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BENJAMIN BONAVIDA, PH.D.

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Brief Academic Biography

Dr. Benjamin Bonavida, is currently ***Distinguished Research Professor at the University of California, Los Angeles (UCLA)***. He is affiliated with the Department of Microbiology, Immunology and Molecular Genetics, UCLA David Geffen School of Medicine. His research career, thus far, has focused on investigations in the fields of basic immunochemistry and cancer immunobiology. His research investigations have ranged from the biochemical, molecular, and genetic mechanisms of cell-mediated killing and tumor cell resistance to chemo-immuno cytotoxic drugs. The reversal of tumor cell resistance was investigated by the use of various selected sensitizing agents based on molecular mechanisms of resistance. In these investigations, there was the newly characterized dysregulated NF- κ B/Snail/YY1/RKIP/PTEN loop in many cancers that was reported to regulate cell survival, proliferation, invasion, metastasis, and resistance. Emphasis was focused on the roles of the tumor suppressor Raf kinase inhibitor protein (RKIP) and the tumor promoter Yin Yang 1 (YY1) and the role of nitric oxide (NO) as a chemo-immuno-sensitizing factor. Many of the aforementioned studies are centered on the clinical challenging features of cancer patients' failure to respond to both conventional and targeted therapies.

DR. Bonavida has been active in the organization of regular sequential international miniconferences that are highly focused on the roles of YY1, RKIP, and nitric oxide in cancer and their potential therapeutic applications. Several books edited or coedited have been published. In addition, he is the Series Editor of books (over 20) published by Springer/ Nature on "*Resistance to Anti-Cancer Targeted Therapeutics*". In addition, he is presently the Series Editor of Three Series published by Elsevier/Academic Press on "*Cancer Sensitizing Agents for Chemotherapy*", "*Sensitizing Agents for Cancer Resistance to Cell Mediated Immunotherapy*", and "*Breaking Tolerance to Anti-Cancer Antibody Immunotherapy*". He is the Editor-in-Chief of the Journal "*Critical Reviews in Oncogenesis*", Editor-in-Chief of '*Onco-Therapeutics*' and Associate Editor of "*Critical reviews in Immunology*". Dr. Bonavida has published over 500 research publications and reviews in various scientific journals of high impact.

EDUCATION

1959-1961	University of Paris School of Medicine, France
1962-1964	BA, Department of Microbiology, University of California, Los Angeles, CA, USA
1964-1968	PhD., Department of Microbiology, University of California, Los Angeles, CA, USA

1969-1971 Postdoctoral Weizmann Fellow, Weizmann Institute, Rehovot, Israel
1971- 1977 Assistant Professor, Department of Microbiology and Immunology, UCLA School of Medicine, University of California, Los Angeles, CA, USA
1977-1982 Associate Professor, Department of Microbiology and Immunology, UCLA School of Medicine, University of California, Los Angeles, CA, USA
1982-2011 Professor, Department of Microbiology and Immunology, UCLA School of Medicine, University of California, Los Angeles, CA, USA
2011-current Distinguished Research Professor, Department of Microbiology and Immunology, UCLA School of Medicine, University of California , Los Angeles, CA, USA

TEACHING ACTIVITIES

IMMUNOBIOLOGY OF CANCER Graduate course taught quarterly (3 times/year) (for > 20 years). Examples below for last 4 years

M262B Winter 2021 *“Development of both innate and adaptive anti-cancer immune cells from “human pluripotent stem cells”*

M262A Fall 2020 *“Combination of anti-angiogenic agents and immune check point inhibitors: synergy achieved in non responding cancers”*

M262C Spring 2020 *“Tumor Hypoxic Stress and Anti-cancer Immune Response”*

M262B Winter 2020 *“Potentiation of antitumor immune response by combination of immunotherapy and other targeted agents: Underlying molecular mechanisms”*

M262A Fall 2019 *“Molecular Regulation of Checkpoint Ligands on Cancer Cells that Inhibit CTL Cytotoxic Activity”*

M262C Spring 2019 *“Suppression of tumor immunity by cancer-associated fibroblasts (CAFs)”*

