

EUROPEAN  
CURRICULUM VITAE  
FORMAT



PERSONAL INFORMATION

Name **ANTONELLA D'ANNEO**  
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Nationality **Italian**

WORK EXPERIENCE

• Dates 1 October 2018 – present.  
• Name and address of the employer University of Palermo, Department of Sciences and Biological, Chemical and Pharmaceutical Technologies, via del Vespro 129, Palermo  
• Occupation or position held **Associate Professor in Biochemistry (SSD BIO/10, SC 05/E1- General Biochemistry)**  
• Main activities and responsibilities Teaching classes of biochemistry, biochemistry for medical laboratory and serve as mentor of PhD and students of the Bs in Biological Sciences.

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• Dates December 2004 – September 2018  
• Name and address of the employer University of Palermo, Department of Sciences and Biological, Chemical and Pharmaceutical Technologies, via del Vespro 129, Palermo  
• Occupation or position held **Assistant Professor in Biochemistry (SSD BIO/10, SC 05/E1- General Biochemistry)**  
• Main activities and responsibilities Teaching classes of biochemical methods, biochemistry and serve as mentor of PhD and students of the MSc in Molecular and Health Biology.

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• Dates November 2020 – 2029  
• Organization Ministero dell'Università e della Ricerca (MUR)  
• Occupation or position held Acquisition of the **National Scientific Habilitation for full Professor in Biochemistry (SC 05/E1- General Biochemistry)**.

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• Dates March 2017 – 2026  
• Organization Ministero dell'Università e della Ricerca (MUR)  
• Occupation or position held Acquisition of the **National Scientific Habilitation for Associate Professor in Biochemistry (SC 05/E1- General Biochemistry)**.

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EDUCATION AND TRAINING

• Dates (from - to) 12-13 November 2015.  
• Name and type of organisation providing education and training Dipartimento di Discipline Chirurgiche ed Oncologiche, University of Palermo  
• Principal subjects/occupational skills covered **Course of MICROSCOPY 2.0 SUPER RESOLUTION NANOSCOPY AND CELL LIVE MICROSCOPY**

• Dates (from - to) 29 July 2003 -12 August 2003.  
• Name and type of organisation providing education and training Laboratorio di Oncogenesi Molecolare (supervisor: Dott. Silvia Soddu), Dipartimento di Oncologia Sperimentale, Istituto Regina Elena (Rome).

- Title of qualification awarded **Research stage**
- Dates (from - to) 8-10 May 2002
- Name and type of organisation providing education and training Dipartimento di Fisiopatologia Clinica, Florence
- Title of qualification awarded **2 COURSE of QUANTITATIVE PCR**

- Dates (from - to) 9 February 2005.
- Name and type of organisation providing education and training Dipartimento di Biologia Cellulare e dello Sviluppo, University of Palermo
- Title of qualification awarded **PhD in Experimental Oncobiology**, University of Palermo.

- Dates (from - to) September 2000 - June 2001
- Name and type of organisation providing education and training Institute of Biological Chemistry (mentors Prof Giovanni Tesoriere and Prof Renza Vento), University of Palermo
- Title of qualification awarded **Post-degree traineeship program**

- Dates (from - to) July 18th 2000
- Name and type of organisation providing education and training University of Palermo
- Title of qualification awarded **5 years Master's degree program in Biological Sciences with a grade of 110/110 cum laude**

**FOREING RESEARCH EXPERIENCE**

- Dates 24 October 2005 – 29 March 2006
- Name and address of the employer Rangos Research Center, Prof. Nick Giannoukakis's Lab (Children's Hospital, School of Medicine, University of Pittsburgh, PA-USA).
- Occupation or position held **Visiting Scientist**

- Dates 10 October 2006 – 11 April 2007
- Name and address of the employer Rangos Research Center, Prof. Massimo Trucco's Lab (Children's Hospital, School of Medicine, University of Pittsburgh, PA-USA).
- Responsible for the project Gene therapy approach for tolerization of diabetic patients to pancreatic islet transplantation
- Occupation or position held **Visiting Scientist**

