

CURRICULUM VITAE ET STUDIORUM

PERSONAL DETAILS:

- *University Address:* Department of Biological, Chemical and Pharmaceutical Sciences and Technologies
Via Archirafi, 28 - 90123 - Palermo, Italia
Phone: + 39 091 23896803
FAX: +39 091 6169999
e-mail: mario.allegra@unipa.it
<http://www.unipa.it/persone/docenti/a/mario.allegra/en/index.html>
- *Place and date of birth:* Palermo, [REDACTED]

EDUCATION:

- 1991 – 1997 **Degree in Chemistry and Pharmaceutical Technologies** (110/110 summa cum laude),
School of Pharmacy – University of Palermo
- 1997 **“First Certificate in English”** (B),
University of Cambridge, United Kingdom
- 2002 **“Zertifikat Deutsch”** (Gut),
Goethe Institut, Germany
- 2015 **“PhD in Molecular Medicine”**
School of Medicine - University of Palermo

POST-LAUREAM QUALIFICATIONS:

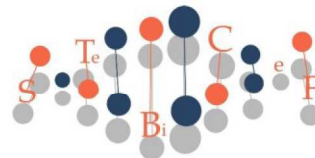
1998

- Research fellowship for a project titled: *“Differential role of Lipocortin 1 and chemokines on the outcome of ischemia-reperfusion injury”*. Funded by University of Palermo in collaboration with the Department of Biochemical Pharmacology, William Harvey Research Institute, **St. Bartholomew’s and the Royal London School of Medicine and Dentistry**, London, United Kingdom.

2000

- Research fellowship for a project titled: *“Evaluation of the prooxidants/antioxidants balance, peroxidative injury against LDL and risk of cardiovascular disease in thalassemia intermedia patients”*. Funded by **Assessorato della Sanità, Regione Sicilia**.

2000



- Research fellowship for a project titled: *"Kinetics of the oxidation of melatonin by myeloperoxidase: the interaction between melatonin and oxoferryl intermediates"*. Funded by the **European Science Foundation** in collaboration with the Department of Physical Chemistry, University of Palermo and the **Institute of Chemistry, University of Vienna**, Austria.

2001

- Research fellowship for a project titled: *"Kinetic studies of the oscillatory dynamics induced by melatonin in the peroxidase-oxidase reaction of myeloperoxidase"*. Funded by the **European Science Foundation** in collaboration with the Department of Physical Chemistry, University of Palermo and the **Institute of Chemistry, University of Vienna**, Austria.

2002

- *Senior Lecturer of Biochemistry* at the University of Palermo

2015

- *Associate Professor of Biochemistry* at the University of Palermo

LECTURING:

2001

- Invited speaker at "Round table on oxidative stress and cancer: insights on experimental and clinical perspectives". National Academy of Medicine; June 25-26, 2001, Cagliari, Italy.

2001

- Temporary Professor of Chemistry and Biochemistry at the School of Medicine and Dentistry, University of Palermo

2002-2014

- Contract Professor of Biochemistry at the University of Palermo.

2015...

- Associate Professor of Biochemistry at the University of Palermo.

2022-2023

- *Guest Lecturer* of Biochemistry at the University of Vienna.

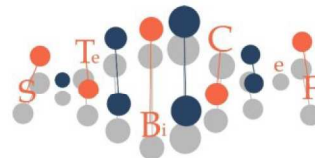
SCIENTIFIC ACTIVITY:

- *January 1993 - March 1997*

Experimental thesis concerning synthesis and characterisation of nanoparticulate drug delivery systems for the release and the targeting of antibiotic, antitumoral and antiviral drugs. Tutor: Prof. G. Giammona, Department of Chemistry and Pharmaceutical Technologies, **University of Palermo**

- *April 1997 - August 1998*

Study of the influence of supplementation with antioxidants on plasma and lipoproteins redox balance in β -thalassemia patients. Tutor: Prof. M.A. Livrea, Department of Pharmaceutical, Toxicological and Biological Chemistry, **University of Palermo**



- *September 1998 – August 1999*

Study of the differential role of chemokines and lipocortin 1 on the outcome of ischemia reperfusion injury. Tutor: Prof. M. Perretti. Department of Biochemical Pharmacology, William Harvey Research Institute, St. Bartholomew's and the Royal London School of Medicine and Dentistry, **University of London** UK.

- *November 2000 – December 2000*

Investigation of the mechanism of reaction of myeloperoxidase with melatonin. Tutor: Prof. C. Obinger, Institute of Chemistry, **University of Vienna**

- *February 2001 – March 2001*

Evaluation of the mechanism of reaction of myeloperoxidase, lactoperoxidase and horseradish peroxidase with indol derivatives. Tutor: Prof. C. Obinger, Institute of Chemistry, **University of Vienna**.

