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JUDITH TERRY ZELIKOFF
Tenured Professor

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EDUCATION

1973: Bachelor of Science (**Biology**)
Upsala College
East Orange, NJ

1976: Master of Science **(Microbiology)**
Farleigh Dickinson University
Department of Biology
Teaneck, NJ,
in conjunction with,
UMDNJ-New Jersey Medical School
Department of Neuroscience
Newark, NJ
Thesis Dissertation: Herpes Simplex Virus-IgM Specific Antibodies in Guillian-Barre Syndrome

1982: Doctor of Philosophy (**Experimental Pathology**)
UMDNJ-New Jersey Medical School
Department of Pathology
Newark, NJ
Thesis Dissertation: Cytoskeletal Modifications of Human Fibroblasts that Occur During a Complement-Dependent Cytotoxic Antibody Response

PROFESSIONAL EXPERIENCE

1982-Present: *NEW YORK UNIVERSITY SCHOOL OF MEDICINE*
Institute of Environmental Medicine
Tuxedo, NY

2005- Present: Tenured Professor
Laboratory of Pulmonary Toxicology

Pulmonary Immunotoxicology: Characterization of inhaled metal, gaseous, and airborne pollutant mixtures including wood smoke and tobacco smoke, on pulmonary immune defense mechanisms and host resistance against infectious disease and asthma.

Developmental Immunotoxicology: Effects of prenatal chemical exposures on immune defense mechanisms of the offspring.

Environmental Toxicology/Ecoimmunotoxicology: Effects of aquatic pollutants on the immune responses of fish; development of immune biomarkers. Alternate animal models for immunotoxicological studies.

1995-2005: Associate Professor (Tenured in 1997)

Laboratory of Systemic Toxicology

1989-1995: **Assistant Professor**
1986-1989: **Research Assistant Professor**
Laboratory of Pulmonary Biology
Laboratory of Environmental Toxicology

Environmental Toxicology: Characterization of aquatic pollutants and immune defense mechanisms of fish. Studies concerning drug bioaccumulation and metabolism in different fish species.

Inhalation/Pulmonary Toxicology: Effects of ambient pollutants on macrophage metabolism and immune function.

1984-1986: **Associate Research Scientist**
Laboratory of Environmental Toxicology

Genetic Toxicology: Clastogenic/mutagenic effects of complex environmental mixtures.

Cell Biology: Establishment of primary cultures for assessing the toxicity of environmental contaminants *in vitro*.

1982-1984: **NIH Post-Doctoral Fellow** (NHLBI)
Laboratory of Environmental Toxicology

Genetic Toxicology: Development of short-term *in vitro* bioassays to detect carcinogens, promoters and co-carcinogens in complex environmental mixtures.

1977-1978: *PFIZER PHARMACEUTICAL*
Laboratory of Chemical Carcinogenesis
Maywood, NJ

Assistant Research Scientist
Laboratory studies using animal models and *in vitro* mammalian cell systems to investigate chemical- and viral-induced carcinogenesis.

1974-1975: *VA HOSPITAL /UMDNJ-NEW JERSEY MEDICAL SCHOOL*
Department of Neuroimmunology
East Orange, NJ

Associate Research Scientist
Laboratory studies investigating the etiology of viral-induced neuropathologies..

TEACHING EXPERIENCE - NATIONAL

1990-Present: *NEW YORK UNIVERSITY SCHOOL OF MEDICINE*
Department of Environmental Medicine
Tuxedo, NY

Graduate Courses
(1) Environmental Immunotoxicology (Developer/Director 1993-present)
(2) Organ System Toxicology (Directed; 1990)

(3) Principles of Toxicology (lecturer; 1992-present)
(4) Environmental Physiology of the Respiratory Tract (Lecturer; 1992 – 1994)

1979-1994: *WILLIAM PATERSON COLLEGE*
Department of Biology
Wayne, NJ

Adjunct Professor
Undergraduate Courses
Microbiology lecture and laboratory (1979 - 1984)
Human biology lecture and laboratory (1979 - 1994)

1991-1994: *ROCKLAND COMMUNITY COLLEGE*
Department of Biology
Suffern, NY

Adjunct Professor
Undergraduate Courses
Microbiology lecture and laboratory

1979-1982: *SETON HALL UNIVERSITY*
Department of Biology
South Orange, NJ

Research Scientist/Graduate Assistant
- Laboratory studies in immunopathology, virology, viral immunology, and microbiology

- **Undergraduate and Graduate Courses**
  Bacteriology lecture and laboratory
  Advanced Microbiology
  Cell biology/Virology techniques

