

**CURRICULUM VITAE
JOEL KENNETH WELTMAN**

PERSONAL INFORMATION

Telephone 401/245-7588
Email joel_weltman@brown.edu

EDUCATION and DEGREES

High School Bronx HS of Science, 1946-1950.
Undergraduate New York University; 1950-1954 pre-medical; B.A., 1954.
Medical School State University of New York-Downstate Medical Center, 1954-1958; M.D., 1958.
Graduate School University of Colorado (Denver), (1959-1963) Ph.D. (Microbiology/Immunology; thesis advisor, David W. Talmage), 1963.

POSTGRADUATE TRAINING

Internship Rotating, Indiana University Medical Center; 1959.
Fellowships Post-Doctoral Fellow (Chemical Immunology) Weizmann Institute of Science, Rehovoth, Israel; with Michael Sela; 1963-1964.
Post-Doctoral Fellow (Chemical Immunology) The Rockefeller University, New York, NY; with Gerald M Edelman; 1965-1966.

POSTGRADUATE HONORS AND AWARDS

U.S.P.H.S. NIAID Post-Doctoral Fellowship; 1961-1963.
NIH Post-Doctoral Fellowship, 1963-1964. U.S.P.H.S. NIAID Special Post-Doctoral Fellowship; 1964-1965.
American Cancer Society Post-Doctoral Fellowship; 1965-1966),
Brown University; M.A. ad eundum, 1972.
Distinguished Teacher Award, Brown University School of Medicine; May, 2000.
Distinguished Teacher Award, Brown University School of Medicine; May, 2002.
Emeritus Award, May, 2006, Brown Medical School

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

- (1) Diplomate, National Board of Medical Examiners; Certificate #38314; 1959.
- (2) Diplomate, American Board of Allergy and Immunology, a Conjoint Board of the American Board of Internal Medicine and the American Board of Pediatrics; Certificate #1370; 1975.
- (3) American Board of Allergy and Immunology; Special Qualification in Diagnostic Laboratory Immunology; Certificate #101; 1988.
- (4) Licensed to practice medicine in Rhode Island (#3964) 03/20/68 - retired from practice April 2004.
- (5) Licensed to practice medicine in Massachusetts (#44084) 04/03/79 - retired from practice April 2004.

ACADEMIC APPOINTMENTS

- (1) Instructor of Microbiology and Immunology, University of Colorado, 1963.
- (2) Assistant Professor of Medical Sciences, Brown University; 1966 to 1971.
- (3) Associate Professor of Medicine (Research), Brown University; 1971 to 1979.
- (4) Clinical Associate Professor of Medicine, Brown University; 1979 to 1999.
- (5) Clinical Professor of Medicine, Brown University School of Medicine; 1999 to 2005.
- (6) Clinical Professor Emeritus of Medicine, Brown University School of Medicine; since July 1, 2005.

HOSPITAL APPOINTMENTS

- (1) Consultant, Department of Pediatrics (Allergy), Roger Williams General Hospital; 1968-1994.
- (2) Director, Allergy Clinic, Miriam Hospital, 1969-1979.
- (3) Member Active Staff, 1969-1994 and Consultant 1994-2002, The Miriam Hospital, Providence, RI.
- (4) Lecturer/Consultant in Pediatrics (Allergy and Immunology), Newport Regional Naval Medical Center; 1979-1984.
- (5) Consultant, Department of Medicine, Newport Hospital; 1979-1992.
- (6) Attending Physician, Division of Allergy, Rhode Island Hospital; 1979-1996.
- (7) Associate Member of Medical Staff of Charlton Memorial Hospital and St. Anne's Hospital, Fall River, MA; 1979 - 2004.
- (8) Associate Research Oncologist, Rhode Island Hospital; 1981-1982.
- (9) Research Oncologist, Rhode Island Hospital, Providence, RI; 1983-1991.
- (10) Member, Staff of LifeSpan - Rhode Island Hospital and The Miriam Hospital, Providence, RI; 2002 - 2004.

OTHER APPOINTMENTS AND ACTIVITIES

- (1) Visiting Scientist, Cell Biology Group, Department of Biochemistry, University of Bergen, Norway; Feb. 1972.
- (2) Consultant, Abbott Laboratories, Advanced Diagnostics Division, North Chicago, IL; 1979 and 1980.
- (3) Contributing Editor, Allergy Proceedings; 1981 - 2004.
- (4) Outside Reader, 1988, Tenure Committee, Department of Biology, Williams College, Williamstown, MA.
- (5) Member, Specialty Advisory Committee (Allergy), Blue Cross/Blue Shield of RI, 1991 - 2001.
- (6) Medical Director, JM Clinical Trials, Swansea, MA; 1997-1999; Co-Investigator 1999-2004.
- (7) Ad Hoc Reviewer, NIH (NIAID) 2001.
- (8) Ad Hoc Reviewer, International Science and Technology Center (ISTC) 2004.
- (9) Ad Hoc Reviewer, J Resp Diseases 2004.
- (10) Ad Hoc Reviewer, Allergy and Asthma Proceedings, 2004 – 2006, 2011, 2013, 2016, 2017.
- (11) Ad Hoc Reviewer, The Lancet, 2006.
- (12) Ad Hoc Reviewer, Entropy, 2008.
- (13) Ad Hoc Reviewer, American Journal of Medicine, 2008, 2010, 2013.
- (14) Ad Hoc Reviewer, Clinical and Experimental Immunology, 2008.
- (15) Editor, Journal of Medical Microbiology and Diagnosis, 2011

- (16) Editor-in-Chief, Journal of Medical Microbiology and Diagnosis, 2012 to present
- (17) Participant on NIAID Special Emphasis Peer Review Panel for contract proposals, 2013.
- (18) Ad Hoc Reviewer, British Journal of Pharmaceutical Research, 2014, 2015.
- (19) Ad Hoc Reviewer, Nature Scientific Reports, 2014.
- (20) Ad Hoc Reviewer, British Microbiology Research Journal, 2014, 2015, 2016.
- (21) Ad Hoc Reviewer, International Journal of Medical and Pharmaceutical Case Reports, 2015.
- (22) Editorial Board Member, Medical Reports & Case Studies, Dec 2015 – Dec 2016.
- (23) Ad Hoc Reviewer, International Journal of Tropical Disease and Health, 2016.
- (24) Ad Hoc Reviewer, Journal of Biomedical Informatics, 2016
- (25) Ad Hoc Reviewer, Journal of Applied Life Sciences International, 2016.
- (26) Ad Hoc Reviewer, International Journal of Biomathematics, 2017.
- (27) Ad Hoc Reviewer, Microbiology Research Journal International, 2017
- (28) Ad Hoc Reviewer, Journal of Scientific Research and Reports, (ScienceDomainInternational), 2017, 2018
- (29) Ad Hoc Reviewer, Virology (Elsevier), 2017
- (30) Ad Hoc Reviewer, Annual Research & Review in Biology (ScienceDomainInternational), 2017, 2018
- (31) Ad Hoc Reviewer, Journal of Advances in Mathematics and Computer Science (ScienceDomainInternational), 2018
- (32) Ad Hoc Reviewer, Asian Research Journal of Mathematics (ScienceDomainInternational), 2018
- (33) Ad Hoc Reviewer, Journal of Advances in Mathematics and Computer Science (ScienceDomainInternational), 2018
- (34) Ad Hoc Reviewer, South Asian Journal of Research in Microbiology (ScienceDomainInternational), 2018
- (35) Ad Hoc Reviewer, Physical Science International Journal; 2018
- (36) Ad Hoc Reviewer, Journal of Theoretical and Computational Science; 2019.