M262B Winter 2019 *“Immune Resistance of Tumor Cells Expressing Immuno-Inhibitory Ligands*

M262A Fall 2018 *Dysregulation of Tumor Immunity by Tumor Suppressors”*

M262C Spring 2018 *“Targeting Protein Kinase Pathways in Cancer Potentiates Immunotherapy”*

M262B Winter 2018 *“Autophagy and Cancer Immunotherapy”*

M262A Fall 2017 *“Involvement of Microbiota in the Response of Cancer to Immunotherapy”*

M262B Winter 2017 *“Immune-Mediated Cancer Dormancy”*

M262C Spring 2017 *“Sensitizing Agents that Reverse Resistance to Cell-Mediated Immunotherapy: Molecular Mechanisms of Sensitization”*

TEACHING UNDERGRADUATE STUDENTS (SRP; M199)

Research publications by undergraduate students (names in bold) (examples of 2015-2021)

2021

Navasardyan, I & Bonavida, B. YY1 is involved in thre pathogenesis and malignat propereties of human trriple-negative breast cancer (TNBC). In YY1 in the control of pathogenesis and drug resistance of cancer: A critical therapeutic target. Edited by B. Bonavida Academic Press, USA. 2021: p149-162

Kosasih, FR & Bonavida, B. YY1-mediated regulation of type 2 diabetes via insulin. In YY1 in the control of pathogenesis and drug resistance of cancer: A critical therapeutic target. Edited by B. Bonavida. Academic Press, USA. 2021: p271-287

Touboul, R & Bonavida, B. YY1 expression and PD-1 regulation in CD8T lymphocytes. In YY1 in the control of pathogenesis and drug resistance of cancer: A critical therapeutic target. Edited by B. Bonavida. Academic Press, USA. 2021: p289-309

Wang, Y & Bonavida, B. The role of YY1 in the pathogenesis of rheumatoid arthritis: A tale of cytokines, ncRNA, and aberrant fibroblast-like synoviocytes (FLSs). In YY1 in the control of pathogenesis and drug resistance of cancer: A critical therapeutic target. Edited by B. Bonavida. Academic Press, USA. 2021: p311-335

2020

Wang, Y & Bonavida, B. Peitropic activities of RKIP in cancer: Role in survival, EMT, chemo-immuno-resistance, and autophagy. In Prognostic and therapeutic applications of RKIP in cancer. Editors B. Bonavida and S. Baritaki. Elsevier/Academic Press, USA 2020: p 49-75

Rama, M & Bonavida, B. Identification of regulatory crosstalks between RKIP and BRCA1 tumor suppressors in healthy tissues and cancer (breast and ovarian): Therapeutic implications. In Prognostic and therapeutic applications of RKIP in cancer. Editors B. Bonavida and S.Baritaki. Elsevier/Academic Press, USA 2020: p176-209

2019

Hays E, Bonavida B. YY1 regulates cancer cell immune resistance by modulating PD-L1 expression. Drug Resist Updat. 2019 Mar;43:10-28.

Hays E, Bonavida B. Nitric Oxide-Mediated Enhancement and Reversal of Resistance of Anticancer Therapies. Antioxidants (Basel). 2019 Sep 17;8(9):407

Kosasih FR, Bonavida B. Involvement of Yin Yang 1 (YY1) Expression in T-Cell Subsets Differentiation and Their Functions: Implications in T Cell-Mediated Diseases. Crit Rev Immunol. 2019;39(6):491-510.

2018

Wang Y, Bonavida B. A New Linkage between the Tumor Suppressor RKIP and Autophagy: Targeted Therapeutics. *Crit Rev Oncog*. 2018;23(5-6):281-305.

Bae S, Brumbaugh J, Bonavida B. Exosomes derived from cancerous and non-cancerous cells regulate the anti-tumor response in the tumor microenvironment. *Genes Cancer*. 9(3-4):87-100, 2018.

2017

Shvartsur A, Givechian KB, Garban H, Bonavida B. Overexpression of RKIP and its cross-talk with several regulatory gene products in multiple myeloma. *J Exp Clin Cancer Res*. 36:62, 2017.