1976-1979: *FAIRLEIGH DICKINSON UNIVERSITY*
Department of Biology
Teaneck, NJ

Adjunct Professor
Undergraduate and Graduate Courses
General biology lecture and laboratory
Human genetics
Immunology

TEACHING EXPERIENCE - INTERNATIONAL

2003-Present: *CHULABHORN RESEARCH INSTITUTE (Adjunct Professor)*
Department of Toxicology
Bangkok, Thailand
Graduate Course
Environmental Immunotoxicology and Reprotoxicology (Organizer/Director)

1999: *UNIVERSITY OF TASMANIA (Adjunct Professor)*
Department of Environmental Toxicology
Tasmania, Australia

Graduate Course
Fish Immunology & Immunotoxicology (Organizer/Director; Lecture and Lab)

LINCOLN UNIVERSITY
Department of Environmental Health Sciences
Christ Church, New Zealand

Graduate Course
Fish Immunology & Immunotoxicology (Organizer/Director; Lecture and Lab)

PUBLICATIONS

Peer-reviewed Journals

1. Ende, N., E.V. Orsi, F. Buechel, N.Z. Baturay and **J.T. Zelikoff.** Antibodies to synovial derived cells in patients undergoing artificial prosthesis transplants. *J. Orthopedic Res.* 3: 78-83 (1985).

2. **Zelikoff, J.T**., J.M. Daisey, K. Traul and T.J. Kneip. Balb/c 3T3 cell transformation response to organic extracts of airborne particulate matter as seen by their survival in aggregate form. *Mutat. Res.* 144: 107-116 (1985).

3. **Zelikoff, J.T**., N. Atkins, T.G. Rossman and J.M. Daisey. Cytotoxicity of fine particles with and without absorbed polycyclic aromatic hydrocarbons using Chinese hamster lung cells (V79). *Environ. Internat.* 11: 331-339 (1985).

4. **Zelikoff, J.T**., N. Atkins and S. Belman. Stimulation of cell growth and proliferation in NIH-3T3 cells using onion and garlic oil. *Cell Biol. Toxicol.* 2: 369-378 (1986).

5. Ende, J., J. Grizzanti, E.V. Orsi, P.P. Lubanski, R.C. Amarusso, L.B. Reichman and **J.T. Zelikoff.** Sarcoid and cytotoxic lung antibodies. *Life Sciences* 39: 2435-2440 (1986).

6. Rossman, T.G., **J.T. Zelikoff,** S. Agarwal and T.J. Kneip. Genetic toxicology of metal compounds: An examination of appropriate cellular models. *Toxicol. Environ. Chem*. 14: 251-262 (1987).

7. Squibb, K.S., C.M.F. Michel, **J.T. Zelikoff** and J.M. O'Connor. Kinetics and metabolism in the channel catfish *Ictalurus punctatus*. *Veterinary Human Toxicol.* 34: 620 (1988).

8. **Zelikoff, J.T**., J.H. Li, A. Hartwig and T.G. Rossman. Genetic toxicology of lead compounds. *Carcinogenesis* 9: 1727-1732 (1988).

9. Schlesinger, R.B., A.F. Gunnison and **J.T. Zelikoff.** Modulation of pulmonary eicosanoid biosynthesis following exposure to sulfuric acid. *Fundam. Appl. Toxicol.* 15: 151-162 (1990).

10. Schlesinger, R.B., K.E. Driscoll, A.F. Gunnison and **J.T. Zelikoff.** Pulmonary arachadonic acid metabolism following acute exposures to ozone and nitrogen dioxide. *J. Toxicol. Environ. Health* 31: 275-290 (1990).

11. Schlesinger, R.B., L.C. Chen and **J.T. Zelikoff.** Comparative potency of inhaled acidic sulfate aerosols: The influence of specific components and the role of H^+ ions. *Environ. Res.* 52: 210-224 (1990).

12. Schlesinger, R.B., P.A. Weideman and **J.T. Zelikoff.** Effects of repeated exposure to ozone on respiratory tract prostanoids. *Inhal. Toxicol.* 3: 27-36 (1991).

13. **Zelikoff, J.T.**, N.A. Enane, D. Bowser, K.S. Squibb and K. Frenkel. Development of fish peritoneal macrophages as a model for higher vertebrates in immunotoxicological studies. I. Characterization of trout macrophage morphological, functional and biochemical properties. *Fundam. Appl. Toxicol.* 16: 576-589 (1991).