HOSPITAL COMMITTEES

- (1) Chairman, Research Committee, Miriam Hospital; 1969-1978.
- (2) Member, Asthma Steering Committee; Beat the Wheeze; Hasbro Children's Hospital; Providence, RI; 1996-1997.

BROWN UNIVERSITY COMMITTEES

- (1) Member, Brown University/American Cancer Society Institutional Research Grant Committee; 1968-1974 and 1983-1998.
- (2) Member, Advisory Committee on Corporate Responsibility in Investment; 1979-1981.
- (3) Member, Admissions Committee of the Graduate Program in Molecular and Cellular Biology; 1988-1990.

MEMBERSHIP IN SOCIETIES

- (1) Fellow, Rhode Island Society of Allergy (Secretary-Treasurer 1978-1981; President 1986-1988);

- (2) Fellow Emeritus, American Academy of Allergy and Immunology;
- (3) Member, American Association for the Advancement of Science, 1979-2017;
- (4) Member, American Society for Biological Chemistry and Molecular Biology; Emeritus 2005
- (5) Associate Member, Rhode Island Medical Society 1979-2004.
- (6) Member, Fall River (MA) Medical Society 1979-2004 (Retired April 2004).
- (7) Former member, Clinical Immunology Society;
- (8) Member, New England Society of Allergy. Member, Program Committee 1990-1992; Member, Executive Council, 1992-1994; Treasurer, 1995-1998; President-elect, 04/1998; President, 04/1999 to 04/2000, Past President, 04/2000 to 04/2001; Emeritus 2005.
- (9) Member, American Medical Association.

PUBLICATIONS

- (1) Weltman, JK (1963) A Study of Differences in the Free Methionine and Cysteine Compartments which Supply Precursors for the Synthesis of Serum Albumin; Ph.D. Thesis, University of Colorado.
- (2) Weltman, JK and Talmage, DW (1963) A Method for the Simultaneous Determination of H³ and S³⁵ in Samples with Variable Quenching, *Int.J.Appl.Rad.Isotop.*, 14, 541-548.
- (3) Weltman, JK and Sela, M (1964) Hydrogen Ion Titration of Rabbit Gamma Globulin and Some of its Subunits; *Biochim.Biophys.Acta*, 93, 553-563.
- (4) Weltman, JK and Edelman, GM (1967) Fluorescence Polarization of Human Immunoglobulin G; *Biochem.*, 6, 1437-1447.
- (5) Weltman, JK and Arnold, JH (1969) The Interaction of a Hydrophobic Probe with Human Blood Cells; *Proc. Soc. Exptl. Biol. Med.*, 131, 546-549; doi:10.3181/00379727-131-33922.
- (6) Weltman, JK and Talmage, DW (1969) Analysis of the Compartmentation of Methionine and Cysteine Pools; *Anal.Biochem.*, 32, 218-228.
- (7) Dyckman, J and Weltman, JK (1970) A Morphological Analysis of Binding of a Hydrophobic Probe to Cells; *J.Cell Biol.*, 45, 192-197.
- (8) Weltman, JK and Davis, RP (1970) Fluorescence Polarization Study of a Human IgA Myeloma Protein: Absence of Segmental Flexibility; *J.Mol.Biol.*, 54, 177-185.
- (9) Marchalonis, JJ and Weltman, JK: Relatedness Among Proteins: a New Method of Estimation and its Application to Immunoglobulins; *Comp.Biochem.Physiol.*, 38, 609-625; 1971.
- (10) Weltman, JK (1971) A Simplified Model for Analysis of Conversion of Methionine to Cysteine; *Anal.Biochem.*, 40, 380-385.
- (11) Coleman, AW, Coleman, JR, Griffin, JD, Weltman, JK and Chapman, KM (1972) Methylxanthine-Induced Escalation: a Propagated Wave Phenomenon Observed in Skeletal Muscle Developing in Culture; *Proc.Nat.Acad.Sci.*, 69, 613-616.
- (12) Weltman, JK, Szaro, RP, Frackelton, AR, and Dowben, RM (1972) Fluorescence Changes Associated with G-F Transformation of Actin; *FEBS Letters*, 22, 61-63.
- (13) Griffin, JD, Szaro, RP and Weltman, JK (1972) Oubain Antagonism of Smooth Muscle Contraction; *J.Pharm.Exptl.Therap.*, 182, 378-387.
- (14) Pryme, IF, Garatun-Tjeldsto, O, Birckbichler, PJ, Weltman, JK and Dowben, RM (1973) Synthesis of Immunoglobulins by Membrane-Bound Polysomes and Free Polysomes from Plasmacytoma Cells; *Europ.J.Biochem.*, 33, 374-378.
- (15) Weltman, JK, Szaro, RP, Frackelton, AR, Dowben, RM, Bunting, JR, and Cathou, RE (1973) N-(3-Pyrene)maleimide: a Long Lifetime Fluorescent Sulfhydryl Reagent; *J.Biol.Chem.*, 248, 3173-3177.
- (16) Weltman, JK and Dowben, RM (1973) Relatedness Among Contractile and Membrane Proteins: Evidence for Evolution from Common Ancestral Genes; *Proc.Nat.Acad.Sci.*, 70, 3230-3234.
- (17) Garatun-Tjeldsto, O, Pryme, IF, Weltman, JK and Dowben, RM (1976) Synthesis and