- *August 2001- September 2001*

Evaluation of the chemistry of melatonin's interaction with reactive species. Tutor: Prof. R.J. Reiter, Department of Cellular and Structural Biology, The **University of Texas** Health Science Center at San Antonio. USA.

- *February 2004*

Investigation of the mechanism of reaction of myeloperoxidase with betalains from Cactus Pear Fruits. Tutor: Prof. C. Obinger, Department of Chemistry, **University of Vienna**.

- *September 2004 – February 2005*

Evaluation of betalain effects on the neutrophil-mediated endothelial dysfunction. Tutor: Prof. M. Perretti, Department of Biochemical Pharmacology, Barts and The Royal School of Medicine and Dentistry, Queen Mary **University of London**, UK.

- *September 2005 – December 2005*

Investigation of betalain effects on the LPS-induced macrophages dysfunction. Tutor: Prof. M. Perretti, Department of Biochemical Pharmacology, Barts and The Royal School of Medicine and Dentistry, Queen Mary **University of London**, UK.

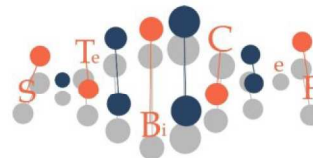
- *January 2007 – March 2007*

Evaluation of betalain effects on lymphocyte activation. Tutor: Dr. F. D'Acquisto, Department of Biochemical Pharmacology, Barts and The Royal School of Medicine and Dentistry, Queen Mary **University of London**, UK.

- *January 2010 – February 2010*

Evaluation of betalain interaction with lipid rafts. Tutor: Dr. M. Waugh, Department Cellular and Molecular Biology, **University College London**, UK.

- *February 2022*



Evaluation of the protective effects of indicaxanthin against insulin resistance at the *Institute for Diabetes and Cancer - Helmholtz Centre Munich, Germany*.

- *September 1999 - present*

Study of the interaction of melatonin with catalytic heme proteins: basic biochemical mechanisms and implications in inflammatory processes.

Study of the molecular mechanisms of the anti-inflammatory, anti-tumoral, neuroprotective and anti-dysmetabolic effects of betalains pigments from cactus pear fruits in *in vitro*, *ex vivo*, and *in vivo*.

LABORATORY TECHNIQUES MASTERED

- *Analytical Chemistry:*

High Pressure Liquid Chromatography (HPLC), UV-Visible spectrophotometry.

- *Physical Chemistry:*

Stopped-flow spectroscopy, Enzyme kinetics at pre-steady and steady state.

- *Biochemistry techniques:*

Protein and enzymatic assays, Enzyme-linked immunosorbent assay, Western Blotting, Real-Time, Reverse-Transcriptase, Polymerase Chain Reaction, Flow cytometry, Cell culturing.

INVITED SPEAKER AT INTERNATIONAL CONGRESSES:

2002

- “Second International Symposium on Antioxidants in nutrition and therapy: mechanisms in physiology-pathology-pharmacology”. October 2-4, 2002, **Bali, Indonesia**.

2005

- “International Symposium on Human Health Effects of Fruits and Vegetables”. August 17-20, 2005. **Quebec City, Canada**.

2006

- “IV International Congress on Pigments in Food”. October 9-12, 2006. **Stuttgart, Germany**.

2009

- “SFRR – Europe Meeting 2009”. August 26-29, 2009. **Rome, Italy**.

2012

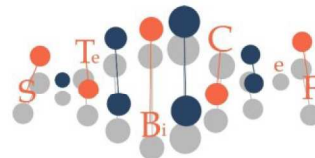
- “16th SFRRI – Biennial Meeting 2012”. September 6-9, 2012. **London, UK**.

2013

- “Workshop on oxidative stress, inflammation and metabolic diseases”. May 30, 2013. **Catania, Italy**.

2013

- “VIII International Congress on Cactus Pear and Cochineal”. October 28-31, 2013. **Palermo, Italy**.



2017

- “Workshop on new frontiers in biochemistry and molecular medicine”. May 25, 2017. **Catania, Italy.**

2022

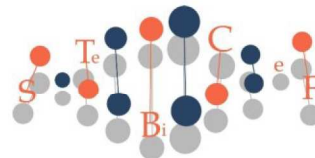
- “International Alzheimer’s Disease & Dementia Conference”. **Magnus Group Conferences.** Online Conference. June 15-16, 2022
- *International Conference on Diabetes, Metabolism and Endocrinology*. **Magnus Group Conferences.** Online Conference. October 17-18, 2022

2023

- “The First International Conference on Antioxidants: Sources, Methods, Health Benefits and Industrial Applications”. **Antioxidants, MDPI.** May 10-12, 2023, **Barcelona, Spain.**
- “2nd International Alzheimer’s Disease & Dementia Conference”. **Magnus Group Conferences.** June 16-17, 2023, **Rome, Italy.**