14. **Zelikoff, J.T**., G.L. Kreamer, M.C. Vogel and R.B. Schlesinger. Immunomodulating effects of ozone on macrophage functions important for tumor surveillance and host defense of the lung. *J. Toxicol. Environ. Health* 34: 449-467 (1991).

15. Costa, M., N.T. Christie, O. Cantoni, **J.T. Zelikoff**, X.W. Wang and T.G. Rossman. DNA damage by mercury compounds: An overview. Proc. of Advances for Mercury Toxicology. In *Advances in Mercury Toxicology* (T. Suzuki, Ed.), Plenum Press, NY. pp. 255-273 (1991).

16. Schlesinger, R.B., **J.T. Zelikoff,** L.C. Chen and P.L. Kinney. Assessment of toxicologic interactions resulting from acute inhalation exposure to sulfuric acid and ozone mixtures. *Toxicol. Appl. Pharmacol.* 115(2): 183-190 (1992).

17. **Zelikoff, J.T**. and R.B. Schlesinger. Immunomodulation by sulfuric acid aerosol: Effects on pulmonary macrophage-derived tumor necrosis factor and superoxide production. *Toxicology* 76: 271-281 (1992).

18. Cohen, M.D., E. Parsons, R.B. Schlesinger and **J.T. Zelikoff.** Immunotoxicity of *in vitro* vanadium exposure: Effects on interleukin-1, tumor necrosis factor, and prostaglandin E2 production by macrophages. *Int. J. Immunopharmacol. Immunotoxicol*. 15: 437-446 (1993).

19. **Zelikoff, J.T**. Metal pollution-induced immunomodulation in fish. *Ann. Rev. Fish Dis*. 2: 305-325 (1993).

20. **Zelikoff, J.T.**, E. Parsons and R.B. Schlesinger. Immunomodulating activity of inhaled particulate lead oxide disrupts pulmonary macrophage-mediated functions important for host defense and tumor surveillance in the lung. *Environ. Res.* 62: 207-222 (1993).

21. Enane, N.A., K. Frenkel, J.M. O'Connor, K.S. Squibb and **J.T. Zelikoff.** Fish macrophages as an alternative model for mammalian phagocytes. *Immunol*., 80: 68-72 (1993).

22. **Zelikoff,** J.T., R. Smialowicz, P.E. Bigazzi, R.A. Goyer, D.A. Lawrence, H.I. Maibach and D. Gardner. Immunomodulation by metals. *Fund. Appl. Toxicol*. 22: 1-8 (1994).

23. Bowser, D., K. Frenkel and **J.T. Zelikoff**. Effects of *in vitro* nickel exposure on macrophage-mediated immunity in rainbow trout. *Bull Environ. Cont. Toxicol.* 52: 367-373 (1994).

24. Schlesinger, R.B., H. El-Fawal, **J.T. Zelikoff,** J.E. Gorczynski, T. McGovern, C.E. Nadziejko, and L.C. Chen. Pulmonary effects of repeated episodic exposures to nitric acid vapor alone and in combination with ozone. *Inhal. Toxicol*. 6: 21-41 (1994).

25. Cohen, M.D., Z. Yang and **J.T. Zelikoff**. Immunotoxicity of particulate lead: *In vitro* exposure alters pulmonary macrophage tumor necrosis factor production and activity. *J. Toxicol. Environ. Health* 42: 377-392 (1994).

26. **Zelikoff, J.T**., M. Sisco, Z. Yang, M.D. Cohen and R.B. Schlesinger. Immunotoxicity of sulfuric acid aerosol: Effects on pulmonary macrophage effector and functional activities critical for maintaining host resistance against infectious diseases. *Toxicology* 92: 269-286 (1994).

27. **Zelikoff, J.T.**, J.E. Bertin, R.K. Miller, S. Tabacova, E.S. Hunter, E.K. Silbergeld, T.M. Burbacher, and J. Rogers. Health risks associated with prenatal metal exposure. *Fund. Appl. Toxicol.* 25: 161-170 (1995).

28. **Zelikoff, J.T**., K. Squibb, D. Bowser and K. Frenkel. Immunotoxicity of low level cadmium exposure in fish: Alternative animal models for immunotoxicological studies. *J. Toxicol. Environ Health* 45:235-248 (1995).

29. Cohen, M.D., T.P. McManus, Z. Yang, Q. Qu, R.B. Schlesinger, and **J.T. Zelikoff**. Vanadium alters macrophage interferon-□ interactions and interferon-inducible responses. *Toxicol. Appl. Pharmacol.* 138: 110-120 (1996).