MOTHER TONGUE **ITALIAN**

OTHER LANGUAGES **ENGLISH (LEVEL B2, IELTS CERTIFICATION (released by British Council of Naples, module Academic, 11.07.2015 )**

## **PERSONAL SKILLS AND COMPETENCES**

*Acquired in the course of life and career but not necessarily covered by formal certificates and diplomas.*

She began her studies on the field of tumor biology, cell death mechanisms and biochemical pathways that can be activated in tumor cells. She has published over 50 peer-reviewed articles and over 50 abstracts in national and international conferences.

Her scientific production is characterized by manuscripts on researches performed to elucidate the mode of action of apoptotic drugs and the possible synergistic interactions when drugs are employed in combination studies. To complement the graduate training in biochemistry, Prof. D'Anneo obtained, as visiting scientist, a training at Rangos Research Center (Children's Hospital, School of Medicine, University of Pittsburgh, PA-USA). During this stage (2005-2007), she was directly involved in the study of Adenoviral and EIA (Equine infectious anemia) viruses in blocking cytokine-induced apoptosis in both human and murine pancreatic  $\beta$  islets. She also took part in a research project concerning gene therapy approaches to determine tolerization of diabetic patients against the cells of islet donor.

During her career, she had acquired expertise in the study of many different types of cell death (apoptosis, necrosis, necroptosis, autophagy and anoikis) activable in vitro tumor systems and the role of oxidative stress in cancer. Prof D'Anneo made significant contributions to researches on combinations of sesquiterpene lactones (parthenolide), HDAC inhibitors (SAHA, Trichostatin A and sodium butyrate), proteasome inhibitors (MG132, lactacystin and Velcade) and recombinant Trail in vitro studies for the treatment of many different cancer systems. She is also the co-inventor of a patent for combined therapies for the treatment of liver tumors.

The technical skills acquired in this area have been applied more recently in a study aimed at identifying the nutraceutical potential (antitumor, anti-inflammatory and antioxidant) of phytochemicals extracted from Sicilian subtropical fruits (mangoes and lychees). In particular, these studies intend to exploit the skills acquired in the study of the mechanisms of programmed cell death and transfer them to the understanding of the putative antitumor action carried out by phytochemicals present in the different fractions of these fruits.

## **PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIP**

2002-2005. Young member of Italian Society of Biochemistry and Molecular Biology (SIB).

2012-present. Member of Italian Society of Biochemistry and Molecular Biology (SIB).

2014-2018. Member of Italian Association of Cell Cultures (ONLUS - AICC).

2021-2022. Member of Italian Society of Experimental Biology.

## **PATENT**

Composizioni farmaceutiche per il trattamento di tumori epatici. Patented by: Giovanni Tesoriere, Marianna Lauricella, Sonia Emanuele, Antonella D'Anneo. (Ns. Rif.: 9514PTIT. Date of deposit: 07/05/2009).

## **SCIENTIFIC AND PROFESSIONAL - ACTIVITIES**

2016-present. Associate Editor in Chief of Cancer Management and Research

2015, 2016, 2018. Editorial Board member of International Journal of Clinical Pharmacology & Pharmacotherapy

2019-present. Editor of Diseases, section Oncology

2020-present. Reviewer Board member of Cancers

2020. Temporary Associated Editor of Frontiers in Oncology

2021-present. Guest Editor of International Journal of Molecular Sciences .