- Secretion of Light-Chain Immunoglobulin in Two Successive Cycles of Synchronized Plasmacytoma Cells; *J.Cell Biol.*, 68, 232-239.
- (18) Frackelton,AR, Szaro,RP and Weltman,JK (1976) A Galactosidase Immunosorbent Test for Carcinoembryonic Antigen; *Cancer Res.*, 36, 2845-2849.
- (19) Weltman,JK and Frackelton,AR (1976) Application of a Galactosidase Immunosorbent Test to Carcinoembryonic Antigen in Plasma; *Cancer Res.*, 36, 2850-2853.
- (20) Richman,MH, Thunold,J, Weltman,JK and Cole,A (1976) A Metallurgical Examination of Fractured Stainless Steel ASIF Tibial Plates; *Injury, Brit.J.Trauma Surgery*, 8, 13-19.
- (21) Weltman,JK, Frackelton,AR,Jr., Szaro,RP and Rotman,B (1976) A Galactosidase Immunosorbent Test for Human Immunoglobulin E; *J.Allergy Clin.Immunol.*, 58, 426-431.
- (22) Liburdy,RP and Weltman,JK (1976) Preparation and Characterization of Fluorescent N-(3-Pyrene)maleimide Adducts of Myosin; *J.Mechanochem.Cell Motility* 3, 229-234.
- (23) Herbert,TJ, Weltman,JK, Frackelton,AR,Jr., and Dowben,RM (1977) Dielectric Dispersion of Actin; *J.Mechanochem. Cell Motility*; 4, 79-85.
- (24) Weltman,JK, Szaro,RP, and Settupane,GA (1978) An Analysis of the Role of IgE in Intolerance to Aspirin and Tartrazine; *Allergy*, 33, 273-281.
- (25) Settupane,GA, Klein,DE, Boyd,GK, Sturam,JK, Freye,HG and Weltman,JK (1979) Adverse Reactions to Cromolyn Sodium: A Clinical and Immunological Evaluation; *J.Am.Med.Assoc.*; 241, 811-813.
- (26) Senft,AW, Weltman,JK, Goldgraber,MB, Egyud,LG and Kuntz,RE (1979) Species Specificity of the Immediate Hypersensitivity Response to Schistosomal Antigens; *Parasite Immunol.*, 1, 79-89.
- (27) Frackelton,AR,Jr., and Weltman,JK (1980) Diffusion Control of the Binding of Carcinoembryonic Antigen (CEA) with Insoluble Anti-CEA Antibodies; *J.Immunol.*, 124, 2048-2054.
- (28) Weltman,JK and Senft,AW (1981) An Analysis of Allergy, Immunoglobulin E and Diagnostic Skin Tests in Schistosomiasis; *Parasite Immunol.*, 3, 157-163.
- (29) Weltman,JK (1982) Effect of Praziquantel on Antigenemia in Murine Schistosomiasis; *Am.J.Trop.Med.Hyg.* 31, 1294-1296.
- (30) Weltman, JK, Johnson, S-A, Langevin, J and Riester, EF (1983) N-Succinimidyl(4-Iodoacetyl)Aminobenzoate: a New Heterobifunctional Crosslinker; *BioTechniques*, 1, 148-152.
- (31) Weltman,JK and Senft,AW (1983) Regulation of the Allergic Response in Schistosomiasis: a Proposed Model; *Pharmacolog. Therapeut.*, 20, 171-181.
- (32) Weltman, JK, Pedroso, P, Johnson, SA, Fast, LD, Leone, LA, Cuttitta, F and Minna, JD (1986) Indirect Immunotoxin Method for Demonstrating Antibodies Against Human Tumor Cells; *BioTechniques*, 4, 224-228.
- (33) Weltman, JK, Pedroso, P, Johnson, S-A, Davignon, D, Fast, LD, and Leone, LA (1987) Rapid Screening with Indirect Immunotoxin for Monoclonal Antibodies Against Small Cell Lung Cancer; *Cancer Res.* 47, 5552-5556.
- (34) Weltman, JK, Pedroso, P, Johnson, S-A and Fast, LD (1989) Mediation of Indirect Immunotoxin Activity by Antibodies Against Leukocyte Membrane Antigens; *Antibody Immunoconj. Radiopharm.*, 2, 29-36.
- (35) Weltman, JK, Melucci, C, Chen, J and Davidson, A (1992) Internalization of Monoclonal Antibodies by Small-Cell Lung Cancer Cells; *Hybridoma* 11, 547-559.
- (36) Karim, AS and Weltman, JK (1993) Formation of Protein Conjugates of Phosphorothioate Nucleoside Diphosphate beta-S; *Nucl Acids Res* 21:5281-5282.
- (37) Karim, AS, Johansson CS and Weltman, JK (1995) Maleimide-Mediated Protein Conjugates of a Nucleoside Triphosphate gamma-S and an Internucleotide Phosphorothioate Diester; *Nucl Acids Res*; 23:2037-2040.
- (38) Weltman JK and Karim, AS (1998) A Semi-Empirical Hückel Molecular Orbital Analysis of

Internucleotide Phosphorothioate Diesters; *Anticancer Res*; 18:2733-2736.

(39) Weltman JK and Karim, AS (1998) Interleukin-5: A Proeosinophilic Cytokine Mediator of Inflammation in Asthma and a Target for Antisense Therapy; *Asthma Allergy Proc*, 19:257-261.

(40) Weltman JK (1999) The Use of Inhaled Corticosteroids in Asthma; *Asthma Allergy Proc*; 20:255-260.

(41) Karim, AS and Weltman, JK (1999) Transcription of 2'-Fluoro-modified and Phosphorothioate-modified RNA Templates by HIV-1 Reverse Transcriptase; *Anticancer Res* 19:5419-5422.

(42) Weltman JK and Karim AS (2000) IL-5: Biology and Potential Therapeutic Applications; *Expert Opinion on Investigational Drugs*; 9(3): 491-496.

(43) Weltman JK (2000) Update on Histamine as a Mediator of Inflammation; *Asthma Allergy Proc* 21:125-128.

(44) Weltman, JK (2000) Cytokines: Regulators of Eosinophilic Inflammation. *Asthma Allergy Proc* 21:203-207.

(45) Weltman, JK (2000) The Function of Eosinophils. *Asthma Allergy Proc* 21: 343-344.

(46) Weltman, JK (2001) An Ab Initio Molecular Orbital Analysis of Phosphorothioate Mono-anion. *Anticancer Res Mar-Apr*;21(2A):1195-1198.

(47) Weltman, JK (2001) An Updated Model of Clinical Asthma. *Asthma Allergy Proc*. May-Jun;22(3):149-151.

(48) Weltman JK (2003) Histamine as a Regulator of Allergic and Asthmatic Inflammation. *Asthma Allergy Proc*. 24(4):227-229.

(49) Weltman, JK and Lorient, GB (2003) Molecular Modeling of Penicilloate Anions: an RHF-SCF Analysis. *J Molecular Modeling*, 9(4): 225-229. Epub 2003 May 23.

(50) Weltman JK, Skowron G and Lorient GB. (2004) The HF-SCF Energy of HIV-1 MNgp120 V3 Hairpin Loop Conformers. *J Molecular Modeling* 10(5-6): 367-372. Epub 2004 Oct 02.