30. Cohen, M.D., **J.T. Zelikoff,** T.P. McManus, Q. Qu, and R.B. Schlesinger. Effects of ozone upon macrophage-interferon-gamma interactions. *Toxicology* , 114: 243-252 (1996).

31. Cohen, M.D., Z. Yang, **J.T. Zelikoff**, and R.B. Schlesinger. Pulmonary immunotoxicity of inhaled ammonium metavanadate in Fisher-344 rats. *Fund. Appl Toxicol.* 33: 254-263 (1996).

32. Cohen, M.D., S. Becker, R. Devlin, R.B. Schlesinger, and **J.T. Zelikoff.** Effects of vanadium upon polyI:C-induced responses in rat lung and alveolar macrophage. *J. Toxicol. Environ. Health* 51: 591-608 (1997).

33. **Zelikoff, J.T**., M. Sisco, M.D. Cohen, Y. Tsai, P.E. Morrow, M.W. Frampton, M.J. Utell, and R.B. Schlesinger. Effects of inhaled sulfuric acid aerosols on pulmonary immunocompetence: A comparative study in humans and animals. *Inhal. Toxicol*. 9: 731-752 (1997).

34. Rodgers, K., P. Klykken, J. Jacobs, C. Frondoza, V. Tomazic, and **J.T. Zelikoff.** Immunotoxicity of medical devices. *Fund. Appl. Toxicol*. 36:1-14 (1997).

35. Luebke, R.W., P.V. Hodson, M. Faisal, P.S. Ross, K.A. Grasman, and **J.T. Zelikoff.** Aquatic pollution-induced immunotoxicity in wildlife species. *Fund. Appl. Toxicol*. 37:1-15 (1997).

36. Anderson, M.J., M.G. Barron, S.A. Diamond, J. Lipton, and **J.T. Zelikoff**. Biomarker selection for restoration monitoring of fishery resources. ASTM STP 1317 (F. J. Dwyer, T.R. Doane, M.L. Hinman, Eds.), American Society for Testing and Materials. pp. 333 - 359 (1997).
37. Cohen, M.D., J.T. **Zelikoff,** L.C. Chen, and R.B. Schlesinger. Pulmonary retention and distribution of inhaled chromium: Effects of particle solubility and co-exposure to ozone. *Inhal. Toxicol.* 9:843-865 (1997).

38. **Zelikoff, J.T**. Biomarkers of immunotoxicity in fish and other non-mammalian sentinel species: Predictive value for mammals. *Toxicology* 129:63-71 (1998).

39. Cohen, M.D., **J.T. Zelikoff,** L.C. Chen, and R.B. Schlesinger. Immunological effects of inhaled chromium alone and in combination with ozone. *Toxicol. Appl. Pharmacol*. 152:30-40 (1998).

40. Beaman, J.R., R. Finch, H. Gardner, F. Hoffman, A. Rosencrance, and **J.T. Zelikoff.** Mammalian immunoassays for predicting the toxicity of malathion in a laboratory fish model. *J. Toxicol. Environ. Health* 56:523-542 (1999).

41. **Zelikoff, J.T**., A. Raymond, E. Carlson, Y. Li, J.R. Beaman, and M. Anderson. Biomarkers of immunotoxicity in fish: From the lab to the ocean. *Toxicol. Lett*. 112-113:325-331 (2000).

42. Barron, M.G., M. Anderson, D. Beltman, T. Podrabsky, W. Walsh, D. Cacela, J. Lipton, S.T. Teh, D. Hinton, **J.T. Zelikoff,** A.L. Dikkeboom, B.A. Lasee, S.K. Woolley, D.E. Tillitt, M. Holey, P. Bouchard, and N. Denslow. Association between PCBs, liver lesions, and biomarker responses in adult walleye (*Stizostedium vitreum vitreum*) collected from Green Bay, Wisconsin. *J. Great Lakes Res*. 3:156-170 (2000).

43. Cohen, M.D., M. Sisco, Y. Li, and **J.T. Zelikoff,** and R.B. Schlesinger. Immunomodulatory effects of ozone upon *in situ* cell-mediated responses in the lungs. *Toxicol. Appl. Pharmacol*. 171:71-84 (2001).

44. Sweet, L.I., and **J.T. Zelikoff.** The toxicology and immunotoxicology of mercury: A comparative review in fish and humans. *J. Toxicol. Environ. Health*-B 4:161-205 (2001).

45. Palchaudhuri, S., A. Raymond, E. Carlson, Y. Li, and **J.T. Zelikoff.** Cytotoxic and cytoprotective effects of selenium on bluegill sunfish (*Lepomis macrochirus*) phagocytic cells *in vitro*. *Bull. Environ. Contam. Toxicol.* 67:672-679 (2001).