2021-present. Member of the Editorial Board of Molecular Medicine Reports

2022. Member of the Editorial Board of Experimental and Therapeutic Medicine

2022. Guest Editor of Antioxidants.

## **JOURNAL REFEREE ACTIVITY**

Molecular and Cellular Biochemistry (2010); Gastrointestinal Cancer: Targets and Therapy (2011); Journal of Experimental Pharmacology (2012, 2016); Cancer Management and Research (2011, 2012, 2016, 2017); OncoTargets and Therapy (2014, 2016, 2017); Research and Reports in Biology (2015); Advances in Medical Sciences (Elsevier, 2015, 2016, 2017); PLoS One (2015, 2016; 2020); Journal of US-China Medical Science (2015, 2016); Drug Design, Development and Therapy (2016); Spandidos Publications (2016); Food and Chemical Toxicology (2016); Journal of Cellular Physiology (2017; 2019); Scientific Reports (2017); Pharmacological Reports (2017); Marine Drug (2018); BMC Cancer (2018); European Journal of Medicinal Chemistry (2018); Antioxidants (2019). Nutrients. (2019); International Journal of Molecular Sciences (2020); Cancers (2020; 2021, 2022); BMC Cancer (2020); Biomolecules (2020); Experimental and Therapeutic Medicine (2020); International Journal of Molecular Sciences (2020, 2022); World Academy of Sciences Journal (2020); Molecular Biology Reports (2020); Oncology Letters (2020). Marine Drug (2021). Applied Sciences (2022).

**- NATIONAL AND  
INTERNATIONAL GRANTS**

2001 Fellowship grant from "Young researchers Project"- University of Palermo. Research Topic: "Involvement of oxidative stress and JNK in apoptosis induced by proteasome inhibitor MG132 in human osteosarcoma Saos-2 cells. Role of pRb and p53" (D.R. n.518, 22/4/2002).  
2002 Fellowship grant from "Young researchers Project"-University of Palermo. Research Topic: "Induction of apoptosis in human osteosarcoma cells".  
2001-2003 Recipient of a fellowship grant founded by Associazione Italiana per le Ricerca sul Cancro (AIRC) to develop a three-year project titled: "Induzione di apoptosi e differenziamento in cellule di osteosarcoma umano prive della funzione di pRb e p53".  
Recipient of the "Finanziamento delle attività base di ricerca (FFBAR)", year 2017.  
Recipient of the "Contributo Cori Azione A – LM6 La Coruna (SPA)" (code: CORI-2018-A-D15-LM6-SPA"; from 14.03.2018 to 28-02.2019).  
Recipient of the "Contributo Cori Azione A – LM6 La Coruna (SPA)" (code: CORI-2018-A-D15-LM6-SPA"; 2019).

Participant to the following founded researches:

2005. "Azione sinergica degli inibitori del proteasoma e delle deacetilasi istoniche nell'induzione di apoptosi in cellule di epatoblastoma umano: accertamento del meccanismo molecolare d'azione." (code ORPA041431, founded by University of Palermo, ex quota 60%, prot. n. 21488, 7 April 2005).  
2005. Induzione di apoptosi in cellule di epatoblastoma umano HepG2. Azione sinergica del SAHA e del bortezomib; ruolo della via estrinseca dell'apoptosi e di Bcl-Xs". (code ORPA052475, founded by University of Palermo, ex quota 60%, prot. n. 69518, 16 November 2005).  
2005. "Effetti di cannabinoidi sintetici in cellule di epatoma umano in coltura" (code ORPA055540, founded by University of Palermo, ex quota 60%, prot. n. 69518, 16 November 2005).  
2006. "Acetilazione di p53 e degli istoni nell'apoptosi indotta dagli inibitori delle deacetilasi istoniche in cellule tumorali umane". (code ORPA06YNZB, founded by University of Palermo, ex quota 60%, prot. n. 84309, 11 dicembre 2006).  
2007. "Sensibilizzazione al segnale apoptotico Trail determinata da inibitori delle deacetilasi istoniche e da cannabinoidi in cellule tumorali. Possibile nuova strategia nella cura dei tumori", (code OIPA07WTC4, Innovative projects founded by University of Palermo, prot. n. 90143, 17 December 2007).  
2007-2013. Genome Breast cancer Xborder Risk Surveillance" (OP Italia-Malta Project, CCI 2007 CB 163 PO 037).  
2008. "Analisi epigenetiche di oncogeni e oncosoppressori coinvolti nella cancerogenesi in linee cellulari tumorali e campioni di sangue/plasma", (code ORPA07ABK4, founded by University of Palermo, ex quota 60%, prot. n. 46932, 11 June 2008).  
2008. "Correlazione tra l'espressione dell'oncosoppressore NUMB e l'azione dei modulatori selettivi dei recettori per gli estrogeni (SERM) nel carcinoma mammario. Valutazione di eventuali effetti sinergici con gli inibitori del proteasoma". (code ORPA07BSKZ, founded by the University of Palermo, ex quota 60%, prot. n. 46932, 11 June 2008).  
2012. Cellule di carcinoma mammario non endocrino-responsive. Uno studio in vitro e in vivo del loro comportamento e degli effetti di farmaci anticancerosi". (2012-ATE-0122), founded by the University of Palermo, ex quota 60%.  
2016. Sviluppo PDTA per la prevenzione della cardiotoxicità e patologie indotte da terapie antitumorali (Piano Sanitario Nazionale- PRJ-0222).  
2021. Cosmetici Per La Valorizzazione Delle Proprieta' Nutraceutiche Dei Sottoprodotti Del Mango Siciliano (PSR2014-20\_SICILIA- Nutrimango).  
2022. Processi innovativi di estrazione, e valorizzazione di composti a elevato valore aggiunto da scarti agricoli delle filiere siciliane (POFEAMP2014-20\_SICILIA - PO FEAMP 2014-2020 Regione Siciliana, ProInScar).