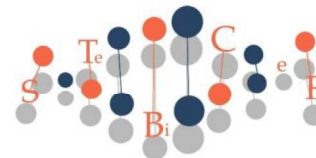
FULL PAPERS

1. Restivo, I., Basilicata, M.G., Giardina, I.C., Massaro, A., Pepe, G., Salviati, E., Pecoraro, C., Carbone, D., Cascioferro, S., Parrino, B., Diana, P., Ostacolo, C., Campiglia, P., Attanzio, A., D’Anneo, A., Pojero, F., Allegra, M., Tesoriere, L.
A Combination of Polymethoxyflavones from Citrus sinensis and Prenylflavonoids from Humulus lupulus Counteracts IL-1 β -Induced Differentiated Caco-2 Cells Dysfunction via a Modulation of NF- κ B/Nrf2 Activation
(2023) *Antioxidants*, 12 (8), art. no. 1621, .
2. Pojero, F., Gervasi, F., Fiore, S.D., Aiello, A., Bonacci, S., Caldarella, R., Attanzio, A., Candore, G., Caruso, C., Ligotti, M.E., Procopio, A., Restivo, I., Tesoriere, L., Allegra, M., Accardi, G.
Anti-Inflammatory Effects of Nutritionally Relevant Concentrations of Oleuropein and Hydroxytyrosol on Peripheral Blood Mononuclear Cells: An Age-Related Analysis
(2023) *International Journal of Molecular Sciences*, 24 (13), art. no. 11029, .
3. Notaro, A., Lauricella, M., Di Liberto, D., Emanuele, S., Giuliano, M., Attanzio, A., Tesoriere, L., Carlisi, D., Allegra, M., De Blasio, A., Calvaruso, G., D’Anneo, A.
A Deadly Liaison between Oxidative Injury and p53 Drives Methyl-Gallate-Induced Autophagy and Apoptosis in HCT116 Colon Cancer Cells
(2023) *Antioxidants*, 12 (6), art. no. 1292, .
4. Celesia, A., Franzò, M., Di Liberto, D., Lauricella, M., Carlisi, D., D’Anneo, A., Notaro, A., Allegra, M., Giuliano, M., Emanuele, S.
Oncogenic BRAF and p53 Interplay in Melanoma Cells and the Effects of the HDAC Inhibitor ITF2357 (Givinostat)
(2023) *International Journal of Molecular Sciences*, 24 (11), art. no. 9148, .
5. Gambino, G., Giglia, G., Allegra, M., Di Liberto, V., Zummo, F.P., Rappa, F., Restivo, I., Vetrano, F., Saiano, F., Palazzolo, E., Avellone, G., Ferraro, G., Sardo, P., Di Majo, D.



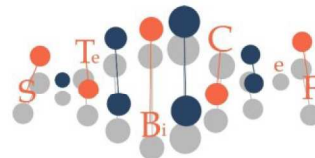
“Golden” Tomato Consumption Ameliorates Metabolic Syndrome: A Focus on the Redox Balance in the High-Fat-Diet-Fed Rat
(2023) Antioxidants, 12 (5), art. no. 1121, .