46. **Zelikoff, J.T.**, E. Carlson, Y. Li, A. Raymond, and J. Duffy. Immunotoxicity biomarkers in fish: Development, validation, and application for field studies and risk assessment. *Human and Ecotoxicol. Risk Assess.* 8:253:263 (2002).

47. Carlson, E., Y. Li, and **J.T. Zelikoff.** Exposure of Japanese medaka (*Oryziaslatipes*) to benzo(a)pyrene suppresses immune function and host resistance against bacterial challenge. *Aquat. Toxicol*. 56:289-301 (2002).

48. Schlesinger, R.B., M.D. Cohen, T. Gordon, C. Nadziejko, J.T. Z**elikoff,** M. Sisco, J.F. Regal, and M. Ménache. Ozone differentially modulates airway responsiveness in atopic vs nonatopic guinea pigs. *Inhal. Toxicol.* 14:431-457 (2002).

49. **Zelikoff, J.T.,** M.D. Cohen, L.C. Chen, and R.B. Schlesinger. Toxicology of Woodsmoke. *J. Toxicol. Environ. Health - Part B.* 5 (3):269-282 (2002).

50. Cohen, M.D., M. Sisco, K. Baker,Y. Li, D. Lawrence, H. van Loveren, **J.T. Zelikoff,** and R.B. Schlesinger. Effect of inhaled ozone on pulmonary immune cells critical to antibacterial responses *in situ*. *Inhal. Toxicol.* 14:599-619 (2002).

51 Carlson, E., Y. Li, and **J.T. Zelikoff.** The Japanese medaka (*Oryziaslatipes*) model: Applicability for investigating the immunosuppressive effects of the aquatic pollutant benzo(a)pyrene. *Mar. Environ. Res.* 54:5 - 9 (2002).

52. Duffy, J.E., E. Carlson, Y. Li, C. Prophete, and **J.T. Zelikoff.** Impact of polychlorinated biphenyls (PCBs) on Ithe immune function of fish: Age as a variable in determining adverse outcome. *Mar. Environ. Res.* 54:1-5 (2002).

53. **Zelikoff, J.T.**, K.R. Schermerhorn, K. Fang, M.D. Cohen, and Schlesinger, R.B. A role for associated transition metals in the immunotoxicity of inhaled ambient particulate matter (PM). *Environ. Health Perspect.* 110:871-875 (2002).

54. **Zelikoff, J.T**., L.C. Chen, M.D. Cohen, K. Fang, T. Gordon, Y. Li, C. Nadziejko, and R.B. Schlesinger. Effects of inhaled ambient particulate matter (PM) on pulmonary anti-microbial immune defense. *Inhal. Toxicol.* 15:101-120 (2003).

55. Duffy, J., E. Carlson, Y. Li, C. Prophete, and **J.T. Zelikoff.** Exposure to a coplanar PCB congener differentially alters the immune responsiveness of juvenile and aged fish. *Ecotoxicol*. 12:251-259 (2003).

56. Lippmann, M., Frampton, M., Schwartz, J., Dockery, D., Schlesinger, R., Koutrakis, P., Froines, J., Nel, A., Finkelstein, J., Godleski, J., Kaufman, J., Koenig, J., Larson, T., Luchtel, D., Liu L.J., Oberdorster, G., Peters, A., Sarnat, J., Sioutas C., Suh, H., Sullivan, J., Utell, M., Wichmann, E., and **Zelikoff, J.T**. The U.S. Environmental Protection Agency particulate matter health effects Research Centers Program: A midcourse report of status, progress, and plans. *Environ. Health Perspect.* 111:1073-1092 (2003).

57. Adams, S.M., M.S. Greeley, D.G. Fitzgerald, J.M. Law, E.J. Noga, and **J.T. Zelikoff.** Effects of flooding from three sequential hurricanes on the health and condition of fish in Pamlico Sound, NC. *Estuaries* 112:221-230 (2003).

58. Anderson, J.S., D. Cacela, D. Beltman, S.J. Teh, M.S. Okihiro, D.E. Hinton, N. Denslow, and **J.T. Zelikoff.** Biochemical indicators and toxicopathologic lesions assessed in smallmouth bass recovered from a polychlorinated biphenyl (PCB) contaminated river. *Biomarkers* 8:371-393 (2003).

59. Carlson, E., Y. Li, and **J.T. Zelikoff.** Suppressive effects of benzo[a]pyrene upon fish immune function: Evolutionarily conserved cellular mechanisms of immunotoxicity. *Mar. Environ. Res.* 151:131-138 (2004).