## MEMBER OF THE PHD SCHOOL

2007/2009 and 2010/2012. Member of the PhD Board in Experimental Oncobiology (DOT0320318). Doctorate Cycles: XXII e XXIV.  
2011/2013. Member of the PhD Board in Biomedicine and Neurosciences (DOT1120123). University of Palermo. Doctorate Cycle: XXV.  
2012/2014. Member of the PhD Board in a in Biomedicine and Neurosciences (DOT1120123). University of Palermo. Doctorate Cycle: XXVI.  
2017/2019. Member of the PhD Board in Molecular and Biomolecular Sciences (DOT1320418). University of Palermo. Doctorate Cycle: XXXIII.  
2018/2020 Member of the PhD Board in Molecular and Biomolecular Sciences (DOT1320418). University of Palermo. Doctorate Cycle: XXXIV.  
2019/2021 Member of the PhD Board in Molecular and Biomolecular Sciences (DOT1320418). University of Palermo. Doctorate Cycle: XXXV.  
2020/2022 Member of the PhD Board in Molecular and Biomolecular Sciences (DOT1320418). University of Palermo. Doctorate Cycle: XXXVI.  
2021/2023 Member of the PhD Board in Molecular and Biomolecular Sciences (DOT1320418). University of Palermo. Doctorate Cycle: XXXVII.  
2022/2024 Member of the PhD Board in Molecular and Biomolecular Sciences (DOT1320418). University of Palermo. Doctorate Cycle: XXXVIII.  
2023/2025 Member of the PhD Board in Molecular and Biomolecular Sciences (DOT1320418). University of Palermo. Doctorate Cycle: XXXIX.