(51) Weltman JK, Skowron G and Lorient GB (2005) HIV-1 GP120 V3 conformational and informational entropies. *J Molecular Modeling* 12(3):362-365. Epub 2006 Jan 18.

(52) Weltman JK, Skowron G and Lorient GB (2007) Influenza A H5N1 hemagglutinin cleavable signal sequence substitutions. *Biochem Biophys Res Commun*. 352(1):177-180. Epub 2006 Nov 10.

(53) Thompson WA, Fan S and Weltman JK. (2008) Information Entropy of Influenza A Segment 7. *Entropy* 10(4):736-744; DOI: 10.3390/e10040736.

(54) Thompson WA, Martwick A and Weltman JK. (2009) Decimative Multiplication of Entropy Arrays, with Application to Influenza. *Entropy* 11(3):351-359; DOI: 10.3390/e11030351; Correction: <http://www.mdpi.com/1099-4300/11/3/384/>

(55) Thompson, W.A. Martwick, A. Weltman, J.K. (2010) Examining H1N1 Through Its Information Entropy. (In the Spotlight). *IEEE Signal Processing* 27(3):171-174.

(56) Thompson, WA and Weltman, JK (2012). Intergenic subset organization within a set of geographically-defined viral sequences from the 2009 H1N1 influenza A pandemic. *Amer J Mol Biol*. 2(1):32-41. DOI: 10.4236/ajmb.2012.21004. Pub. date: 2011-12-30.

(57) Thompson, WA and Weltman, JK (2012) Bioinformatic Analyses of 2009-2010 Pandemic H1N1 Influenza A Hemagglutinin Subsets; *J Med Microbiol Diagnosis*, June 25, 2012, 1:e110. doi:10.4172/2161-0703.1000e110.

(58) Weltman, JK (2014) An Immunobioinformatic Comparison of Influenza A Subtype Hemagglutinins; *J Med Microbiol Diagnosis*, 3: 135. doi: 10.4172/2161-0703.1000135

(59) Weltman JK (2015) Identification of Invariant Peptide Domains within Ebola Virus Glycoprotein GP1, 2. *J Med Microb Diagn* 4: 176-178. doi:10.4172/2161-0703.1000176

(60) Weltman Joel K (2015) Information Entropy and Protein Secondary Structure in the ZEBOV-Makona Ebola Virus Glycoprotein; *J Health Med Informat* 2015, 6: 207 doi: 10.4172/2157-7420.1000207
<http://www.omicsonline.org/open-access/information-entropy-and-protein-secondary-structure-in>

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(61) Weltman Joel K (2016) An Immuno-Bioinformatic Analysis of Zika virus (ZIKV) Envelope E Protein. *J Med Microb Diagn* 5: 228. doi:10.4172/2161-0703.1000228

(62) Weltman Joel K (2016) Computer-Assisted Vaccine Design by Analysis of Zika Virus E Proteins Obtained either from Humans or from Aedes Mosquitos. *J Med Microb Diagn* 5: 235. doi:10.4172/2161-0703.1000235

(63) Weltman Joel K (2016) Sets and Subsets of Mutating Amino Acids in Zika Virus Polyprotein. *J Med Microb Diagn* 5:247. doi: 10.4172/2161-0703.1000247

(64) Weltman Joel K (2017) Exclusive and Common Subsets of Zika Virus Polyprotein Mutants. *J Med Microb Diagn* 6: 256. doi:10.4172/2161-0703.1000256

(65) Weltman Joel K (2017) A Bioinformatic Glimpse of Human-Origin Zika Virus Polyprotein; *J Med Microb Diagn*; Vol 6(4), 265 DOI: 10.4172/2161-0703.1000265

(66) Weltman Joel K (2018) Shannon Entropy Screening of Influenza Hemagglutinin for Tetrapeptides with Exact Homology to Human Proteins; *J Med Microb Diagn*, Vol 7(3): 284 DOI: 10.4172/2161-0703.1000284

(67) Weltman Joel K (2019) Identical Subsequences of Contiguous Amino Acids in Influenza Virus Hemagglutinin and in Human Proteins. *J Med Microb Diagn* 8: 301. doi:10.4172/2161-0703.1000301

OTHER PUBLICATIONS

(1) Weltman, JK: Biochemical Aspects of Asthma; *Rhode Island Med.J.*, 58, 107; 1970; editorial.

(2) Weltman, JK: Immune Surveillance, RT Smith and M Landy, eds., *Amer.Scientist*, 60, 507; 1972; book review.

(3) Weltman, JK: Immune Response at the Cellular Level; TP Zacharia, ed., (*Methods in Molecular Biology Series*, Vol.6); *Amer. Scientist*, 62, 605; 1974; book review.

(4) Weltman,JK: Immunodiffusion, AJ Crowle; *Amer. Scientist*, 62, 363; 1974; book review.

(5) Weltman,JK: Basic and Clinical Immunology; HH Fudenberg, ed., *RI Med.J.*, 60, 508; 1977; book review.

(6) Weltman, JK: Origins of Lymphocyte Diversity, *Cold Spring Harbor Symposium*, Vol.XLI, 1977; *Amer. Scientist*, 66, 92; 1978; book review.

(7) Settignano,GA and Weltman,JK: Swimmers' Itch: a New England Problem; *New Engl. Regional Allergy Proc.*, 1, 115- 119; 1980.

(8) Weltman,JK: Solid Phase Enzyme ImmunoAssays with Covalent Conjugates of Galactosidase; *New Engl. Regional Allergy Proc.*, 2, 31-33; 1981.

(9) Weltman,JK and Settignano,GA: Aspirin Intolerance is Not Mediated by Immunoglobulin E; *New Engl. Regional Allergy Proc.*, 2, 94-95; 1981.

(10) Weltman,JK: Targeted-Chemotherapy of Cancer with Monoclonal Antibodies; *New Engl. Regional Allergy Proc.*, 3, 315-317, 1982.

(11) Weltman, JK: Detection and Quantitation of Immunoglobulin E Antibodies; in *RHINITIS*, GA Settignano, ed., *New Engl. Regional Allergy Proc.*; Providence, RI; pp.22-23; 1984.

(12) Weltman,JK: The 1984 Nobel Prize for Medicine Awarded to Three Immunologists; *New Engl. Regional Allergy Proc*; 6, 84-85; 1985; editorial.

(13) Weltman,JK: The 1986 Nobel Prize for Physiology or Medicine Awarded for Discovery of Growth Factors. *New Engl. Reg. Allergy Proc*; 8, 31-32, 1987; editorial.