6. Angellotti, G., Di Prima, G., D’Agostino, F., Peri, E., Tricoli, M.R., Belfiore, E., Allegra, M., Cancemi, P., De Caro, V.
Multicomponent Antibiofilm Lipid Nanoparticles as Novel Platform to Ameliorate Resveratrol Properties: Preliminary Outcomes on Fibroblast Proliferation and Migration
(2023) International Journal of Molecular Sciences, 24 (9), art. no. 8382, .
7. Terzo, S., Calvi, P., Nuzzo, D., Picone, P., Allegra, M., Mulè, F., Amato, A.
Long-Term Ingestion of Sicilian Black Bee Chestnut Honey and/or D-Limonene Counteracts Brain Damage Induced by High Fat-Diet in Obese Mice
(2023) International Journal of Molecular Sciences, 24 (4), art. no. 3467, .
8. Restivo, I., Attanzio, A., Tesoriere, L., Allegra, M., Garcia-Llatas, G., Cilla, A.
A Mixture of Dietary Plant Sterols at Nutritional Relevant Serum Concentration Inhibits Extrinsic Pathway of Eryptosis Induced by Cigarette Smoke Extract
(2023) International Journal of Molecular Sciences, 24 (2), art. no. 1264, .
9. Pojero, F., Aiello, A., Gervasi, F., Caruso, C., Ligotti, M.E., Calabrò, A., Procopio, A., Candore, G., Accardi, G., Allegra, M.
Effects of Oleuropein and Hydroxytyrosol on Inflammatory Mediators: Consequences on Inflammaging
(2023) International Journal of Molecular Sciences, 24 (1), art. no. 380, .
10. Di Prima, G., Belfiore, E., Migliore, M., Scarpaci, A.G., Angellotti, G., Restivo, I., Allegra, M., Arizza, V., De Caro, V.
Green Extraction of Polyphenols from Waste Bentonite to Produce Functional Antioxidant Excipients for Cosmetic and Pharmaceutical Purposes: A Waste-to-Market Approach
(2022) Antioxidants, 11 (12), art. no. 2493, .
11. Attanzio, A., Restivo, I., Tutone, M., Tesoriere, L., Allegra, M., Livrea, M.A.
Redox Properties, Bioactivity and Health Effects of Indicaxanthin, a Bioavailable Phytochemical from *Opuntia ficus indica*, L.: A Critical Review of Accumulated Evidence and Perspectives
(2022) Antioxidants, 11 (12), art. no. 2364, .
12. Restivo, I., Attanzio, A., Giardina, I.C., Di Gaudio, F., Tesoriere, L., Allegra, M.
Cigarette Smoke Extract Induces p38 MAPK-Initiated, Fas-Mediated Eryptosis
(2022) International Journal of Molecular Sciences, 23 (23), art. no. 14730, .
13. Gambino, G., Brighina, F., Allegra, M., Marrale, M., Collura, G., Gagliardo, C., Attanzio, A., Tesoriere, L., Di Majo, D., Ferraro, G., Sardo, P., Giglia, G.
Modulation of Human Motor Cortical Excitability and Plasticity by *Opuntia Ficus Indica* Fruit Consumption: Evidence from a Preliminary Study through Non-Invasive Brain Stimulation
(2022) Nutrients, 14 (22), art. no. 4915, .
14. Restivo, I., Attanzio, A., Tesoriere, L., Allegra, M., Garcia-Llatas, G., Cilla, A.
Anti-Eryptotic Activity of Food-Derived Phytochemicals and Natural Compounds

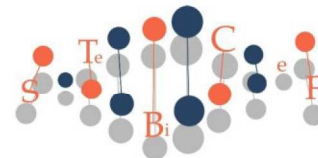


(2022) International Journal of Molecular Sciences, 23 (6), art. no. 3019, .

15. Culetta, G., Allegra, M., Almerico, A.M., Restivo, I., Tutone, M.
In Silico Design, Synthesis and Biological Evaluation of Anticancer Arylsulfonamide Endowed with Anti-Telomerase Activity
(2022) Pharmaceuticals, 15 (1), art. no. 82, .
16. Terzo, S., Attanzio, A., Calvi, P., Mulè, F., Tesoriere, L., Allegra, M., Amato, A.
Indicaxanthin from *Opuntia ficus-indica* fruit ameliorates glucose dysmetabolism and counteracts insulin resistance in high-fat-diet-fed mice
(2022) Antioxidants, 11 (1), art. no. 80, .
17. Allegra, M.
Redox systems, oxidative stress, and antioxidant defences in health and disease
(2021) Antioxidants, 10 (12), art. no. 1955, .
18. Allegra, M., Tutone, M., Tesoriere, L., Attanzio, A., Culetta, G., Almerico, A.M.
Evaluation of the IKK β Binding of Indicaxanthin by Induced-Fit Docking, Binding Pose Metadynamics, and Molecular Dynamics
(2021) Frontiers in Pharmacology, 12, art. no. 701568, .
19. Allegra, M.
Redox regulation of metabolic syndrome: From biochemical mechanisms to nutritional interventions
(2021) Antioxidants, 10 (5), art. no. 638, .
20. Campisi, A., Raciti, G., Sposito, G., Grasso, R., Chiacchio, M.A., Spatuzza, M., Attanzio, A., Chiacchio, U., Tesoriere, L., Allegra, M., Pellitteri, R.
Amyloid-beta induces different expression pattern of tissue transglutaminase and its isoforms on olfactory ensheathing cells: Modulatory effect of indicaxanthin
(2021) International Journal of Molecular Sciences, 22 (7), art. no. 3388, .
21. De Cicco, P., Busà, R., Ercolano, G., Formisano, C., Allegra, M., Taglialatela-Scafati, O., Ianaro, A.
Inhibitory effects of cynaropicrin on human melanoma progression by targeting MAPK, NF- κ B, and Nrf-2 signaling pathways in vitro
(2021) Phytotherapy Research, 35 (3), pp. 1432-1442.
22. Restivo, I., Attanzio, A., Tesoriere, L., Allegra, M.
Suicidal erythrocyte death in metabolic syndrome
(2021) Antioxidants, 10 (2), art. no. 154, pp. 1-13.
23. Restivo, I., Tesoriere, L., Frazzitta, A., Livrea, M.A., Attanzio, A., Allegra, M.
Anti-Proliferative Activity of A Hydrophilic Extract of Manna from *Fraxinus angustifolia* Vahl through Mitochondrial Pathway-Mediated Apoptosis and Cell Cycle Arrest in Human Colon Cancer Cells
(2020) Molecules, 25 (21), art. no. 5055, .