Lee S, Wottrich S, Bonavida B. Crosstalks between Raf-kinase inhibitor protein and cancer stem cell transcription factors (Oct4, KLF4, Sox2, Nanog). *Tumour Biol* 39:1010428317692253, 2017.

Wottrich S, Kaufhold S, Chrysos E, Zoras O, Baritaki S, Bonavida B. Inverse correlation between the metastasis suppressor RKIP and the metastasis inducer YY1: Contrasting roles in the regulation of chemo/immuno-resistance in cancer. *Drug Resist pdat*. 30:28-38, 2017.

Cho AA, Bonavida B, Targeting the Overexpressed Yin Yang 1 in Cancer Inhibits EMT and Metastasis. *Critical Reviews in Oncogenesis*. 22(1-2):49–61, 2017.

Kaufhold K., Aziz N, Bonavida B. The Forgotten YY2 in Reported YY1 Expression Levels in Human Cancers. *Critical Reviews in Oncogenesis*. 22(1-2):63–73 2017

2016

Kaufhold S, Garbán H, Bonavida B. Yin Yang 1 is associated with cancer stem cell transcription factors (SOX2, OCT4, BMI1) and clinical implication. *J Exp Clin Cancer Res*. 25;35(1):84, 2016.

Wottrich S., Bonavida B., Regulation of the Cancer Stem Cell Phenotype by Raf Kinase Inhibitor Protein via Its Association with Kruppel-Like Factor 4 107. In “Forum on Immunopathological Diseases and Therapeutics” Edited by Benjamin Bonavida. Vol 7. New York :Begellhouse, 107-118, 2016.

Moyal E., Kaufhold S., Bonavida B., Identification of the Alternating Oncogenic and Tumor-Suppressor Activities of Kruppel-Like Factor 4 in Various Human Cancers. In “Forum on Immunopathological Diseases and Therapeutics” Edited by Benjamin Bonavida. Vol 7. New York: Begellhouse, 77-93, 2016.

Aziz N, Bonavida B, Activation of Natural Killer Cells by Probiotics. In “Forum on Immunopathological Diseases and Therapeutics” Edited by Benjamin Bonavida. Vol 7. New York: Begellhouse, 41-55, 2016.

2015

Shvartsur A, Bonavida B. Trop2 and its overexpression in cancers: regulation and clinical/therapeutic implications. *Genes Cancer*. 6:84-105, 2015.

Bonavida B, Kaufhold S. Prognostic significance of YY1 protein expression and mRNA levels by bioinformatics analysis in human cancers: a therapeutic target. *Pharmacol Ther.* 150:149-68, 2015.

BONAVIDA PUBLICATIONS (recent examples/ over 550)

See Curriculum Vitae

EDITORIAL ACTIVITIES

Scientific Journals

Editor-in-Chief: *Critical Reviews in Oncogenesis* – Published by Begell

Editor in Chief: *Onco-Therapeutics* – Published buy Begell

Associate Editor: *Critical reviews in Immunology* – Published by Begell

Editorial Board: Many scientific Journals

Books published by Bonavida

Successes and Challenges of NK Immunotherapy: Breaking Tolerance to Cancer Resitance

Editors: B. Bonavida and A. Jewett- Academic Press, USA in press **2021**

YY1 in the Control of the Pathogenesis and Drug Resistance of Cancer: A Critical Therapeutic Target.

Editor : B Bonavida – Elsevier/Academic Press, USA. **2020**

Prognostic and therapeutic applications of RKIP in cancer. **Editors B. Bonavida and S.Baritaki.**

Elseveier/Academic Press, USA. **2020**

Therapeutic Application of Nitric Oxide in Cancer and Inflammatory Disorders. **Editors: Lucia**

Morbidelli and Benjamin Bonavida. Academic Press, USA. **2019**

Nitric Oxide and Cancer: Pathogenesis and Therapy. **Edited by B. Bonavida.** Springer, USA - **2015**

B. BONAVIDA (SERIES EDITOR/EDITOR)

I. Published by Springer/Nature

Title of Series: Resistance to Anti-cancer Targeted Therapies

Volume 1. Molecular Mechanisms of Tumor Cell Resistance to Chemotherapy. **Ed. Benjamin Bonavida.** 2013.