60. Carlson, E.A., Y. Li, **J.T. Zelikoff.** Benzo(a)pyrene-induced immunotoxicity in Japanese medaka (*Oryzias latipes*): Relationship between lymphoid CYP1A activity and humoral immune suppression*. Toxicol. Appl. Pharmacol.* 201:40-52 (2004).

61. Duffy, J.E., Y. Li, and **J.T. Zelikoff.** CYP1A induction in PCB 126-induced immunotoxicity in a feral fish model. *Bull. Environ Contam Toxicol.* 74:107-113 (2005).

62. Ng, S.P., A.E., Silverstone, Z-W. Lai, and **J.T. Zelikoff**. Effects of prenatal exposure to cigarette smoke on offspring tumor susceptibility and associated immune mechanisms. *Toxicol. Sci*. 89(1):135-144 (2006).

63. Duffy, J.E., and **J.T. Zelikoff**. Use of a fish model to examine the relationship between PCB-induced immunotoxicity and hepatic CYP1A induction. *J. Immunotoxicol* 3:39-47 (2006*).*

64. Prophete, C., E.A. Carlson, Y. Li, J. Duffy, B. Steinetz, S. Lasano, and **J.T. Zelikoff**. Effects of elevated temperature and nickel pollution on the immune status of Japanese medaka. *Fish & Shellfish Immunol*. 21:325-334 (2006).

65. Steinetz, B.G., T. Gordon, S. Lasano, T. L. Horton, S.P., Ng, **J.T. Zelikoff**, A. Nadas, and M.C Bosland. The parity-related protection against breast cancer is compromised by cigarette smoke during rat pregnancy: Observations on tumorigenesis and immunological defenses of the neonate. *Carcinogenesis* 27:1146-1152 (2006).

66. Cohen, M.D., C. Prophete, M. Sisco, L.C. Chen, **J.T. Zelikoff**, J. Smee, M. Holder, G. Crans. Pulmonary immunotoxic potential of metals are governed by select physiochemical properties: Chromium agents. J. Immunotoxicol. 3:69-81 (2006).

67. Ng, S.P., B.G. Steinetz, S.G., Lasano and **J.T. Zelikoff**. Hormonal changes accompanying cigarette smoke- induced pre-term births in a mouse model*. Exp. Biol. & Med*. 231:1403-1409. (2006).

68. Iba, M.M., J. Fung, Chung, L., J. Zhao, B. Winnik, B. Buckley, L.C. Chen, **J.T. Zelikoff,** Y. Kou. Differential inducibility of rat pulmonary CYP1A1 by cigarette smoke and wood smoke. *Mutat. Res*. 606:1-11 (2006).

69. Ng, S.P. and **J.T. Zelikoff**. Smoking during pregnancy: Subsequent effects on offspring immune competence and disease vulnerability in later life. *Repro. Toxicol*. 23(3): 428-437 (2007).

70. Naher, L.P., K.R. Smith, M. Brauer, C. Simpson, J.Q, Koenig, M. Lipsett, **J.T. Zelikoff**. Woodsmoke Health Effects: A Review. *Inhal. Toxicol*. 19:67-106 (2007).

71. Cohen, M.D., C. Prophete, M. Sisco, L.C. Chen, **J.T. Zelikoff**, J. Smee, M. Holder, G. Crans, A. J. Ghio, J.D. Stonehuerner. Pulmonary immunotoxic potential of metals are governed by select physiochemical properties: Vanadium agents. *J. Immunotoxicol*. 4:49-60 (2007).

72. Doherty, S.P., C. Prophete, P. Maciejczyk, K. Salnikow, T. Gould, T. Larson, J. Koenig, P. Jaques, C. Sioutas, **J.T. Zelikoff**, M. Lippmann and M.D. Cohen. Use of iron response protein binding activity analysis to detect changes in iron homeostasis inducible by PM2.5 components. *Inhal. Toxicol*. 19:553-562 (2007).

73. Duffy-Whritenour, J.E., and **J.T. Zelikoff.** Relationship between the immune and serotonergic systems in a teleost model. *Brain, Behavior and Immunity*. 22:257-264 (2008).

74. Ng, S, and **J.T. Zelikoff**. Effects of prenatal cigarette smoke exposure on offspring immune parameters later in life. *J. Toxicol. Environ. Health 71:445-453* (2008).