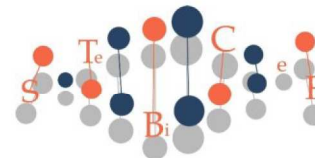


24. Allegra, M., D'anneo, A., Frazzitta, A., Restivo, I., Livrea, M.A., Attanzio, A., Tesoriere, L.
The phytochemical indicaxanthin synergistically enhances cisplatin-induced apoptosis in hela cells via oxidative stress-dependent p53/p21waf1 axis
(2020) *Biomolecules*, 10 (7), art. no. 994, pp. 1-16.
25. Allegra, M., Restivo, I., Fucarino, A., Pitruzzella, A., Vasto, S., Livrea, M.A., Tesoriere, L., Attanzio, A.
Proeryptotic activity of 4-hydroxynonenal: A new potential physiopathological role for lipid peroxidation products
(2020) *Biomolecules*, 10 (5), art. no. 770, .
26. Allegra, M.
Antioxidant and anti-inflammatory properties of plants extract
(2019) *Antioxidants*, 8 (11), art. no. 549, .
27. Attanzio, A., D'Anneo, A., Pappalardo, F., Bonina, F.P., Livrea, M.A., Allegra, M., Tesoriere, L.
Phenolic composition of hydrophilic extract of manna from sicilian *Fraxinus angustifolia* vahl and its reducing, antioxidant and anti-inflammatory activity in vitro
(2019) *Antioxidants*, 8 (10), art. no. 494, .
28. Allegra, M., Tutone, M., Tesoriere, L., Almerico, A.M., Culletta, G., Livrea, M.A., Attanzio, A.
Indicaxanthin, a multi-target natural compound from *Opuntia ficus-indica* fruit: From its poly-pharmacological effects to biochemical mechanisms and molecular modelling studies
(2019) *European Journal of Medicinal Chemistry*, 179, pp. 753-764.
29. Attanzio, A., Diana, P., Barraja, P., Carbone, A., Spanò, V., Parrino, B., Cascioferro, S.M., Allegra, M., Cirrincione, G., Tesoriere, L., Montalbano, A.
Quality, functional and sensory evaluation of pasta fortified with extracts from *Opuntia ficus-indica* cladodes
(2019) *Journal of the Science of Food and Agriculture*, 99 (9), pp. 4242-4247.
30. Attanzio, A., Frazzitta, A., Cilla, A., Livrea, M.A., Tesoriere, L., Allegra, M.
7-keto-cholesterol and cholestan-3beta, 5alpha, 6beta-Triol induce eryptosis through distinct pathways leading to NADPH oxidase and nitric oxide synthase activation
(2019) *Cellular Physiology and Biochemistry*, 53 (6), pp. 933-947.
31. Attanzio, A., Frazzitta, A., Busa, R., Tesoriere, L., Livrea, M.A., Allegra, M.
Indicaxanthin from *Opuntia ficus indica* (L. Mill) Inhibits Oxidized LDL-Mediated Human Endothelial Cell Dysfunction through Inhibition of NF- κ B Activation
(2019) *Oxidative Medicine and Cellular Longevity*, 2019, art. no. 3457846, .
32. Attanzio, A., Frazzitta, A., Vasto, S., Tesoriere, L., Pintaudi, A.M., Livrea, M.A., Cilla, A., Allegra, M.
Increased eryptosis in smokers is associated with the antioxidant status and C-reactive protein levels
(2019) *Toxicology*, 411, pp. 43-48.
33. Allegra, M., De Cicco, P., Ercolano, G., Attanzio, A., Busà, R., Cirino, G., Tesoriere, L., Livrea, M.A., Ianaro, A.



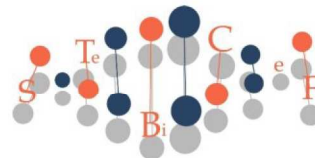
Indicaxanthin from *Opuntia Ficus Indica* (L. Mill) impairs melanoma cell proliferation, invasiveness, and tumor progression
(2018) *Phytomedicine*, 50, pp. 19-24.

