M, Russo A, Bonfiglio V, Avitabile T, Longo A, D'Agata V. Protective Effect of PACAP Against Ultraviolet B Radiation-Induced Human Corneal Endothelial Cell Injury. *Neuropeptides*. 2020 79:101978. doi: 10.1016/j.npep.2019.101978.
44. Vizzi L, Padua E, **D'Amico AG**, Tancredi V, D'Arcangelo G, Cariati I, Scimeca M, Maugeri G, D'Agata V, Montorsi M. Beneficial Effects of Physical Activity on Subjects with Neurodegenerative Disease. *J Funct Morphol Kinesiol.* 2020 Dec 16;5(4):94. doi: 10.3390/jfmk5040094.
45. Toth D, Szabo E, Tamas A, Juhasz T, Horvath G, Fabian E, Opper B, Szabo D, Maugeri G, **D'Amico AG**, D'Agata V, Vicena V, Reglodi D. Protective Effects of PACAP in Peripheral Organs. *Front Endocrinol (Lausanne)*. 2020 Jul 14;11:377. doi: 10.3389/fendo.2020.00377.
46. Maugeri G, **D'Amico AG**, Musumeci G, Reglodi D, D'Agata V. Effects of PACAP on Schwann Cells: Focus on Nerve Injury. *Int J Mol Sci.* 2020 Nov 3;21(21):8233. doi: 10.3390/ijms21218233.
47. Maugeri G, **D'Amico AG**, Morello G, Reglodi D, Cavallaro S, and D'Agata V. Differential Vulnerability of Oculomotor Versus Hypoglossal Nucleus During ALS: Involvement of PACAP. *Front Neurosci.* 2020; 14: 805. doi: 10.3389/fnins.2020.00805.
48. Lauretta G, Ravalli S, Szychlinska MA, Castorina A, Maugeri G, **D'Amico AG**, D'Agata V, Musumeci G. Current knowledge of pituitary adenylate cyclase activating polypeptide

- (PACAP) in articular cartilage. *Histol Histopathol.* 2020 Jun 16:18233. doi: 10.14670/HH-18-233.
49. Cariati I, Scimeca M, Tancredi V, **D'Amico AG**, Pallone G, Palmieri M, Frank C, D'Arcangelo G. Effects of Different Continuous Aerobic Training Protocols in a Heterozygous Mouse Model of Niemann-Pick Type C Disease. *J. Funct. Morphol. Kinesiol.* 2020, 5(3), 53; <https://doi.org/10.3390/jfmk5030053>.
50. **D'Amico AG**, Maugeri G, Vanella L., Pittalà V, Reglodi D and D'Agata V. Multimodal Role of PACAP in Glioblastoma. *Brain Sci.* 2021;11(8):994. doi: 10.3390/brainsci11080994.
51. **D'Amico AG**, Maugeri G, Musumeci G, Reglodi D, D'Agata V. PACAP and NAP: Effect of Two Functionally Related Peptides in Diabetic Retinopathy. *J Mol Neurosci.* 2021 Jan 5. doi: 10.1007/s12031-020-01769-4.
52. Maugeri G, **D'Amico AG**, Saccone S, Federico C, Rasà DM, Caltabiano R, Broggi G, Giunta S, Musumeci G and D'Agata V. Effect of PACAP on Hypoxia-Induced Angiogenesis and Epithelial-Mesenchymal Transition in Glioblastoma. *Biomedicines* 2021, 9(8):965. doi: 10.3390/biomedicines9080965.
53. **D'Amico AG**, Maugeri G, Rasà DM, Reitano R, Saccone S, Federico C, Magro G and D'Agata V. Modulatory role of PACAP and VIP on HIFs expression in lung adenocarcinoma. *Peptides* 2021;146:170672. doi: 10.1016/j.peptides.2021.170672.
54. Romeo G, Ciaffaglione V, Amata E, Dichiara M, Calabrese L, Vanella L, Sorrenti V, Grosso S, **D'Amico AG**, D'Agata V, Intagliata S, Salerno L. Combination of Heme Oxygenase-1 Inhibition and Sigma Receptor Modulation for Anticancer Activity. *Molecules* 2021, 26, 3860. <https://doi.org/10.3390/molecules26133860>.
55. Fallica AN, Sorrenti V, **D'Amico AG**, Salerno L, Romeo G, Intagliata S, Consoli V, Floresta G, Rescifina A, D'Agata V, Vanella L and Pittalà V. Discovery of Novel Acetamide-Based Heme Oxygenase-1 Inhibitors with Potent In Vitro Antiproliferative Activity. *J Med Chem.* 2021;64(18):13373-13393. doi: 10.1021/acs.jmedchem.1c00633.
56. Sorrenti V, **D'Amico AG**, Barbagallo I, Consoli V, Grosso S, Vanella L. Tin Mesoporphyrin Selectively Reduces Non-Small-Cell Lung Cancer Cell Line A549 Proliferation by Interfering with Heme Oxygenase and Glutathione Systems. *Biomolecules*. 2021;11(6):917. doi: 10.3390/biom11060917.
57. Consoli V, Sorrenti V, Pittalà V, Greish K, **D'Amico AG**, Romeo G, Intagliata S, Salerno L, Vanella L. Heme Oxygenase Modulation Drives Ferroptosis in TNBC Cells. *Int J Mol Sci.* 2022 May 20;23(10):5709. doi: 10.3390/ijms23105709.

