

CURRICULUM VITAE

Benjamin Bonavida, Ph.D.

Distinguished Research Professor, Department of Microbiology, Immunology & Molecular Genetics and David Geffen School of Medicine at UCLA

EDUCATION:

Institution	Field	Degree	Year
University of Paris, School of Medicine	Medicine	-----	1959-1961
University of California, Los Angeles	Microbiology	B.A.	1961-1964
University of California, Los Angeles Department of Bacteriology (Advisor: Professor Eli Sercarz)	Immunochemistry	Ph.D. (with distinction)	1964-1968
The Weizman Institute of Science Rehovot, Israel (Advisor: Professor Michael Sela)	Immunochemistry	Postdoctoral Fellow	1969-1971

APPOINTMENTS:

2011-Present	Distinguished Research Professor, Department of Microbiology, Immunology and Molecular Genetics, David Geffen School of Medicine, UCLA
1983-2011	Professor, Department of Microbiology, Immunology and Molecular Genetics, David Geffen School of Medicine, UCLA
1995-1997	Interim Chair, Department of Microbiology and Immunology UCLA School of Medicine
1978-1983	Associate Professor, Department of Microbiology and Immunology UCLA School of Medicine
1971-1978	Assistant Professor, Department of Microbiology and Immunology UCLA School of Medicine
1968-1969	Research Scientist, Department of Ophthalmic Immunology Cedars Sinai Hospital , Los Angeles, California Postgraduate Research Associate, Department of Bacteriology, UCLA.

MEMBERSHIP IN SCIENTIFIC AND SCHOLARLY SOCIETIES:

1973-Present	American Association of Immunologists (AAI), Federation of the American Societies for Experimental Biology
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1974-Present American Association for Cancer Research (AACR)
2003-Present Americansociation of Hematology (ASH)
1976-1984 Transplantation Society
1976-1984 American Society of Zoologists
1982-1986 The Reticuloendothelial Society

OTHER APPOINTMENTS:

Member of the NIH Study Section:

Past: Allergy and Immunology

Immunobiology

National Institute of Aging (Ad Hoc)

National Institute of Alcohol and Drug Abuse

Member of National ACS Study Section

Member of the Department of Defense Congressionally Directed Medical Research Programs (CDMRP) (1998-2002) (2002-present Ad Hoc)

Member of the NCI SPORE Program (2005-present)

National cancer Institute, Cellular Antibody Immunotherapy (2004 present Ad Hoc)

National Cancer Institute, Development Therapeutics (2007-present Ad Hoc)

Other Member of International Scientific Advisory Board, Israel Cancer Research Foundation

Editor:

Journals

Editor-in-Chief

Critical Reviews in Oncogenesis-Begellhouse Inc. Publishers

Co-Editor with Dr. Zouhair Atassi

Forum of Immunopathological Diseases and Therapeutics-Begellhouse Inc. Publishers

Books

Series Editor

Resistance to Anticancer Targeted Therapies-Springer Publishing

Series Editor

Chemotherapy-Sensitizing Agents for Cancer -Elsevier Publishing Company

Sensitizing Agents for Cancer Resistance to Cell Mediated

Immunotherapy-Elsevier Publishing Company

Sensitizing Agents for Antibody Therapies in Cancer-Elsevier Publishing Company

Editorial Board:

Journal of Clinical Immunology
International Journal of Oncology
Cancer Biotherapy & Radiopharmaceuticals (2001-present)
Cellular Pharmacology (1992-1998)
Journal of the National Cancer Institute (1994-1998)

International Conferences:

Current Organizer/Co-organizer I-V International Conferences on Nitric Oxide and Cancer. (2007-2017)

Past Co-Organizer (with John Collier) of ICN Meeting on Membrane-Mediated Cytotoxicity (Park City, Utah 1986)

Co-Organizer of International Conference on TNF and Related Cytokines (Heidelberg, 1987)

Co-Organizer (with Gale Granger) of International Conference on TNF:structure,mechanism of action, role in disease and therapy (Napa Valley, 1990)

Co-organizer of a conference on “ New frontiers in the therapy of malignancies” (Cagliari, Italy, 1991)

Co-organizer course on Genetics and Immunotherapeutic Approaches in Cancer treatment, (Erice, Sicily, Italy, 1996; 1999)

Organizer of conference on “Physical, Chemical, and Biological Properties of Stable Water Clusters (Los Angeles, 1998)

Presentations at International meetings

Yearly submitting several abstracts for poster and oral presentations (average 6-14/year) and attending the meetings of the following associations: American Association of Immunologists; American Association for cancer Research; American Society for Hematology.