34. Attanzio, A., Tesoriere, L., Vasto, S., Pintaudi, A.M., Livrea, M.A., Allegra, M.
Short-term cactus pear [*Opuntia ficus-indica* (L.) mill] fruit supplementation ameliorates the inflammatory profile and is associated with improved antioxidant status among healthy humans
(2018) *Food and Nutrition Research*, 62, art. no. 1262, .
35. Fiorica, C., Palumbo, F.S., Pitarresi, G., Allegra, M., Puleio, R., Giammona, G.
Hyaluronic acid and α -elastin based hydrogel for three dimensional culture of vascular endothelial cells
(2018) *Journal of Drug Delivery Science and Technology*, 46, pp. 28-33.
36. Gambino, G., Allegra, M., Sardo, P., Attanzio, A., Tesoriere, L., Livrea, M.A., Ferraro, G., Carletti, F.
Brain distribution and modulation of neuronal excitability by indicaxanthin from *Opuntia ficus indica* administered at nutritionally-relevant amounts
(2018) *Frontiers in Aging Neuroscience*, 10 (MAY), art. no. 133, .
37. Attanzio, A., Tesoriere, L., Allegra, M., Livrea, M.A.
Monofloral honeys by Sicilian black honeybee (*Apis mellifera* ssp. *sicula*) have high reducing power and antioxidant capacity
(2016) *Heliyon*, 2 (11), art. no. e00193, .
38. Allegra, M., Carletti, F., Gambino, G., Tutone, M., Attanzio, A., Tesoriere, L., Ferraro, G., Sardo, P., Almerico, A.M., Livrea, M.A.
Indicaxanthin from *Opuntia ficus-indica* crosses the blood-brain barrier and modulates neuronal bioelectric activity in rat hippocampus at dietary-consistent amounts
(2015) *Journal of Agricultural and Food Chemistry*, 63 (33), pp. 7353-7360.
39. Tesoriere, L., Attanzio, A., Allegra, M., Livrea, M.A.
Dietary indicaxanthin from cactus pear (*Opuntia ficus-indica* L. Mill) fruit prevents eryptosis induced by oxysterols in a hypercholesterolaemia-relevant proportion and adhesion of human erythrocytes to endothelial cell layers
(2015) *British Journal of Nutrition*, 114 (3), pp. 368-375.
40. Allegra, M., Tesoriere, L., Livrea, M.A., Ianaro, A., Panza, E.
Cactus pear fruit extract exerts anti-inflammatory effects in carrageenin-induced rat pleurisy
(2015) *Acta Horticulturae*, 1067, pp. 19-25.
41. Di Rosa, L., Allegra, M., Aleo, D., Attanzio, A., Tesoriere, L., Gentile, C., Saita, M.G., Livrea, M.A.
Valutazione degli effetti antiossidanti del Resolvis Omega™ in un modello di disfunzione corneale in vitro
(2015) *Journal of Biological Research (Italy)*, 88 (1), p. 23.
42. Schifano, I., Gentile, C., Naselli, F., Sposito, L., Allegra, M., Tesoriere, L., Livrea, M.A., Caradonna, F.



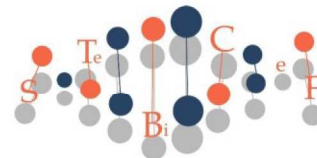
IL-1 β induces DNA demethylation, at genome level and in specific CpG sites of IL-6 and IL-8 genes in human intestinal epithelial cells
(2015) Journal of Biological Research (Italy), 88 (1), p. 36.

43. Tesoriere, L., Attanzio, A., Allegra, M., Cilla, A., Gentile, C., Livrea, M.A.
Oxysterol mixture in hypercholesterolemia-relevant proportion causes oxidative stress-dependent eryptosis
(2014) Cellular Physiology and Biochemistry, 34 (4), pp. 1075-1089.
44. Tesoriere, L., Attanzio, A., Allegra, M., Gentile, C., Livrea, M.A.
Indicaxanthin inhibits NADPH oxidase (NOX)-1 activation and NF- κ B-dependent release of inflammatory mediators and prevents the increase of epithelial permeability in IL-1 β -exposed Caco-2 cells
(2014) British Journal of Nutrition, 111 (3), pp. 415-423.
45. Allegra, M., Ianaro, A., Tersigni, M., Panza, E., Tesoriere, L., Livrea, M.A.
Indicaxanthin from cactus pear fruit exerts anti-inflammatory effects in carrageenin-induced rat pleurisy
(2014) Journal of Nutrition, 144 (2), pp. 185-192.
46. Allegra, M., D'Acquisto, F., Tesoriere, L., Attanzio, A., Livrea, M.A.
Pro-oxidant activity of indicaxanthin from *Opuntia ficus indica* modulates arachidonate metabolism and prostaglandin synthesis through lipid peroxide production in LPS-stimulated RAW 264.7 macrophages
(2014) Redox Biology, 2 (1), pp. 892-900.
47. Tesoriere, L., Attanzio, A., Allegra, M., Gentile, C., Livrea, M.A.
Phytochemical indicaxanthin suppresses 7-ketocholesterol-induced THP-1 cell apoptosis by preventing cytosolic Ca²⁺ increase and oxidative stress
(2013) British Journal of Nutrition, 110 (2), pp. 230-240.
48. Tesoriere, L., Gentile, C., Angileri, F., Attanzio, A., Tutone, M., Allegra, M., Livrea, M.A.
Trans-epithelial transport of the betalain pigments indicaxanthin and betanin across Caco-2 cell monolayers and influence of food matrix
(2013) European Journal of Nutrition, 52 (3), pp. 1077-1087.
49. Gentile, C., Allegra, M., Angileri, F., Pintaudi, A.M., Livrea, M.A., Tesoriere, L.
Polymeric proanthocyanidins from Sicilian pistachio (*Pistacia vera* L.) nut extract inhibit lipopolysaccharide-induced inflammatory response in RAW 264.7 cells
(2012) European Journal of Nutrition, 51 (3), pp. 353-363.
50. Allegra, M., D'Acquisto, F., Tesoriere, L., Livrea, M.A., Perretti, M.
Cross-talk between minimally primed HL-60 cells and resting HUVEC reveals a crucial role for adhesion over extracellularly released oxidants
(2011) Biochemical Pharmacology, 81 (3), pp. 396-401.
51. Liveri, M.L.T., Sciascia, L., Allegra, M., Tesoriere, L., Livrea, M.A.