(14) Kalliel, JN, Weltman, JK, Mandell, CH, Rahman, A: Osteonecrosis as a Complication of Steroid Dependent Asthma: a Case Report and Review; *New Engl. Regional Allergy Proc.*, 8, 108- 112; 1987.

(15) Weltman, JK: The 1987 Nobel Prize for Physiology or Medicine Awarded to Molecular Immunogeneticist Susumu Tonegawa. *Allergy Proc.* editorial, 9, 575-576, 1988.

(16) Weltman, JK: Laboratory Tests for Total and Allergen-Specific Immunoglobulin E; *New Engl.*

Regional Allergy Proc., 9, 129-133, 1988.

(17) Weltman, JK: Detection and Quantitation of Immunoglobulin E Antibodies; in RHINITIS, second edition; GA Settupane, ed., Pitman Press.; Providence, RI; 39-41; 1991.

(18) Weltman, JK: Current Issues in Allergy/Immunology: Regulation of the Balance Between Humoral and Cellular Immunity. Blue Cross & Blue Shield of RI Medical Practice Bulletin, 1:1-2, 1993.

(19) Weltman, JK and Karim, AS: Ligand-Targeted Delivery of Genes and Antisense Oligonucleotides; Genetic Engineering News; Vol. 15, No 2, page 14; Jan 15, 1995.

(20) Weltman, JK (2012) Editorial; Analytic Approximations of SIR Compartmental Models of Infectious Disease Epidemics; J Med Microbiol Diagnosis, June 25, 2012, 1:e110. doi:10.4172/2161-0703.1000e110.

(21) Weltman, JK (2012) Editorial; Some Implications of Mathematical Analyses of Epidemics; J Med Microbiol Diagnosis, Oct 18, 2012, 1:e115. doi:10.4172/2161-0703.1000e115.

(22) Weltman, JK (2014) Editorial; MERS-Cov and Immunobioinformatics; J Med Microbiol Diagnosis, 3(3), e126, doi:10.4172/2161-0703.1000e126.

(23) Weltman, JK (2014) Combined Use of Information Entropy and Bepipred Scores for Screening Ebola Virus Glycoprotein (GP) Sequences. In Proceedings of the 1st Int. *Electron. Conf. Entropy Appl.*, 3 - 21 November 2014; Sciforum Electronic Conference Series, Vol. 1, 2014, d003; doi:10.3390/ecea-1-d003

(24) Weltman JK (2015) Editorial: Mapping Zaire Ebola Virus Glycoprotein Organization onto Information Entropy. J Med Microbiol Diagn 4: 180 doi:10.4172/2161-0703.1000e128

(25) Weltman, JK (2015) Mutual Information-Based Cliques of Amino Acids in the Zaire Ebola Virus-Makona Glycoprotein In Proceedings of the 2nd Int. *Electron. Conf. Entropy Appl.*, 15 - 30 November 2015; Sciforum Electronic Conference Series, Vol. 2, 2015; doi:10.3390/ecea-2-d001

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(28) Weltman JK (2016) Insights in Medical Microbiology and Diagnosis. J Med Microb Diagn 5:e134. doi:10.4172/2161-0703.1000e134

PATENTS

(1) Weltman, JK and Rotman, B (1977) Enzyme Conjugates U.S. Patent Number 4,002,532.

(2) Weltman, JK (1979) Procède de Preparation d'un Conjugue d'un Enzyme et Reactif de Couplage Utile et Cet Effet, Patent Number 875,064; Belgium.

(3) Weltman, JK (1980) Enzyme Conjugates and Method of Preparation and Use; U.S. Patent Number 4,218,539.

(4) Weltman, JK (1981) N-Succinimidyl Haloacetyl Aminobenzoates as Coupling Agents; U.S. Patent Number 4,251,445.

(5) Weltman, JK (1982) Process for the Detection of Antibodies; U.S. Patent Number 4,360,592.

(6) Weltman, JK (1987) Screening Antibodies for Capacity to Deliver Toxin to Target Cells; U.S. Patent Number 4,689,311.

(7) Weltman JK and Karim, AS (2000) Inhibition of Expression of IL-5; U.S. Patent Number 6,048,726.

ABSTRACTS

- (1) Weltman,JK and Talmage,DW (1963) Selective Incorporation of Locally Synthesized Cysteine into Serum Albumin; Fed.Proc., 22: 237.
- (2) Edelman,GM and Weltman,JK (1967) Fluorescence Polarization of Gamma Globulin; Fed.Proc.,26: 275.
- (3) Weltman,JK and Arnold,JH (1968) The Interaction of a Hydrophobic Probe with Human Blood Cells; Clin.Res.,16: 543.
- (4) Weltman,JK and Davis,RP (1969) A Hydrodynamic Study of Human Immunoglobulin-A; Fed.Proc., 28: 831.
- (5) Weltman,JK and Dyckman,J (1969) Intracellular Localization of Receptor Sites for a Hydrophobic Probe; Clin.Res.,17: 603.
- (6) Weltman,JK, Szaro,RP, and Davis,RP (1971) Antagonism of Histamine- Induced Contraction of Smooth Muscle by Ouabain; J.Gen.Physiol.; 57: 252.
- (7) Weltman,JK, Frackelton,AR,Jr., Szaro,RP and Dowben,RM (1971) Synthesis and Fluorescence Polarization Analysis of an Organomercurial Derivative of Actin; J. Lab. Clin. Invest. 78, 808: 1971.
- (8) Weltman,JK and Griffin,JD (1971) Mode of Action of Ouabain on Smooth Muscle; Clin.Res., 19: 405.
- (9) Weltman,JK, Szaro,RP, Frackelton,AR,Jr., Dowben,RM, Bunting,JR and Cathou,RE (1973) N-(Pyrene)maleimide: a Long Lifetime Fluorescent Sulfhydryl Reagent; Fed.Proc. 32: 495.
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- (11) Weltman,JK (1983) Preparation and Use of a New Iodoacetyl Heterobifunctional Crosslinker; Fed.Proc., 42: 2225.
- (12) Weltman,JK (1984) Killing of Clonogenic Tumor Cells by Diphtheria Toxin; Fed. Proc., 43: 1954.
- (13) Weltman,JK (1984) Killing of Clonogenic Tumor Cells by Diphtheria Toxin; a Crucial Test for Targeted Chemotherapy; Proc. Amer. Assoc. Cancer Res. 25: 343.
- (14) Weltman, JK, Langevin, J, Reisner, R, Fast, L, Lee, RJ and Cuttitta, F (1985) An Indirect Immunotoxin Against Small Cell Lung Carcinoma; Fed. Proc 44: 1802.
- (15) Weltman, JK, Pedroso, P and Johnson, SA (1987) Differential Enhancement of the Action of Indirect Immunotoxins by Lysosomotropes; J. Cellular Biochem., Suppl. 11B: 188.
- (16) Weltman, JK, Pedroso, P, Johnson, S-A, Fast, LD, Davignon, D and Leone, LA (1987) Detection of Monoclonal Antibodies Against Small Cell Lung Cancer (SCLC) by Indirect Immunotoxin Screen; Proc. Amer. Assoc. Cancer Res., 28: 397.
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- (19) Weltman, JK, Ricci, AR, Pedroso, P, Johnson, S-A and Posner, MR (1989) An Indirect Immunotoxin Screen of Human Monoclonal Antibodies (hu-MOABs) Against B-Lineage Leukemic Cells; Proc. Amer. Assoc. Cancer Res.; 30: 396.
- (20) Weltman, JK and Pezzullo, JC (1990) An Allergy-Oriented Invoicing Program Which Screens Appropriateness of Service; Allergy Proc. 11: 309.
- (21) Chen, J, Miller, SD, Johnson, SA and Weltman, JK (1990) Prospecting for Murine Monoclonal Antibodies (MoAbs) Mediating Immunotoxin Activity Against Small Cell Lung Cancer (SCLC) Cells; Allergy Proc. 11: 310.
- (22) Weltman, JK and Johnson, S-A (1990) Murine Monoclonal Antibodies Mediating