75. Dietert, R.R. and J.T. Zelikoff. Early-life environment, developmental Immunotoxicology, and the risk of pediatric allergic disease including asthma. *Birth Defects Research Part B – Developmental and Reproductive Toxicology* 44:231-240 (2008).

76. Dietert, R.R. and **J.T. Zelikoff**. Pediatric immune dysfunction and health risks following early-life immune insult. . *Curr. Pediatr. Rev*. 15:36-51. (2009).

77. Ng, S.P., D. Conklin, A. Bhatnagar, and **J.T. Zelikoff**. Exposure to cigarette smoke *in utero* produces dyslipidemia in the adult murine offspring. *Environ. Health Perspect*. (In press).

78. Doherty-Lyons, S.P., J. Grabowski, C. Hoffman, and **J.T. Zelikoff**. Early life insult from cigarette smoke may be predictive of chronic diseases later in life. *Biomarkers* (In press).

79. Duffy-Whritenour, J.E., R.Z. Kurtzman, S. Kennedy, and **J.T. Zelikoff**. A role for the neuroimmune axis in noncoplanar polychlorinated biphenyl (PCB)-induced immunotoxicity: A fish model of toxicity. *Toxicology* (In press).

80. Duffy-Whritenour, J.E., S. Kennedy, and **J.T. Zelikoff**. Involvement of the neuroimmune axis in noncoplanar polychlorinated biphenyl-induced immunotoxicity. *Perspect. Exper. Clinical Immunotoxicol.* (In press).

81. Vancza, E., S.P, Ng, and **J.T. Zelikoff**. The role of parity status in cigarette smoke-induced modulation of immune tumor surveillance mechanisms: A mouse model. *J. Immunotoxicol.* (In press).

82. Tangjarukij, C., P. Navasumrit, D. Settachan, **J.T. Zelikoff,** M. Ruchirawat. The effects of pyridoxine deficiency and supplementation on hematological profiles, lymphocyte function, and hepatic CYP2E1 in B6C3F1 mice. *J. of Immunotoxicol*. (In press).

83. Berg, E., E. Carlson, and **J.T. Zelikoff.** PCB-induced immunotoxicity may be independent of CYP1A1 metabolism in laboratory-reared Atlantic tomcod. *J. Immunotoxicol.* (Submitted).

Commentaries/Letters to the Editor/Profiles:

1. **Zelikoff, J.T.**, S. Garte and S. Belman. Response to publication "Differential phosphorylation events associated with phorbol ester effects on acceleration versus inhibition of cell growth." *Cancer Res.* 47: 389-390 (1987).
2. **Zelikoff, J.T**. Commentary on "Ecotoxicity Testing." *Toxicology and Ecotoxicology News* 1: 123-124 (1995).
3. Penn, A. and **J.T. Zelikoff.** "Profile of the Department of Environmental Medicine, New York University Medical Center." *Toxicology and Ecotoxicology News* 3: 114:116 (1996).
4. Bayne, C. and **J.T. Zelikoff,.** Meeting review on "Modulators of Immune Responses-A Phylogenetic Approach." *Immunology Today* 20: 12-18 (1996).
5. **Zelikoff, J.T**. "Fish immunotoxicology: A new scientific discipline". *Toxicology and Ecotoxicology News*. 5: 130-132 (1996).

Book Chapters (1988 – Present):

1. Rossman, T.G., **J.T. Zelikoff**, S. Agarwal and T.J. Kneip. 1988. Genetic toxicology of metal compounds: An examination of appropriate cellular models. In: *Carcinogenic and Mutagenic Metal Compounds* 2. (E. Merian, et al., Eds), Gordon and Breach Science Publishers, NY. pp. 195-206.

2. **Zelikoff, J.T.** and Enane, N. 1991. Assays used to assess the activation state of rainbow trout peritoneal macrophages. In: *Techniques in Fish Immunology-2* (J.S. Stolen, et al., Eds.), SOS Publications, NJ. pp. 107-124.

3. **Zelikoff, J.T**. 1993. Immunological alterations as indicators of environmental metal exposure. In: *Modulators of Fish Immune Response: Models for Environmental Toxicology/Biomarkers, Immunostimulators*-Vol. 1 (J.S. Stolen, T. Fletcher, **J.T. Zelikoff**, S.L. Kaattari, D.P. Anderson, and L.E. Twerdok, Eds.), SOS Publications, NJ. pp. 101-110.

4. **Zelikoff, J.T**. and D. Bowser. 1994. Care and short-term laboratory maintenance of rainbow trout in laboratories with limited aquatic facilities. In: *Techniques in Fish Immunology*-3 (J.S. Stolen, et al. Eds.), SOS Publications, NJ. pp. 13-14.