Partition of indicaxanthin in membrane biomimetic systems. A kinetic and modeling approach (2009) *Journal of Agricultural and Food Chemistry*, 57 (22), pp. 10959-10963.

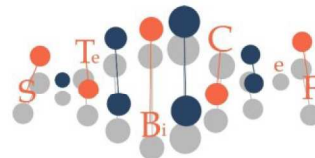
52. Tesoriere, L., Allegra, M., Gentile, C., Livrea, M.A.
Betacyanins as phenol antioxidants. Chemistry and mechanistic aspects of the lipoperoxyl radical-scavenging activity in solution and liposomes
(2009) *Free Radical Research*, 43 (8), pp. 706-717.
53. Tesoriere, L., Allegra, M., Butera, D., Gentile, C., Livrea, M.A.
Kinetics of the lipoperoxyl radical-scavenging activity of indicaxanthin in solution and unilamellar liposomes
(2007) *Free Radical Research*, 41 (2), pp. 226-233.
54. Allegra, M., Tesoriere, L., Livrea, M.
Betanin inhibits the myeloperoxidase/nitrite-induced oxidation of human low-density lipoproteins
(2007) *Free Radical Research*, 41 (3), pp. 335-341.
55. Gentile, C., Tesoriere, L., Butera, D., Fazzari, M., Monastero, M., Allegra, M., Livrea, M.A.
Antioxidant activity of Sicilian pistachio (*Pistacia vera* L Var. Bronte) nut extract and its bioactive components
(2007) *Journal of Agricultural and Food Chemistry*, 55 (3), pp. 643-648.
56. Tesoriere, L., Allegra, M., Butera, D., Gentile, C., Livrea, M.A.
Cytoprotective effects of the antioxidant phytochemical indicaxanthin in β -thalassemia red blood cells
(2006) *Free Radical Research*, 40 (7), pp. 753-761.
57. Tesoriere, L., Fazzari, M., Allegra, M., Livrea, M.A.
Biothiols, taurine, and lipid-soluble antioxidants in the edible pulp of sicilian cactus pear (*Opuntia ficus-indica*) fruits and changes of bioactive juice components upon industrial processing
(2005) *Journal of Agricultural and Food Chemistry*, 53 (20), pp. 7851-7855.
58. Allegra, M., Furtmüller, P.G., Jantschko, W., Zederbauer, M., Tesoriere, L., Livrea, M.A., Obinger, C.
Mechanism of interaction of betanin and indicaxanthin with human myeloperoxidase and hypochlorous acid
(2005) *Biochemical and Biophysical Research Communications*, 332 (3), pp. 837-844.
59. Tesoriere, L., Butera, D., Allegra, M., Fazzari, M., Livrea, M.A.
Distribution of betalain pigments in red blood cells after consumption of cactus pear fruits and increased resistance of the cells to ex vivo induced oxidative hemolysis in humans
(2005) *Journal of Agricultural and Food Chemistry*, 53 (4), pp. 1266-1270.
60. Tesoriere, L., Allegra, M., Butera, D., Livrea, M.A.



Absorption, excretion, and distribution of dietary antioxidant betalains in LDLs: Potential health effects of betalains in humans

(2004) American Journal of Clinical Nutrition, 80 (4), pp. 941-945.