## PUBLICATIONS

1. Calvaruso G., Carabillò M., Giuliano M., Lauricella M., D'Anneo A., Vento R., Tesoriere G. Sodium phenylbutyrate induces apoptosis in human retinoblastoma Y79 cells: the effect of combined treatment with the topoisomerase I-inhibitor topotecan. *Int. J. Oncol.* 18: 1233-1237, 2001.
2. Lauricella M., Calvaruso G., Carabillò M., D'Anneo A., Giuliano M., Emanuele S., Vento R., Tesoriere G. pRb suppresses camptothecin-induced apoptosis in human osteosarcoma Saos-2 cells by inhibiting c-Jun N-terminal kinase. *FEBS Lett.* 499:191-197, 2001.
3. Emanuele S., Calvaruso G., Lauricella M., Giuliano M., Bellavia G., D'Anneo A., Vento R., Tesoriere G. Apoptosis induced in hepatoblastoma HepG2 cells by the proteasome inhibitor MG132 is associated with hydrogen peroxide production, expression of Bcl-Xs and activation of caspase-3. *Int. J. Oncol.* 21: 857-865, 2002.
4. Lauricella M., D'Anneo A., Giuliano M., Calvaruso G., Emanuele S., Vento R., Tesoriere G. Induction of apoptosis in human osteosarcoma Saos-2 cells by the proteasome inhibitor MG132 and the protective effect of pRb. *Cell Death and Diff.* 10,930-932, 2003.
5. Giuliano M., D'Anneo A., De Blasio A., Vento R., Tesoriere G. Apoptosis meets proteasome, an invaluable therapeutic target of anticancer drugs. *Ital J Biochem.* 52:112-121, 2003.
6. De Blasio A. Musumeci M.T., Giuliano M., Lauricella M., Emanuele S., D'Anneo A., Vassallo B., Tesoriere G., Vento R. The effect of 3-aminobenzamide, inhibitor of poly(ADP-ribose)polymerase, on human osteosarcoma cells. *Int. J. Oncol.* 23: 1521-1528, 2003.
7. Giuliano M., Bellavia G., Lauricella M., D'Anneo A., Vassallo B., Vento R., Tesoriere G. Staurosporine-induced apoptosis in Chang liver cells is associated with down-regulation of Bcl-2 and Bcl-XL. *Int J Mol Med.* 13: 565-571, 2004.
8. Emanuele S., D'Anneo A., Lauricella M., Bellavia G., Vassallo B., Vento R., Tesoriere G. Sodium butyrate induces apoptosis in human hepatoma cells by a mitochondria/caspase pathway, associated with degradation of  $\beta$ -catenin, pRb and Bcl-XL. *Eur J Cancer* 40: 1441-52, 2004.
9. De Blasio A., Messina C., Santulli A., Mangano V., Di Leonardo E., D'Anneo A., Tesoriere G., Vento R. Differentiative pathway activated by 3-aminobenzamide, an inhibitor of PARP, in human osteosarcoma MG-63 cells. *FEBS Lett.* 579:615-620, 2005.
10. Lauricella M., Emanuele S., D'Anneo A., Calvaruso G., Vassallo B., Carlisi D., Portanova P., Vento R., Tesoriere G. JNK and AP-1 mediate apoptosis induced by bortezomib in HepG2 cells via FasL/caspase-8 and mitochondria-dependent pathways. *Apoptosis.* 11:607-25, 2006.
11. D'Anneo A., Rood P., Bottino R., Balamurugan A.N., He J., Giannoukakis N. Gene Therapy for Type 1 Diabetes. Is it Ready for the Clinic?. *Immunol Res.* 36: 83-90, 2006.
12. Emanuele S., Lauricella M., Vassallo B., Carlisi D., D'Anneo A., Di Fazio P., Vento R., Tesoriere G. SAHA induces apoptosis in hepatoma cells and synergistically interacts with the proteasome inhibitor Bortezomib. *Apoptosis.* 12:1327-38, 2007.
13. Carlisi D., Vassallo B., Lauricella M., Emanuele S., D'Anneo A., Di Leonardo E., Di Fazio P., Vento R. and Tesoriere. Histone deacetylase inhibitors induce in human hepatoma HepG2 cells acetylation of p53 and histones in correlation with apoptotic effects. *Int. J. Oncol.* 32:177-184, 2008.