58. Maugeri G, **D'Amico AG**, D'Agata V. Emerging Roles of the Neurotrophic Peptides IGF-1 and PACAP in Amyotrophic Lateral Sclerosis. *Curr Protein Pept Sci.* 2022 Aug 5. doi: 10.2174/138920372366220805123251.
59. Maugeri G, **D'Amico AG**, Giunta S, Giallongo C, Tibullo D, Bucolo C, Saccone S, Federico C, Scollo D, Longo A, Avitabile T, Musumeci G, D'Agata V. Activity-Dependent Neuroprotective Protein (ADNP)-Derived Peptide (NAP) Counteracts UV-B Radiation-Induced ROS Formation in Corneal Epithelium. *Antioxidants (Basel)* 2022, 11(1):128. doi: 10.3390/antiox11010128.
60. Barone R, **D'Amico AG (co-first)**, Di Lorenzo N, Di Grado G, Matranga E, Spinoso G, Bavuso L, Marino Gammazza A, Rappa F, Bucchieri F, Cappello F, Piotrowska W, Spodnik JH, Spodnik E and Wójcik S. Anastomosis between Median and Musculocutaneous Nerve: Presentation of a Very Rare Anatomical Variation in Comparison to Classical Divisions. *ANATOMIA* Volume 1, Issue 1, 10.3390/anatomia1010007.
61. Ravalli S, Roggio F, Lauretta G, Di Rosa M, D'Amico AG, D'Agata V, Maugeri G, Musumeci G. Exploiting real-world data to monitor physical activity in patients with osteoarthritis: the opportunity of digital epidemiology. *Heliyon.* 2022 Feb 22;8(2):e08991. doi: 10.1016/j.heliyon.2022.e08991.
62. Maugeri G, D'Amico AG (co-first), D'Agata V. A Broad Overview on Pituitary Adenylate Cyclase-Activating Polypeptide Role in the Eye: Focus on Its Repairing Effect in Cornea. *Appl. Sci.* 2022, 12(2), 760; doi.org/10.3390/app12020760.
63. D'Agata V, D'Amico AG, Maugeri G, Bucolo C, Rossi S, Giunta S. Carnosol attenuates high glucose damage in human retinal endothelial cells through regulation of ERK/Nrf2/HO-1 pathway. *J Asian Nat Prod Res* 2022 Oct 27;1-13. doi: 10.1080/10286020.2022.2137022.
64. **D'Amico AG**, Maugeri G, Magri B, Giunta S, Saccone S, Federico C, Pricoco E, Broggi G, Caltabiano R, Musumeci G, Reglodi D, D'Agata V. Modulatory activity of ADNP on the hypoxia-induced angiogenic process in glioblastoma. *INTERNATIONAL JOURNAL OF ONCOLOGY* DOI: 10.3892/ijo.2022.5462
65. Maugeri G, D'Amico AG, Magri B, Musumeci G, D'Agata V. Activity-Dependent Neuroprotective Protein (ADNP): An Overview of Its Role in the Eye. *Int J Mol Sci.* 2022 Nov 7;23(21):13654. doi: 10.3390/ijms232113654.
66. Maugeri G, D'Amico AG, Magri B, Pricoco E, Giallongo C, Musumeci G, Bucolo C, Giunta S D'Agata V (2022). Pituitary Adenylate Cyclase-Activating Polypeptide Protects

- Corneal Epithelial Cells against UV-B-Induced Apoptosis via ROS/JNK Pathway Inhibition. APPLIED SCIENCES, vol. 12, ISSN: 2076-3417, doi: 10.3390/app12073435.
67. Lazzara G, Bruno F, Brancato D, Sturiale V, **D'Amico AG**, Miloto S, Pasbakhsh P, D'Agata V, Saccone S, Federico C. Biocompatibility analysis of halloysite clay nanotubes. Materials Letters (2023), doi: <https://doi.org/10.1016/j.matlet.2023.133852>.