61. Tesoriere, L., Butera, D., Pintaudi, A.M., Allegra, M., Livrea, M.A.
Supplementation with cactus pear (*Opuntia ficus-indica*) fruit decreases oxidative stress in healthy humans: A comparative study with vitamin C
(2004) American Journal of Clinical Nutrition, 80 (2), pp. 391-395.
62. Gentile, C., Tesoriere, L., Allegra, M., Livrea, M.A., D'Alessio, P.
Antioxidant betalains from cactus pear (*Opuntia ficus-indica*) inhibit endothelial ICAM-1 expression
(2004) Annals of the New York Academy of Sciences, 1028, pp. 481-486.
63. Tesoriere, L., Butera, D., D'Arpa, D., Di Gaudio, F., Allegra, M., Gentile, C., Livrea, M.A.
Increased resistance to oxidation of betalain-enriched human low density lipoproteins
(2003) Free Radical Research, 37 (6), pp. 689-696.
64. Allegra, M., Reiter, R.J., Tan, D.-X., Gentile, C., Tesoriere, L., Livrea, M.A.
The chemistry of melatonin's interaction with reactive species
(2003) Journal of Pineal Research, 34 (1), pp. 1-10.
65. Butera, D., Tesoriere, L., Di Gaudio, F., Bongiorno, A., Allegra, M., Pintaudi, A.M., Kohen, R., Livrea, M.A.
Antioxidant activities of sicilian prickly pear (*Opuntia ficus indica*) fruit extracts and reducing properties of its betalains: Betanin and indicaxanthin
(2002) Journal of Agricultural and Food Chemistry, 50 (23), pp. 6895-6901.
66. Tesoriere, L., D'Arpa, D., Butera, D., Pintaudi, A.M., Allegra, M., Livrea, M.A.
Exposure to malondialdehyde induces an early redox unbalance preceding membrane toxicity in human erythrocytes
(2002) Free Radical Research, 36 (1), pp. 89-97.
67. Allegra, M., Gentile, C., Tesoriere, L., Livrea, M.A.
Protective effect of melatonin against cytotoxic actions of malondialdehyde: An in vitro study on human erythrocytes
(2002) Journal of Pineal Research, 32 (3), pp. 187-193.
68. Jantschko, W., Furtmüller, P.G., Allegra, M., Livrea, M.A., Jakopitsch, C., Regelsberger, G., Obinger, C.
Redox intermediates of plant and mammalian peroxidases: A comparative transient-kinetic study of their reactivity toward indole derivatives
(2002) Archives of Biochemistry and Biophysics, 398 (1), pp. 12-22.
69. Tan, D.X., Reiter, R.J., Manchester, L.C., Yan, M.T., El-Sawi, M., Sainz, R.M., Mayo, J.C., Kohen, R., Allegra, M., Hardeland, R.
Chemical and physical properties and potential mechanisms: melatonin as a broad spectrum antioxidant and free radical scavenger.



(2002) Current topics in medicinal chemistry, 2 (2), pp. 181-197.

70. Reiter, R.J., Tan, D.-X., Allegra, M.

Melatonin: Reducing molecular pathology and dysfunction due to free radicals and associated reactants

(2002) Neuroendocrinology Letters, 23 (SUPPL. 1), pp. 3-8.

71. Tesoriere, L., Allegra, M., D'Arpa, D., Butera, D., Livrea, M.A.

Reaction of melatonin with hemoglobin-derived oxoferryl radicals and inhibition of the hydroperoxide-induced hemoglobin denaturation in red blood cells

(2001) Journal of Pineal Research, 31 (2), pp. 114-119.

72. Allcock, G.H., Allegra, M., Flower, R.J., Perretti, M.

Neutrophil accumulation induced by bacterial lipopolysaccharide: Effects of dexamethasone and annexin 1

(2001) Clinical and Experimental Immunology, 123 (1), pp. 62-67.

73. Tesoriere, L., Avellone, G., Ceraulo, L., D'Arpa, D., Allegra, M., Livrea, M.A.

Oxidation of melatonin by oxoferryl hemoglobin: A mechanistic study

(2001) Free Radical Research, 35 (6), pp. 633-642.

74. Tesoriere, L., D'Arpa, D., Butera, D., Allegra, M., Renda, D., Maggio, A., Bongiorno, A., Livrea, M.A.

Oral supplements of vitamin E improve measures of oxidative stress in plasma and reduce oxidative damage to LDL and erythrocytes in β -thalassemia intermedia patients

(2001) Free Radical Research, 34 (5), pp. 529-540.

75. Olsen, L.F., Lunding, A., Lauritsen, F.R., Allegra, M.

Melatonin activates the peroxidase-oxidase reaction and promotes oscillations

(2001) Biochemical and Biophysical Research Communications, 284 (4), pp. 1071-1076.

76. Allegra, M., Furtmüller, P.G., Regelsberger, G., Turco-Liveri, M.L., Tesoriere, L., Perretti, M., Livrea, M.A., Obinger, C.

Mechanism of reaction of melatonin with human myeloperoxidase

(2001) Biochemical and Biophysical Research Communications, 282 (2), pp. 380-386.

METRICS

- 76 Publications on Scopus
- 67 Abstracts for National and International Congresses
- Total IF: 403.3
- Mean IF: 5.3
- Total citations: 4861
- Mean citations: 63.96
- h-index: 31