14. Carlisi D., Lauricella M., D'Anneo A., Emanuele S., Angileri L., Di Fazio P., Santulli A., Vento R., Tesoriere G. The histone deacetylase inhibitor suberoylanilide hydroxamic acid sensitises human hepatocellular carcinoma cells to TRAIL-induced apoptosis by TRAIL-DISC activation. *Eur J Cancer* 45: 2425-38, 2009.
15. D'Anneo A., Augello G., Santulli A., Giuliano M., Di Fiore R., Messina C., Tesoriere G., Vento R. Paclitaxel and beta-lapachone synergistically induce apoptosis in human retinoblastoma Y79 cells by downregulating the levels of phospho-Akt. *J Cell Physiol.* 222: 433-443, 2010.
16. Carlisi D. \*, D'Anneo A.\*, Angileri L., Lauricella M., Emanuele S., Santulli A., Vento R., Tesoriere G. Parthenolide sensitizes hepatocellular carcinoma cells to TRAIL by inducing the expression of death receptors through inhibition of STAT3 activation. *J Cell Physiol.*226:1632-41, 2011 (\*contributed equally to this work).
17. Di Caro V., D'Anneo A., Phillips B., Engman C., Harnaha J., Lakomy R., Styche A., Trucco M., Giannoukakis N. Interleukin-7 matures suppressive CD127(+) forkhead box P3 (FoxP3)(+) T cells into CD127(-) CD25(high) FoxP3(+) regulatory T cells. *Clin Exp Immunol.* 165:60-76, 2011.
18. Di Caro V., D'Anneo A., Phillips B., Engman C., Harnaha J., Trucco M., Giannoukakis N. Phosphatidylinositol-3-kinase activity during in vitro dendritic cell generation determines suppressive or stimulatory capacity. *Immunol Res.* 50:130-52, 2011.
19. Di Fiore R., Guercio A., Puleio R., Di Marco P., Drago-Ferrante R., D'Anneo A., De Blasio A., Carlisi D., Di Bella S., Pentimalli F., Forte IM., Giordano A., Tesoriere G., Vento R. Modeling human osteosarcoma in mice through 3AB-OS cancer stem cell xenografts. *J Cell Biochem.* 113: 3380-92, 2012.
20. D'Anneo A., Carlisi D., Lauricella M., Emanuele S., Di Fiore R., Vento R., Tesoriere G. Parthenolide induces caspase-independent and AIF-mediated cell death in human osteosarcoma and melanoma cells. *J Cell Physiol.* 228: 952-967, 2013.
21. D'Anneo A., Carlisi D, Emanuele S, Buttitta G, Di Fiore R, Vento R, Tesoriere G, Lauricella M. Parthenolide induces superoxide anion production by stimulating EGF receptor in MDA-MB-231 breast cancer cells. *Int J Oncol.* 43:1895-900, 2013.
22. Di Fiore R., D'Anneo A., Tesoriere G., Vento R. RB1 in cancer: Different mechanisms of RB1 inactivation and alterations of pRb pathway in tumorigenesis. *J Cell Physiol.* 228: 1676-1687, 2013.
23. Di Fiore R, Drago-Ferrante R, D'Anneo A, De Blasio A, Santulli A, Messina C, Carlisi D, Tesoriere G, Vento R. Differentiation of human osteosarcoma 3AB-OS stem-like cells in derivatives of the three primary germ layers as a useful in vitro model to develop several purposes. *Stem Cell Discov* 3:188-201, 2013.
24. D'Anneo A., Carlisi D., Lauricella M., Puleio R., Martinez R., Di Bella S., Di Marco P., Emanuele S., Di Fiore R., Guercio A., Vento R., Tesoriere G. Parthenolide generates reactive oxygen species and autophagy in MDA-MB231 cells. A soluble parthenolide analogue inhibits tumour growth and metastasis in a xenograft model of breast cancer. *Cell Death Dis.*4:e891, 2013.