Other

Visiting Professor, University of Dijon, France (2005)

Visiting Professor, University of Catania, Italy (2007-present)

Grant reviewer for multiple national and international foundations and institutes

Invited consultant : IPSEN Beaufour ; Genentech Oncology; Biogen-Idec, Inc.; EntreMed Inc; NeoGenix, Inc.

Scientific reviewer

Blood; British Journal of Hematology; Cancer Research; Cellular Immunology; Clinical Immunology; Frontiers in Immunology; International Journal of Oncology; Journal of Clinical Immunology; Journal of Clinical Oncology; Journal of Immunology; Journal of the National Cancer Institute; Leukemia; Leukemia Lymphoma; Molecular Cancer Therapeutics; Nature; Oncotargets; PLOS; PNAS; Science; Tumor Biology

UCLA ACTIVITIES

Teaching

Past M201 Microbiology and Immunology for Medical Students
234 Ethics and Research
M185B & M285B Intermediate Immunology

Current

M251 Advanced Immunology (guest lecturer)
M262 series ‘Immunobiology of Cancer Seminar’ Quarterly

Children Booklets

Series on “Exploring Immunology” developed with UCLA students for children aged 7-12. Currently, we have 5 booklets titled (1) The breakthrough: Edward Jenner and the small pox vaccine (2) The Internal Army: Elie Metchnikoff and disease fighting blood cells (3) Pasteur Discovers Rabies Cure (4) Virus Invasion and the Immune Defense and (5) Blood Killer Cells fighting diseases . In progress for publishing.

Other

Member of the Jonnsson Comprehensive Cancer Center ; Ad Hoc reviewer of grants and fellowships; other

Chairman of the Scientific Advisory Committee on Psychoneuroimmunology (1994-2000)

Strategic planning for the School of Medicine (Past)

Mamber of various university wide Search Committees

Member of various university wide Ph.D. Committees

Member of various university wide Ad Hoc Committees

Director of NCI Institutional Immunology Training Grant at UCLA (1990-2005)

Patent applications

Please see attached list

BIBLIOGRAPHY

BENJAMIN BONAVIDA, Ph.D.

- 1967 1. Sapse, A.T., Ivanyi, J., Stone, W., Jr., **Bonavida, B.**, and Sercarz, E.E. Tears as carriers as antibodies. I. Presence of antibodies to diverse antigens in rabbit tears. *Arch. Ophthalmol.* 77:526, 1967.
2. **Bonavida, B.**, Sapse, A.T., and Sercarz, E.E. Human tear lysozyme. I. Purification, physiochemical and immunochemical characterization. *J. Lab. Clin. Med.* 70:951, 1967.
3. Sapse, A.T., **Bonavida, B.**, Stone, W., Jr., Barnett, E.V., and Sercarz, E.E. La determination quantitative des proteines dans les larmes humaines. *Bull. Mem. Soc. Franc. Opthamol.* 80:236, 1967.
- 1968 4. Sapse, A.T., Ivanji, J., **Bonavida, B.**, Stone, W., Jr., Kramer, R., and Sercarz E.E. Tears as carriers of antibodies. II. Charge heterogeneity of IgG antibodies in rabbit tears. *Int. Arch. Aller. Appl. Immun.* 33:598, 1968.
5. **Bonavida, B.**, and Sapse, A.T. Human tear lysozyme. II. A sensitive method for its quantitative determination making use of standard Schirmer strips. *Amer. J. Ophthalmol.* 66:70, 1968.
6. Sapse, A.T., **Bonavida, B.**, Stone, W., Jr., and Sercarz E.E. Human tear lysozyme. III. Preliminary study in subjects with smog eye irritation. *Amer. J. Ophthalmol.* 7:435, 1968.
7. **Bonavida, B.**, Sapse, A.T., and Sercarz, E.E. Rabbit tear proteins. I. Detection and quantitation of lysozyme in non-stimulated tears. *Inv. Ophthalmol.* 7:435, 1968.
8. **Bonavida, B.** Molecular basis of the serological specificity of hen egg-white lysosyme. Ph.D. Thesis. University of California, Los Angeles, 1968.
- 1969 9. **Bonavida, B.**, Sapse, A.T. and Sercarz, E.E. Structural tear prealbumin: A unique lachrymal protein absent from serum and other secretions. *Nature* 221:375, 1969.
10. **Bonavida, B.**, Miller, A., and Sercarz, E.E. Structural basis for immune recognition of lysozyme. I. Effect of cyanogen bromide on hen egg-white lysozyme. *Biochemistry* 8:968, 1969.