- Volume 2.** Resistance to Immunotherapeutic Antibodies in Cancer. Ed. Benjamin Bonavida. 2013.
- Volume 3.** Resistance to Proteasome Inhibitors in Cancer. Ed. Q. Ping Dou. 2014
- Volume 4.** Resistance to Targeted ABC Transporter in Cancer. Ed. Thomas Efferth. 2015.
- Volume 5.** Resistance to Photodynamic Therapy in Cancer. Eds. Valentina Rapozzi, Giulio Jori. 2015.
- Volume 6.** Resistance to Immunotoxins in Cancer Therapy. Ed. Rama Shanker Verma. 2015.
- Volume 7.** Resistance of Cancer Cells to CTL-Mediated Immunotherapy. Eds. Benjamin Bonavida & Salem Chouaib. 2015.
- Volume 8.** Resistance to Aromatase Inhibitors in Breast Cancer. Ed. Alexey Larionov. 2015.
- Volume 9.** Defects in T Cell Trafficking and Resistance to Cancer Immunotherapy. Ed. Emmanuel Donnadieu. 2016.
- Volume 10.** Resistance to Tyrosine Kinase Inhibitors. Ed. Daniele Focosi. Ed. 2016.
- Volume 11.** Resistance to Targeted Therapies Against Adult Brain Cancers. Ed. Amanda Tivnan. Ed. 2017.
- Volume 12.** TRAIL, Fas Ligand, TNF, and TLR3 in Cancer. Ed. Olivier Micheau. 2017.
- Volume 13.** Resistance to Targeted Therapies for Hepatocellular Carcinoma. Ed. Augusto Villanueva. 2017.
- Volume 15.** Resistance to Anti-Cancer Therapeutics Targeting Receptor Tyrosine Kinases and Downstream Pathways. Eds. Yosef Yarden, Moshe Elkabets. 2018.
- Volume 16.** Resistance to Targeted Therapies in Breast Cancer. Ed. Jeni Properi. 2017.
- Volume 17.** Resistance of Targeted Therapies Excluding Antibodies for Lymphomas. Ed. Andrés J. M Ferreri. 2018.
- Volume 18.** Resistance to Ibritumomab in Lymphoma. Eds. Makoto Honso, Jean-François Chatal. 2018.
- Volume 19.** Cancer Stem Cell Resistance to Targeted Therapy. Eds. Cristina Maccalli, Matilde Todaro, Soldano Ferrone. 2019.
- Volume 20.** Current Applications for Overcoming Resistance to Targeted Therapies. Eds. Myron R. Szewczuk, Bessi Qorri, Manpreet Sambhi. 2019.
- Volume 21.** Resistance to Targeted Therapies in Lymphomas. Eds. Ana c. Xavier, Mitchell S. Cairo. 2019.
- Volume 22.** Resistance to Targeted Therapies in Multiple Myeloma. Eds. Silvia Ling and Steven Trieu. 2021.
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II. Published by Elsevier/Academic Press