25. Di Fiore R., Drago-Ferrante R., D'Anneo A., Augello G., Carlisi D., De Blasio A., Giuliano M., Tesoriere G., Vento R. In human retinoblastoma Y79 cells okadaic acid-parthenolide co-treatment induces synergistic apoptotic effects, with PTEN as a key player. *Cancer Biol Ther.* 14:922-31, 2013.
26. Di Fiore R., Marcatti M., Drago-Ferrante R., D'Anneo A., Giuliano M., Carlisi D., De Blasio A., Querques F., Pastore L., Tesoriere G., Vento R. Mutant p53 gain of function can be at the root of dedifferentiation of human osteosarcoma MG63 cells into 3AB-OS cancer stem cells. *Bone.* 60:198-212, 2014.
27. Carlisi D., D'Anneo A., Martinez R., Emanuele S., Buttitta G., Di Fiore R., Vento R., Tesoriere G., Lauricella M. The oxygen radicals involved in the toxicity induced by parthenolide in MDA-MB-231 cells. *Oncol Rep.* 32:167-72, 2014.
28. Di Fiore R., Drago-Ferrante R., Pentimalli F., Di Marzo D., Forte I.M., D'Anneo A., Carlisi D., De Blasio A., Giuliano M., Tesoriere G., Giordano A., Vento R. MicroRNA-29b-1 impairs in vitro cell proliferation, self-renewal and chemoresistance of human osteosarcoma 3AB-OS cancer stem cells. *Int J Oncol.* 45:2013-23, 2014.
29. Carlisi D., Lauricella M., D'Anneo A., Buttitta G., Emanuele S., Di Fiore R., Martinez R., Rolfo C., Vento R., Tesoriere G. The synergistic effect of SAHA and Parthenolide in MDA-MB231 breast cancer cells. *J Cell Physiol.* 230:1276-89, 2015.
30. Raffa D., Maggio B., Plescia F., Cascioferro S., Raimondi M.V., Cancemi G., D'Anneo A., Lauricella M., Cusimano M.G., Bai R., Hamel E., Daidone G. Synthesis, antiproliferative activity and possible mechanism of action of novel 2-acetamidobenzamides bearing the 2-phenoxy functionality. *Bioorg Med Chem.* 23:6305-16, 2015.
31. Campanella C.\*, D'Anneo A.\*, Gammazza Marino A.\*, Caruso Bavisotto C., Barone R., Emanuele S., Lo Cascio F., Mocciano E., Fais S., De Macario E.C., Macario A.J., Cappello F., Lauricella M. The histone deacetylase inhibitor SAHA induces HSP60 nitration and its extracellular release by exosomal vesicles in human lung-derived carcinoma cells. *Oncotarget* 7: 28849-28867, 2016. (\*contributed equally to this work).
32. Lauricella M., Carlisi D., Giuliano M., Calvaruso G., Cernigliaro C., Vento R., D'Anneo A. The analysis of estrogen receptor- $\alpha$  positive breast cancer stem-like cells unveils a high expression of the serpin proteinase inhibitor PI-9: Possible regulatory mechanisms. *Int J Oncol* 49: 352-360, 2016.
33. Maggio B., Raimondi M.V., Raffa D., Plescia F., Schermann M.C., Prosa N., Lauricella M., D'Anneo A. and Daidone G. Synthesis and Antiproliferative Activity of a Natural like Glycoconjugate Polycyclic Compound. *Eur J Med Chem.* 222: 247-256, 2016.
34. Marino Gammazza A., Campanella C., Barone R., Caruso Bavisotto C., Gorska M., Wozniak M., Carini F., Cappello F., D'Anneo A., Lauricella M., Zummo G., Conway de Macario E., Macario A.J., Di Felice V. Doxorubicin anti-tumor