Immunotoxin Activity Against Small Cell Lung Cancer Cells; Proc. Amer. Assoc. Cancer Res. 31: 293.

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(24) Davidson, AE and Weltman, JK (1991) An Algorithm for the Immunodiagnostic Evaluation of the Patient with Uveitis; Allergy Proc. 12: 401.

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(26) Weltman, JK and Karim, AS (1994) Evidence for Reaction of Maleimide with Phosphorothioate Nucleotides; FASEB-J 8:A1264.

(27) Weltman, JK and Karim, AS (1998) Selection of Antisense Sequences Against Human Interleukin-5 by Maximization of G+C Content. FASEB-J, 12: A1465.

(28) Weltman, JK and Settignano, RJ (2002) Ab Initio Molecular Orbital Analyses of Aminopenicillin Side Chains. Allergy Asthma Proc, 23:163.

(29) Weltman, JK and Loriot, GB (2002) An Ab Initio Molecular Orbital Analysis of 6-Aminopenicillanic Acid. Allergy Asthma Proc 23:281.

(30) Weltman JK, Faken DB and Loriot GB (2004) Geometry Optimization Analyses of Protein Antigens. Allergy Asthma Proc 25(6) 463.

(31) Weltman JK, Pandemic Influenza Bioinformatics; International Conference on Pathology, Philadelphia, PA (Aug 27-29, 2012)

<http://www.omicsonline.org/pathology2012/scientific-programme.php?day=1&sid=143> .

(32) Weltman, JK Pandemic pdm09 Influenza Bioinformatics; International Conference on Clinical Microbiology & Microbial Genomics (Nov 12-14, 2012)

<http://www.omicsonline.org/clinicalmicrobiology2012/scientific-programme.php?day=1&sid=181>

INVITED PRESENTATIONS

(1) Weltman, JK: Enzyme-Immunoassay Studies of CEA; invited lecture, National Bladder Cancer Organ Project, Dept. Pathology, St. Vincent's Hospital, Univ. Mass., Nov.17, 1974.

(2) Rotman, B and Weltman, JK: a New Method for Preparation of Enzyme-Labelled Reagents and its Application to Diagnosis of Allergy; Conference on Non-Isotopic ImmunoAssays; invited lecture; presented in Brussels (Rotman) and Chicago (Weltman); Robert S. First, Inc., New York; 1976.

(3) Weltman, JK: Co-Chairman (with Max Samter); Luncheon Seminar on Aspirin, Asthma and Nasal Polyps; Annual Meeting of American Academy of Allergy; Phoenix, AZ; 1979.

(4) Weltman, JK: New Horizons in Allergy Treatment; invited lecture, Symposium on Aeroallergens; sponsored by NY Botanical Garden and Cornell University Medical Center; Dec 9, 1979.

(5) Weltman, JK and Senft, AW: invited lecturer; The Allergic Response in Schistosomiasis; Conference on Schistosomiasis and Filariasis; sponsored by US and Japanese Panels on Parasitic Diseases of the US and Japan Cooperative Medical Science Program; New Orleans, LA; Aug 13, 1979.

(6) Weltman, JK: invited lecturer, Symposium on Aspirin and Other Non-Steroidal Anti-Inflammatory Agents; National Asthma Center, National Jewish Hospital and Research Center; Denver, CO; topic: State of Research as to Untoward Reactions to Aspirin: Allergic or Pseudo-Allergic Reaction; June 8-9, 1979.

(7) Weltman, JK: Preparation of Active and Stable Conjugates of Galactosidase and Immunoglobulin with N-Succinimidyl(4-iodoacetyl)aminobenzoate; invited tutorial seminar; FASEB Annual Meeting; Anaheim, CA; Sponsored by Pierce Chemical Company; April 17, 1985.