A. Title of Series : Cancer Sensitizing Agents for Chemotherapy Series

- Volume 1.** Nitric Oxide (Donor/Induced) in Chemosensitization Edited by **Benjamin Bonavida**, PhD. **2017**
- Volume 2.** Role of Nutraceuticals in Cancer Chemosensitization
Edited by Alok Chandra Bharti and Bharat Bhushan Aggarwal. **2017**
- Volume 3.** Targeting Cell Survival Pathways to Enhance Response to Chemotherapy Edited by Daniel E. Johnson, PhD. **2018**
- Volume 4.** Protein Kinase Inhibitors as Sensitizing Agents for Chemotherapy Edited by Zhe-Sheng Chen and Dong-Hua Yang. **2018**
- Volume 5.** Breaking Tolerance to Pancreatic Cancer Unresponsiveness to Chemotherapy Edited by Ganji Purnachandra Nagaraju, PhD, Dsc. **2019**
- Volume 6.** Improving the Therapeutic Ratio in Head and Neck Cancer Edited by Randall J. Kimple, MD, PhD. **2019**
- Volume 7.** Drug Efflux Pumps in Cancer Resistance Pathways: From Molecular Recognition and Characterization to Possible Inhibition Strategies in Chemotherapy Edited by Alejandro Sosnik, PhD and Reina Bendayan, PharmD. **2019**
- Volume 8.** Drug Resistance in Colorectal Cancer: Molecular Mechanisms and Therapeutic Strategies Edited by Chi Hin Cho and Tao Hu, PhD. **2019**
- Volume 9.** Novel Therapies in Head and Neck Cancer: Beyond the Horizon Edited by Maie A. St. John, MD, PhD, FACS and No-Hee Park, DMD, PhD. **2020**
- Volume 10.** pH-Interfering Agents as Chemosensitizers in Cancer Therapy Edited by Claudiu T. Supuran, PhD and Simone Carradori, PhD. **2020**
- Volume 11.** Overcoming Ovarian Cancer Chemoresistance Edited by Goli Samimi, PhD, MPH and Christina Annunziata, MD, PhD. **2021**
- Volume 12.** Biological Mechanisms and the Advancing Approaches to Overcoming Cancer Drug Resistance Edited by Andrew Freywald, PhD and Franco J. Vizeacoumar, PhD. **2021**
- Volume 13.** Therapeutic Strategies to Overcome ALK Resistance in Cancer Edited by Luc Friboulet, PhD. **2021**
- Volume 14.** New Targeting in The Reversal of Resistant Glioblastomas Edited by Ali Syed Arbab. **2021**

Volume 15 . Glioblastoma Resistance to Chemotherapy
Edited by Tarik F. Massoud and Ramasamy Paulmurugan. **2021**

B. Title of Series : Breaking Tolerance To Cell-mediated Immunotherapy

Volume 1. Autophagy in immune response: Impact on cancer immunotherapy Edited by Salem Chouaib. **2020**

Volume 2 . Immunotherapy in resistant cancer: From the lab bench work to its clinical perspectives. Edited by Jorge Morales-Montor and Mariana Segovia-Mendoza. **2021**

ORGANIZER (or co-organizer) OF SCIENTIFIC CONFERENCES

“*Successes and Challenges of NK Immunotherapy: Breaking Tolerance to Cancer Resistance,*”. A conference planned to be held at UCLA on March 20-21st, **2020**. Organized by Anahid Jewett and **Benjamin Bonavida**.
(Postponed due to the Covid pandemic, for late **2021**).

“*Prognostic and therapeutic applications of RKIP in cancer*” . A conference held on May 9-10, **2019**, Crete, Greece. Organized by Stavroula Baritaki and **Benjamin Bonavida**

“*Therapeutic application of nitric oxide in cancer and inflammatory disorders*”. A conference held on October 4-5, **2018** , Siena, Italy. Organized by Lucia Morbidelli and **Benjamin Bonavida**

Books and published reports on Nitric Oxide

Books

Therapeutic Application of Nitric Oxide in Cancer and Inflammatory Disorders
Editors: Lucia Morbidelli & **Benjamin Bonavida** Academic Press **2019**

Nitric Oxide (Donor/Induced) in Chemosensitization, Volume 1
Editor: **Benjamin Bonavida** Elsevier/Academic Press **2017**

Nitric Oxide and Cancer: Pathogenesis and Therapy
Editor: **Benjamin Bonavida** Springer **2015**

Nitric Oxide (NO) and Cancer : Prognosis, Prevention, and Therapy
Editor: **Benjamin Bonavida** Springer **2010**

Publications on Nitric Oxide Exclusively

Bonavida B. Sensitizing activities of nitric oxide donors for cancer resistance to anticancer therapeutic drugs. *Biochem Pharmacol.* **2020** Jun;176:113913.