11. Sapse, A.T., **Bonavida, B.**, Kadin, M., Stone, W., Jr., and Sercarz E.E. Smog eye irritation: Effect of air pollution on the tear protein pattern. In: *Occupational and Medicative Hazards in Ophthalmology*, J. Francois Ghent, ed., S. Karger AG, Switzerland, p.421, 1969.
12. Sapse, A.T., **Bonavida, B.**, Stone, W., Jr., and Sercarz, E.E. Human tear proteins, I, Immuno-electrophoretic patterns. *Arch. Ophthalmol.* 81:315, 1969.
- 1970 13. **Bonavida, B.**, Fuchs, S., and Sela, M. Antibodies to transfer RNA obtained with covalently linked RNA conjugates. *Biochem. Biophys. Res. Comm.* 41:1335, 1970.
- 1971 14. Maron, E. and **Bonavida, B.** A sensitive immunoassay for human lysozyme in biological fluids. *Biophys. Biochem. Acta.* 229:273, 1971.
15. **Bonavida, B.**, Fuchs, S., Inouye, H., and Sela, M. Inosine-coated Bacteriophage T4- Use in detection of anti-inosine-related compounds. *Biophys. Biochem. Acta.* 240:604, 1971.
16. **Bonavida, B.**, and Sercarz, E.E. Structural basis for immune recognition of lysozyme. II. Non-immunogenic epitopes on hen lysozyme. *Eur. J. Immun.* 2:166, 1971.
17. Maron, E., Arnon, R., and **Bonavida, B.** Sequential appearance of antibodies directed against different antigenic determinants on hen egg white lysozyme. *Eur. J. Immun.* 3:181, 1971.
18. **Bonavida, B.** Structural basis for immune recognition of lysozyme. IV. Immunologically active peptide obtained by the action of CNBr on human lysozyme. *Immunochemistry* 8:829, 1971.
19. Miller, A., **Bonavida, B.**, Stratton, J., Sercarz, E.E. Cross-reactivity of rabbit anti-human lysozyme sera with gallinaceous lysozymes. *Biophys. Biochem. Acta.* 243:520, 1971.
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- 1973 24. Zigelboim, J., **Bonavida, B.**, and Fahey, J.L. Evidence for several cell populations active in antibody dependent cellular cytotoxicity. *J. Immunol.* 111:1737, 1973.
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28. **Bonavida, B.** Studies on the induction and expression of T cell-mediated immunity. II. Antiserum blocking of cell-mediated cytolysis. *J. Immunol.* 112:1308, 1974(b).
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- 1975 39. Kedar, E. and **Bonavida, B.** Studies on the induction and expression of T cell-mediated immunity. IV. Non-overlapping populations of alloimmune cytotoxic lymphocytes to allogeneic cells. *J. Immunol.* 113:1386, 1975
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42. Rao, V.S., and **Bonavida, B.** Enhancement of skin allograft survival by soluble alloantigen is serum-mediated. *Transplantation* 21:42, 1976.
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- 1977 49. **Bonavida, B.** Concanavalin A-mediated activation of antigen-primed lymphocytes into secondary cytotoxic lymphocytes. *J. Exp. Med.* 145:293, 1977.
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51. Rao, V.S. and **Bonavida, B.** Detection of soluble tumor-associated antigens in serum of tumor-bearing rats and their immunological role in vivo. *Cancer Res.* 37:3385, 1977.
52. Grimm, E.A. and **Bonavida, B.** Studies on the induction and expression of T-cell mediated immunity. VI. Heterogeneity of lytic efficiency exhibited by isolated cytotoxic T lymphocytes prepared from highly enriched populations of effector-target conjugates. *J. Immunol.* 119:1041, 1977.
53. Saxon, A., Morledge, V.D., and **Bonavida, B.** Histamine-receptor leukocytes (HRL): organ lymphoid subpopulation distribution in man. *Clin. Exp. Immunol.* 28:394, 1977.
54. **Bonavida, B.** Antigen-induced cyclophosphamide-resistant suppressor T cells inhibit the in vitro generation of cytotoxic cells from one-way mixed leukocyte reactions. *J. Immunol.* 118:1550, 1977.
55. Owens, M.H., and **Bonavida, B.** Initiation and characterization of cultured tumor lines from spontaneous reticulum cell sarcoma of SJL/J mice. *Cancer Res.* 37:4439, 1977.
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59. Grimm, E.A. and **Bonavida, B.** Is there a relationship between effector-target cell binding and cell-mediated cytotoxicity? In: *Regulatory Mechanism in Lymphocyte Activation*, D.O. Lucas ed., Academic Press, New York, p.316, 1977.
60. Roman, J., Owens, M.H., and **Bonavida, B.** T cell recognition in cell-mediated immunity. I. Antigen recognition in the syngeneic SJL tumor systems. In: *Regulatory Genetics of the Immune System*, E. Sercarz and L. Herzenberg, eds., Academic Press, New York, p. 643. 1977.
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- 1978 63. Kedar, E., Clark, W.R., and **Bonavida, B.** *In vivo* and *in vitro* induction of cytotoxic lymphocytes by alloantigen-reactive lymphocytes fractionated on spleen cell monolayers. *Transplantation* 25:146, 1978.
64. McHugh, Y.E. and **Bonavida, B.** Autoreactive antibody-forming cells directed against thymocytes and thymus-derived lymphocytes. *J. Immunol.* 121:1090, 1978.
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68. Grimm, E.A. and **Bonavida, B.** Studie on the induction and expression of T-cell mediated immunity. IX. Activation of alloimmune memory lymphocytes into specific secondary CTL by syngeneic NAGO oxidized stimulator cells. *J. Immunol.* 123:2026, 1979.
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74. Shearer, G., and **Bonavida, B.** 1979 Workshop Summary: Genetics and cell interactions in cell-mediated lympholysis. In: *T and B Lymphocytes: Function and Regulation*, F. Bach, B. Bonavida, E. Vitetta, and E. Fox, eds, Academic Press, New York, p. 573, 1979.
75. Hiserodt, J.C., Granger, G.A., and **Bonavida, B.** Target cell lysis by supernatants derived from allimmune murine cytotoxic T lymphocytes: Possible role for a lymphotoxin-T cell receptor complex? In: *T and B Lymphocytes: Function and Regulation*, F. Bach, B. Bonavida, E. Vitetta, and E. Fox, eds, Academic Press, New York, p. 471, 1979.
76. Bach, F., **Bonavida, B.**, Vitetta, E., and Fox, F., eds. *T & B lymphocytes: recognition and function.* Academic Press, New York, 1979.
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81. Roman, J.M. and **Bonavida, B.** Inappropriate alloantigen-like specificities detected on spontaneous and transplantable reticulum cell sarcomas of SJL/J mice. *J. Immunogenetics* 7:61, 1980.
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87. **Bonavida, B.** and Bradley, T.P. Assessment of cell mediated cytotoxicity. *Immunol. Today* 1:104, 1980.
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- 1981 89. Bradley, T.P. and **Bonavida, B.** Mechanism of cell mediated cytotoxicity to the single cell level. III. Evidence that cytotoxic T lymphocytes lyse with antigen-specific and nonspecific targets pretreated with lectins or periodate. *J. Immunol.* 126:208, 1981.