- (8) Weltman, JK: Immunotoxins; invited lecture; Baylor Research Foundation, Dallas, TX; July 7, 1987.
- (9) Weltman, JK: In Vitro Office Tests in Allergy Practice; invited lecture; Eastern Allergy Conference; Southampton Princess, Bermuda; 2-4 April 1987.
- (10) Weltman, JK: Invited lecture: Mechanisms of Allergic Disease, Harvard Community Health Care, Swansea, MA; sponsored by Marion Merrell Dow; September 23, 1991.
- (11) Weltman, JK: Invited lecture: Recent Trends in Diagnostic Laboratory Immunology; annual meeting New Engl Soc Allergy; Nantucket, MA; Sept 13, 1991.
- (12) Weltman, JK: Histamine, Histamine Receptors and Histamine Antagonists; Allergy/Immunology Grand Rounds; Rhode Island Hospital, Providence, RI; sponsored by Schering Corp; May 4, 1995.
- (13) Weltman, JK: Histamine, Histamine Receptors and Histamine Antagonists; St Anne's Hospital; Greater Fall River Physicians' CME lecture; sponsored by Schering Corp; Fall River, MA; June 7, 1995.
- (14) Weltman, JK: Control of Asthma with Inhaled Steroids; Newport, RI; sponsored by Rhone-Poulenc Rorer; July 27, 1995.
- (15) Weltman, JK: Control of Asthma with Inhaled Steroids; Sneezes, Wheezes and Itch; Wellesley, MA; sponsored by Rhone-Poulenc Rorer; December 21, 1995.
- (16) Weltman, JK: Control of Asthma with Inhaled Steroids; Charlton Memorial Hospital; Fall River, MA; Greater Fall River Physician CME Grand Rounds; sponsored by Rhone-Poulenc Rorer; January 9, 1996.
- (17) Weltman, JK: Control of Asthma with Inhaled Steroids; St. Anne's Hospital; Fall River, MA; Greater Fall River Physician CME Pediatric Grand Rounds; sponsored by Rhone-Poulenc Rorer; March 1, 1996.
- (18) Weltman, JK: Treatment of Allergic Diseases with Anti-Histamines; Newport, RI; sponsored by Schering Corp; March 21, 1996.
- (19) Weltman, JK: Control of Asthma with Inhaled Steroids; Allergy/Immunology Grand Rounds; Rhode Island Hospital, Providence, RI; sponsored by Rhone-Poulenc Rorer; May 2, 1996.
- (20) Weltman, JK: Control of Asthma with Inhaled Steroids; West Springfield, MA; sponsored by Rhone-Poulenc Rorer; June 11, 1996.
- (21) Weltman, JK: Tutorial on Inhaled Steroids; corporate Plan of Action seminar; Sturbridge, MA; sponsored by Rhone-Poulenc Rorer; June 20, 1996.
- (22) Weltman, JK: Control of Asthma with Inhaled Steroids; Grand Rounds; Good Samaritan Medical Center; Brockton, MA; sponsored by Rhone-Poulenc Rorer; July 26, 1996.
- (23) Weltman, JK: Control of Asthma with Inhaled Steroids; Massachusetts Respiratory Hospital; Braintree, MA; sponsored by Rhone-Poulenc Rorer; July 26, 1996.
- (24) Weltman, JK: Recent Developments in Antihistamines; tutorial for the Schering Corp; Taunton, MA; Sept 20, 1996.
- (25) Weltman, JK: Defining the Ideal Characteristics of an Inhaled Steroid; Westport, MA; sponsored by Forest Pharmaceuticals; November 21, 1996.
- (26) Weltman, JK: Recent Observations on the Use of Inhaled Steroids in Asthma; Providence, RI; sponsored by Rhone-Poulenc Rorer; February 16, 1997.
- (27) Weltman, JK: The Diagnosis and Management of Asthma: Problem-Based Learning; Newport, RI; sponsored by Astra USA; July 24, 1997.
- (28) Weltman, JK: Managed Asthma Care; Conference on Psychological Aspects of Allergies, Asthma and Other Chronic Diseases; Newport, RI; Sept 26 and 27, 1997.
- (29) Weltman, JK: Pathophysiology of Asthma and Allergic Rhinitis; Conference on Psychological Aspects of Allergies, Asthma and Other Chronic Diseases; Newport, RI; Sept 26 and 27, 1997.
- (30) Weltman, JK (with Buyse, M) Asthma Management Programs; Brown University Allergy/Immunology Grand Rounds; Oct 16, 1997.
- (31) Weltman, JK: The Use of Inhaled Corticosteroids in Asthma; Brown University

- Allergy/Immunology Grand Rounds; Dec 17, 1998.
- (32) Weltman, JK: Mediator Release in Rhinitis; Sponsored by Rhone Poulenc Rorer; Providence, RI; Dec 30, 1999.
- (33) Weltman, JK: Cytokines - Mediators of Immunological Cross-talk and Regulators of Eosinophilic Inflammation. Eastern Allergy Conference/Southwest Allergy Forum Combined Meeting; Cancun, Mexico, Jan 13, 2000.
- (34) Weltman, JK: Update on Histamine. Eastern Allergy Conference; Cancun, Mexico, Jan 16, 2000.
- (35) Weltman JK: Cytokine Mediators of Eosinophilic Inflammation; Brown University Allergy/Immunology Grand Rounds. Aug 17, 2000.
- (36) Weltman JK: Cytokines: Allergy and Asthma. Brown University Allergy/Immunology Grand Rounds. Rhode Island Hospital. Sept 21, 2000.
- (37) Weltman JK: Seminar: Update on IL-5 and Asthma. Beeson Library. Section of Allergy and Clinical Immunology, Yale University School of Medicine, New Haven CT. Oct 27, 2000.
- (38) Weltman JK: An Updated Model of Asthma. Brown University Allergy/Immunology Grand Rounds. June 21, 2001.
- (39) Weltman JK: Histamine as a Mediator of Inflammation. Eastern Allergy Conference/Southwestern Allergy Forum; Cancun, Mexico. Jan 20, 2002.
- (40) Weltman JK: Penicillin Allergy Update. Rhode Island Hospital. Providence, RI. Medical Grand Rounds. Feb 26, 2002.
- (41) Weltman JK: Molecular Modeling of Penicillin Allergens. Brown Univ Allergy/Immunology Grand Rounds. Oct 17, 2002.
- (42) Weltman JK: Penicillin Allergy. Charlton Memorial Hospital, Fall River, MA; Medical Grand Rounds. Jan 28, 2003.
- (43) Weltman J: Pandemic Influenza Bioinformatics; Seminar, Brown University Center for Computational Molecular Biology (CCMB), Mar 14, 2012.
- (44) Weltman J: Keynote address, Pandemic Influenza Bioinformatics; Aug 27, 2012; International Conference on Pathology, Philadelphia, PA (Aug 27-29, 2012).
- (45) Weltman J: Keynote address, Pandemic pdm09 Influenza Bioinformatics; Nov 12, 2012; International Conference on Clinical Microbiology & Microbial Genomics, San Antonio, TX (Nov 12-14, 2012).

GRANTS AND CONTRACTS

Basic Research

- (1) Principal Investigator (1966-1969) NIH AI-07754 \$93,700; Fluorescence Polarization Analysis of Immunoglobulins.
- (2) Co-principal Investigator (1970-1973) NIH AM-13438 (RM Dowben, Principal Investigator) \$162,000; Fluorescence Studies of Contractile Proteins.
- (3) Principal Investigator (1974-1976) NCI-15261; \$130,000; Galactosidase-Immunoassays for CEA.
- (4) Principal Investigator (1979-1981) Edna McConnell Clark Foundation Research Grant No. 279-0112; \$80,173; Galactosidase-Immunoassays for Schistosomiasis.
- (5) Principal Investigator (1981-1982) RI Foundation, the Phebe Parker Fund; Project No. 7755; \$4,500; Non-histone Chromosomal Proteins of Human Peripheral Lymphocytes.
- (6) Principal Investigator (1996-1997) Antisense Inhibition of Allergic Inflammation; \$5,000; Asthma and Allergy Foundation of America/New England Chapter.
- (7) Principal Investigator (1997-1998) Antisense Inhibition of Allergic Inflammation; \$5,000; Francis H. Chafee/Brown University Allergy Research Fund.