Hays E, **Bonavida B.** Nitric Oxide-Mediated Enhancement and Reversal of Resistance of Anticancer Therapies. *Antioxidants (Basel).* **2019** Sep 17;8(9):407.

Bonavida B. Therapeutic YY1 Inhibitors in Cancer: ALL in ONE. *Crit Rev Oncog.* **2017**;22(1-2):37-47.

Muntané J, **Bonavida B** Nitric oxide in cancer.. *Redox Biol.* **2015** Dec;6:505-506.

Bonavida B, Garban H. Nitric oxide-mediated sensitization of resistant tumor cells to apoptosis by chemo-immunotherapeutics. *Redox Biol.* **2015** Dec;6:486-494.

Rapozzi V, Della Pietra E, **Bonavida B.** Dual roles of nitric oxide in the regulation of tumor cell response and resistance to photodynamic therapy. *Redox Biol.* **2015** Dec;6:311-317

Rapozzi V, Pietra ED, **Bonavida B,** Xodo LE. The Role Of Nitric Oxide After Repeated Low Dose Photodynamic Treatments In Prostate Carcinoma Cells. *Redox Biol.* **2015** Aug;5:422-423.

Bonavida B. Regulation Of Cell Death Apoptotic Pathways By Nitric Oxide In Cancer: Reversal Of Drug/Immune Resistance. *Redox Biol.* **2015** Aug;5:415

Della Pietra E, Simonella F, **Bonavida B,** Xodo LE, Rapozzi V. Repeated sub-optimal photodynamic treatments with pheophorbide a induce an epithelial mesenchymal transition in prostate cancer cells via nitric oxide. *Nitric Oxide.* **2015** Feb 15;45:43-53.

Huerta-Yepez S, et al. Dual role of NO donors in the reversal of tumor cell resistance and EMT: Downregulation of the NF- κ B/Snail/YY1/RKIP circuitry. *Nitric Oxide.* **2013.**

Rapozzi V, Della Pietra E, Zorzet S, Zacchigna M, Bonavida B, Xodo LE. Nitric oxide-mediated activity in anti-cancer photodynamic therapy. *Nitric Oxide.* **2013** Apr 1;30:26-35

Huerta-Yepez S, Baritaki S, Baay-Guzman G, Hernandez-Luna MA, Hernandez-Cueto A, Vega MI, **Bonavida B.** Contribution of either YY1 or BclXL-induced inhibition by the NO-donor DETANONOate in the reversal of drug resistance, both in vitro and in vivo. YY1 and BclXL are overexpressed in prostate cancer. *Nitric Oxide.* **2013** Feb 28;29:17-24.

Bonavida B, Baritaki S. Inhibition of Epithelial-to-Mesenchymal Transition (EMT) in Cancer by Nitric Oxide: Pivotal Roles of Nitrosylation of NF- κ B, YY1 and Snail. *For Immunopathol Dis Therap.* **2012**;3(2):125-133.

Benjamin Bonavida , Stavroula Baritaki Dual role of NO donors in the reversal of tumor cell resistance and EMT: Downregulation of the NF- κ B/Snail/YY1/RKIP circuitry full text links *Nitric Oxide* **2011** Jan 1;24(1):1-7.

Bonavida B, Baritaki S. Dual role of NO donors in the reversal of tumor cell resistance and EMT: Downregulation of the NF- κ B/Snail/YY1/RKIP circuitry. *Nitric Oxide.* **2011** Jan 1;24(1):1-7

Baritaki S, Huerta-Yepez S, Sahakyan A, Karagiannides I, Bakirtzi K, Jazirehi A, **Bonavida B**. Mechanisms of nitric oxide-mediated inhibition of EMT in cancer: inhibition of the metastasis-inducer Snail and induction of the metastasis-suppressor RKIP. *Cell Cycle*. **2010** Dec 15;9(24):4931-40.

Huerta-Yepez S, Vega M, Escoto-Chavez SE, Murdock B, Sakai T, Baritaki S, **Bonavida B**. Nitric oxide sensitizes tumor cells to TRAIL-induced apoptosis via inhibition of the DR5 transcription repressor Yin Yang 1. *Nitric Oxide*. **2009** Feb;20(1):39-52.