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91. Wright, S.C., Hiserodt, J.C., and **Bonavida, B.** Lysis of NK target cells by soluble cytotoxic factors and inhibition by an xenoantiserum directed against cytotoxic cells. *Transplant. Proc.* 13:770, 1981.
92. Wilbur, S. and **Bonavida, B.** Expression of hybrid Ia molecules on the cell surface of reticulum cell sarcomas that are undetectable on host SJL/J lymphocytes. *J. Exp. Med.* 153:501, 1981.
93. Wright, S.C. and **Bonavida, B.** Selective lysis of NK sensitive target cells by soluble mediator released from murine spleen cells and human peripheral blood leukocytes. *J. Immunol.* 126:1516, 1981.
94. **Bonavida, B.** Wilbur, S., and Marelli, O. Surface expression of alien hybrid IE/C antigens on the reticulum cell sarcoma of SJL/J mice. *Transplant. Proc.* 13:1833, 1981.
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96. Berrih, S., London, J., and **Bonavida, B.** Murine spleen lymphocytes bearing receptors for peanut agglutinin. VII. Separation and functional characterization. *Cell. Immunol.* 63:249, 1981.
97. Fan, J. and **Bonavida, B.** Activation of allosensitized memory lymphocytes into secondary cytotoxic T lymphocytes by third party stimulator. *Transplant. Proc.* 13:1897, 1981.
98. **Bonavida, B.** and Roman, J.M. Expression of alien histocompatibility antigens on SJL/J tumors detected by cell mediated and serological analysis. *Cancer Immunol. Immunother.* 11:115, 1981.
99. Fan, J. and **Bonavida, B.** Studies on the induction and expression of T-cell mediated immunity. XII. The concomitant loss and recovery of membrane associated nonspecific cytotoxic activity of alloimmune T lymphocytes following treatment with trypsin, *J. Immunol.* 127:1856, 1981.
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101. **Bonavida, B.** Lectin-dependent natural killer cellular cytotoxicity in mice (NK-LDCC): A new subpopulation of NK-like cytotoxic cells. In: *NK Cells and other natural effector cells*, R.B. Herberman, ed., Academic Press, New York, p.483, 1982.
102. Bradley, T.P. and **Bonavida, B.** Natural killer cells are distinct from lectin-dependent effector cells. In: *Man as determined by the two-effector cells*, R.B. Herberman, ed., Academic Press, New York, p. 145, 1982.
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