Clinical Trials

- (1) Principal Investigator (1996-1997) A 12-Week Randomized, Double Blind, Positive Control Cross-Over Study of Albuterol, Ipratropium and the Combination, as an Inhalation Solution in Patients with Chronic Obstructive Pulmonary Disease; Dey Laboratories, Napa Valley, CA (DL-024).
- (2) Principal Investigator (1996-1997) Evaluation of the Efficacy and Safety of Alferon-N (interferon alpha-n3) Injection as Compared to a Placebo Control in the Treatment of HIV-Positive Subjects; Interferon Sciences, Inc., New Brunswick, NJ (IFN-9501).
- (3) Principal Investigator (1997-1998) Alferon-N (interferon alpha-n3) Injection Treatment of HIV: Continuation Study; Interferon Sciences, Inc., New Brunswick, NJ (IFN-9504).
- (4) Principal Investigator (1997-1998) A Double Blind Placebo-Controlled Pilot Study of Nefazodone in the Treatment of Fibromyalgia; Bristol-Myers Squibb, Princeton, NJ (CN104-137-011).
- (5) Principal Investigator (1998) A Multicenter, Multinational, Randomized, Double-Blind, Placebo-Controlled, Phase III Study of Oral Naloxone for the Treatment of Opioid-Induced Constipation in Patients with Chronic Non-malignant or Malignant Pain; Roxane Laboratories, Inc. (NAL-0397).
- (6) Sub-Investigator (2000) Phase II Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group Study of the Efficacy, Safety, and Tolerability of Six Weeks Treatment by Oral Dosing with CJ-13,610 in Adults with COPD; Pfizer (A2531002).
- (7) Sub-Investigator (2000-2001) Double-Blind, Placebo Controlled, Parallel Group Comparison of the Efficacy and Safety of Propiram, Tramadol (Ultram) and Placebo with an Open Label Extension in the Treatment of Pain Associated with Osteoarthritis of the Knee and/or Hip. Roberts Laboratories, Inc (SCIREX Corp 22,163-302R1).
- (8) Sub-Investigator (2000-2001) A Multi-centre, Multinational, Double-blind, Double-dummy, Placebo-controlled, Group Comparative Study to Investigate the Effects of AR-C68397AA via pMDI Compared with Salmeterol in Adult Patients with Chronic Obstructive Pulmonary Disease.(AstraZeneca, SC-397-5163).
- (9) Sub-Investigator (2001 to present) A Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Fixed Dose, Multicenter Study of Weight-Reducing Effect and Prevention of Weight Regain in Obese Patients With or Without Co-morbidities. Sanofi-Synthelabo.
- (10) Sub-Investigator (July 2002 to present) A Randomized, Double-blind, Multi-center Study to Evaluate the Tolerability and Effectiveness of Etoricoxib 90 mg qd vs Diclofenac 50 mg tid in

Patients with Osteoarthritis. Merck & Co, Inc. Protocol No. 061/COX523.

BROWN UNIVERSITY TEACHING ROLES

Course Assignments

- (1) Lecturer, Medical Microbiology (Bio 158); 1966-1971. Course Leader, 1969-1971.
- (2) Instructor and Course Leader, Advanced Immunology (Bio 253); 1974 and 1975.
- (3) Lecturer, graduate course in Physical Biochemistry (Bio 293) 1987; immunochemical methods.
- (4) Co-Instructor, Experimental Cellular Immunology (Bio 160); 1989 and 1991.
- (5) Lecturer, Brown University course, Special Topics in Immunology (Bio 194) given at Pfizer Labs, Groton, CT; 1992.
- (6) Co-Instructor, Advanced Immunology (Bio 253) 1993.
- (7) Course Director, Brown University Allergy/Immunology Grand Rounds; monthly teleconferences for allergist/immunologists, pulmonologists, primary care physicians, pharmacologists and pathologists; Oct 1997-.
- (8) Course Leader, Allergy and Clinical Immunology (BioMed 309) problem-based learning sessions in clinical, diagnostic, patho-physiologic and therapeutic aspects of asthma, allergy and primary immunodeficiency diseases; eight one-hour sessions; Brown University School of Medicine; 1998-.

Students Supervised

- (1) James D. Griffin, Master of Medical Science, Brown University; 1972. Thesis: Ouabain Antagonism of Histamine-Induced Smooth Muscle Contraction; present position: Professor of Medicine, Dana-Farber Cancer Institute, Harvard Medical School.
- (2) Robert P. Liburdy, Ph.D., Brown University; 1975. Thesis: Fluorescent N-(3-pyrene)maleimide Adducts of Mercaptoethanol and of the Contractile Proteins; formerly Assistant Professor of Environmental Medicine, New York University Medical Center; formerly Staff Scientist, Lawrence Berkeley Laboratory, University of California. Currently consultant.
- (3) A_Raymond Frackelton, Jr., Ph.D., Brown University; 1979. Thesis: Analysis of Immunological Interactions of Carcinoembryonic Antigen; formerly Post-Doctoral Fellow, Institute for Cancer Research, Massachusetts Institute of Technology and Harvard Medical School; present position: Associate Professor of Medicine (Research), Brown University.
- (4) Theresa Diaz, B.A., Brown University; 1982. Undergraduate Honors Thesis: Characterization of Circulating Antigen in Murine Schistosomiasis.
- (5) Christian S Johansson; Brown University UTRA summer Research Assistantship; Kinetics and reversibility of reaction of phosphorothioate oligonucleotide diesters with maleimide; summer 1994.
- (6) Aftab Karim, undergraduate student, Brown University Program in Liberal Medical Arts; research advisor, independent studies in Chemistry, Fall 1991 and Spring 1992; honors thesis in Biochemistry: Evidence for the Formation of Conjugates of Nucleotides; June, 1993; poster presentation, New Engl Assoc for Cancer Res; Rhode Island Hosp/Brown Univ; Feb 11, 1994 (First Prize, graduate student poster); independent studies, Brown University School of Medicine, summer 1996. neurosurgeon,, Assistant Prof NeuroSurgery, Stanford University, 2012..

HOSPITAL TEACHING ROLES

Mentor, Clinical Laboratory Immunology training and research, Rhode Island Hospital/Brown University Fellowship Training Program in Allergy/Immunology, 1981-1991

Course Director, Brown University Allergy/Immunology Grand Rounds; monthly teleconferences for allergist/immunologists, pulmonologists, primary care physicians, pharmacologists and pathologists; since Oct 1997. Since Sept 2000, these conferences have originated at the Rhode Island Hospital and are sponsored by the Brown University Division of Allergy, the Brown University Division of Respiratory and Critical Care Medicine, the New England Society of Allergy and the RIH CME Office. From May 2003 until September 2009, Program Director with Sidney S Braman, MD, Director of the Division of Pulmonary and Critical Care Medicine, Rhode Island Hospital and Brown University and Professor of Medicine, Brown Medical School.