- mechanisms include Hsp60 post-translational modifications leading to the Hsp60/p53 complex dissociation and instauration of replicative senescence. *Cancer Lett.* 385:75-86, 2017.
35. Raffa D., Plescia F., Maggio B., Raimondi M.V., D'Anneo A., Lauricella M., Daidone G. Anthranilamide-based 2-phenylcyclopropane-1-carboxamides, 1,1'-biphenyl-4-carboxamides and 1,1'-biphenyl-2-carboxamides: Synthesis biological evaluation and mechanism of action. *Eur J Med Chem.* 132:262-273, 2017.
  36. Lauricella M., Emanuele S., Calvaruso G., Giuliano M., D'Anneo A. Multifaceted Health Benefits of *Mangifera indica* L. (Mango): The Inestimable Value of Orchards Recently Planted in Sicilian Rural Areas. *Nutrients* 9, E525, 2017.
  37. Emanuele S., Lauricella M., Calvaruso G., D'Anneo A., Giuliano M. Litchi chinensis as a functional food and a source of antitumor compounds: an overview and a description of biochemical pathways. *Nutrients* 9, E992, 2017.
  38. Emanuele S., D'Anneo A., Calvaruso G., Cernigliaro C., Giuliano M., Lauricella M. The Double-Edged Sword Profile of Redox Signaling: Oxidative Events As Molecular Switches in the Balance between Cell Physiology and Cancer. *Chem Res Toxicol.* 31: 201-210, 2018.
  39. Emanuele S., Oddo E., D'Anneo A., Notaro A., Calvaruso G., Lauricella M., Giuliano M. Routes to Cell death in animal and plant kingdoms: from classic apoptosis to alternative ways to die:- a review. *Rendiconti Lincei* 29: 397-409, 2018.
  40. Emanuele S., Notaro A., Palumbo Piccionello A., Maggio A., Lauricella M., D'Anneo A., Cernigliaro C., Calvaruso G., Giuliano M. Sicilian Litchi Fruit Extracts Induce Autophagy versus Apoptosis Switch in Human Colon Cancer Cells. *Nutrients* 10(10), 2018.
  41. Raffa D.\*, D'Anneo A.\*, Plescia F., Daidone G., Lauricella M., Maggio B. Novel 4-(3-phenylpropionamido), 4-(2-phenoxyacetamido) and 4-(cinnamamido) substituted benzamides bearing the pyrazole or indazole nucleus: synthesis, biological evaluation and mechanism of action. *Bioorganic Chemistry* 83:367-379, 2018. (\*contributed equally to this work).
  42. Cernigliaro C.\*, D'Anneo A. \*, Carlisi D., Giuliano M., Marino Gammazza A., Barone R., Longhitano L., Cappello F., Emanuele S., Distefano A., Campanella C., Calvaruso G., Lauricella M. Ethanol-Mediated Stress Promotes Autophagic Survival and Aggressiveness of Colon Cancer Cells via Activation of Nrf2/HO-1 Pathway. *Cancers (Basel)*. 2019 Apr 10;11(4). pii: E505. (\*contributed equally to this work).
  43. Lauricella M., Lo Galbo V., Cernigliaro C., Maggio A., Palumbo Piccionello A., Calvaruso G., Carlisi D., Emanuele S., Giuliano M., D'Anneo A. The Anti-Cancer Effect of *Mangifera indica* L. Peel Extract is Associated to  $\gamma$ H2AX-mediated Apoptosis in Colon Cancer Cells. *Antioxidants (Basel)*. 2019, 8(10). pii: E422.
  44. Attanzio A., D'Anneo A., Pappalardo F., Bonina F.B., 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. *Antioxidants (Basel)*. 2019, 8(10): 494.
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### **Book Chapters**

- I. Co-author of the book chapter "The cannabinoid system and its potential therapeutic applications in cancer". Giuliano M., D'Anneo A., Calvaruso G. Libro edito da KERALA: Research Signpost, p. 85-105, (2007). ISBN: 978-81.
- II. Co-author of the book chapter: "Immuno-Fluorescence (IF) on interphase polytene chromosomes of *Drosophila melanogaster*". Burgio G., Di Leonardo E., D'Anneo A. Quaderni del Dottorato di Ricerca in Oncobiologia Sperimentale: Tecniche e Procedure di Ricerca. P.87-92 (2008). ISBN: 978-88-903912-2-4. PALERMO: Edizioni Compostampa (ITALY).
- III. Co-author of the book chapter: "Polymerase Chain Reaction (PCR)". Di Leonardo E., Montalbano R., D'Anneo A. Quaderni del Dottorato di Ricerca in Oncobiologia Sperimentale: Tecniche e Procedure di Ricerca. p. 165-181(2008). ISBN: 978-88-903912-2-4. PALERMO: Edizioni Compostampa (ITALY).

*According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016,  
I hereby express my consent to process and use my data provided in this CV*

*F.to Antonella D'Anneo*