Huerta S, Baay-Guzman G, Gonzalez-Bonilla CR, Livingston EH, Huerta-Yepez S, **Bonavida B**. In vitro and in vivo sensitization of SW620 metastatic colon cancer cells to CDDP-induced apoptosis by the nitric oxide donor DETANONOate: Involvement of AIF. *Nitric Oxide*. **2009** May;20(3):182-94.

Bonavida B, Baritaki S, Huerta-Yepez S, Vega MI, Chatterjee D, Yeung K. Novel therapeutic applications of nitric oxide donors in cancer: roles in chemo- and immunosensitization to apoptosis and inhibition of metastases. *Nitric Oxide*. **2008** Sep;19(2):152-7.

Huerta S, Chilka S, **Bonavida B**. Nitric oxide donors: novel cancer therapeutics *Int J Oncol*. **2008** Nov;33(5):909-27.

Lee JY, Huerta-Yepez S, Vega M, Baritaki S, Spandidos DA, **Bonavida, B**. The NO TRAIL to YES TRAIL in cancer therapy *Int J Oncol*. **2007** Oct;31(4):685-91

Bonavida B, Khineche S, Huerta-Yepez S, Garbán H. Therapeutic potential of nitric oxide in cancer. *Drug Resist Updat*. **2006** Jun;9(3):157-73.

Hongo F, Garban H, Huerta-Yepez S, Vega M, Jazirehi AR, Mizutani Y, Miki T, **Bonavida B**. Inhibition of the transcription factor Yin Yang 1 activity by S-nitrosation. *Biochem Biophys Res Commun*. **2005** Oct 21;336(2):692-701.

Huerta-Yepez S, Vega M, Jazirehi A, Garban H, Hongo F, Cheng G, **Bonavida B**. Nitric oxide sensitizes prostate carcinoma cell lines to TRAIL-mediated apoptosis via inactivation of NF-kappa B and inhibition of Bcl-xl expression. *Oncogene*. **2004** Jun 24;23(29):4993-5003.

Garbán HJ, **Bonavida B**. Nitric oxide disrupts H₂O₂-dependent activation of nuclear factor kappa B. Role in sensitization of human tumor cells to tumor necrosis factor-alpha -induced cytotoxicity. *J Biol Chem*. **2001** Mar 23;276(12):8918-23.

Keith Bechtel M, **Bonavida B**. Inhibitory effects of 17beta-estradiol and progesterone on ovarian carcinoma cell proliferation: a potential role for inducible nitric oxide synthase. *Gynecol Oncol*. **2001** Jul;82(1):127-38.

Garbán HJ, **Bonavida B**. Nitric oxide inhibits the transcription repressor Yin-Yang 1 binding activity at the silencer region of the Fas promoter: a pivotal role for nitric oxide in the up-regulation of Fas gene expression in human tumor cells. *J Immunol*. **2001** Jul 1;167(1):75-81

Garbán HJ, **Bonavida B**. Nitric oxide sensitizes ovarian tumor cells to Fas-induced apoptosis. *Gynecol Oncol*. **1999** May;73(2):257-64.

Hernandez-Cueto A, Hernandez-Cueto D, Antonio-Andres G, Mendoza-Marin M, Jimenez-Gutierrez

C, Sandoval-Mejia AL, Mora-Campos R, Gonzalez-Bonilla C, Vega MI, **Bonavida B**, Huerta-Yepez S. [Corrigendum] Death receptor 5 expression is inversely correlated with prostate cancer progression. Mol Med Rep. 2017 Oct;16(4):5738.

Bonavida B. Sensitizing activities of nitric oxide donors for cancer resistance to anticancer therapeutic drugs. Biochem Pharmacol. 2020 Jun;176:113913.

Bonavida B, Baritaki S, Huerta-Yepez S, Vega MI, Chatterjee D, Yeung K. Novel therapeutic applications of nitric oxide donors in cancer: roles in chemo- and immunosensitization to apoptosis and inhibition of metastases. Nitric Oxide. 2008 Sep;19(2):152-7.