5. **Zelikoff, J.T.** 1994. Fish immunotoxicology. In: *Immunotoxicology and Immunopharmacology* (J. Dean, M. Luster, A. Munson, I. Kimber Eds), Raven Press, NY. pp. 386-403.

6. **Zelikoff, J. T**. and M. D. Cohen 1995. Immunotoxicity of inorganic metal compounds. In: *Immunotoxicology.* (R. Smialowicz, and M. Holsapple, Eds.), CRC Press, Boca Raton, FL. pp. 125-146.

7. **Zelikoff, J.T.**, W. Wang, N. Islam, L.E., Twerdok, M. Curry, J. Beaman, and E. Flescher. 1996. Assays of reactive oxygen intermediates and antioxidant enzymes in medaka *(Oryzias latipes*): Potential biomarkers for predicting the effects of environmental pollution. In: *Techniques in Aquatic Toxicology*. (G. Ostrander Ed.), CRC Press, FL. pp. 178-206.

8. **Zelikoff, J.T.** W. Wang, N. Islam, E. Flescher, and L.E. Twerdok. 1996. Heavy metal-induced changes in antioxidant enzymes and oxyradical production by fish phagocytes: Application as biomarkers for predicting the immunotoxic effects of metal-polluted aquatic environments. In: *Modulators of Immune Responses-A Phylogenetic Approach* - Vol. 2 (J. Stolen, **J.T. Zelikoff**, L.E. Twerdok, D. Anderson, C. Bayne, C. Secombes, T. Fletcher, Eds.), SOS Publications, NJ. pp. 135-148.

9. Twerdok, L.E., J.R. Beaman, M.W. Curry, and **J.T. Zelikoff**. 1996. Health status determination and monitoring in an aquatic model *(Oryzias latipes*) used in immunotoxicological testing. In: *Modulators of Immune Responses - A Phylogenetic Approach*-Vol. 2 (J. Stolen, **J.T. Zelikoff**, L.E. Twerdok, D. Anderson, C. Bayne, C. Secombes, T. Fletcher, Eds.), SOS Publications, NJ. pp. 210-215.

10. Benson, J. and **J.T. Zelikoff**. 1996. Respiratory toxicology of metals. In: *Toxicology of Metals*. (L.W. Chang, Ed.), CRC Press, FL. pp. 929-938.

11. **Zelikoff, J.T**. and R. 1996. Smialowicz. Metal-induced alterations in innate immunity. In: *Toxicology of Metals.* (L.W. Chang, Ed.), CRC Press, FL. pp. 811-826.

12. **Zelikoff, J.T**., W. Wang, N. Islam and L.E. Twerdok. 1997. Immune responses of fish as biomarkers to predict the health effects of aquatic pollution: Application of laboratory assays for field studies. In: *Ecotoxicology: Responses, Biomarkers and Risk Assessment* (J.T. Zelikoff, J. Schepers, J. Lynch, Eds.), SOS Publications, Fair Haven, NJ. pp. 218-235.

13. **Zelikoff, J.T.** and M.D. Cohen. 1997. Metal Immunotoxicology. In: *Handbook of Human Toxicology*, (E.J. Massaro, Ed.), CRC Press, Boca Raton, FL. pp. 811-852.

14. Thomas, P.T. and **J.T. Zelikoff.** 1999. Air pollutants: Modulators of pulmonary host resistance against infection. In: *Air Pollutants and Effects on Health*. (S.L. Hogate, H.S. Koren, J.M. Samet, R.L. Maynard, Eds.), Academic Press, London. pp. 420-450.

15. **Zelikoff, J.T**., C. Nadziejko, K. Fang, T. Gordon, C. Premdass, and M.D. Cohen. 1999. Short-term, low-dose inhalation of ambient particulate matter exacerbates ongoing pneumococcal infections in

Streptococcus pneumoniae-infected rats. *Proceedings of Third Colloquium on Particulate Air Pollution and Human Health.* 8-94- 8-104.

16. **Zelikoff, J.T.** Woodsmoke, kerosene emissions, and diesel exhaust emissions. In: *Pulmonary Immunotoxicology* (M.D. Cohen, **J.T. Zelikoff**, R.B. Schlesinger, Eds.), Klewar Publ., MA. pp. 369-387 (2000).

17. Schlesinger, R.B., LC. Chen, and **J.T. Zelikoff.** 2000. Sulfur and nitrogen oxides. In: *Pulmonary Immunotoxicology* (M.D. Cohen, **J.T. Zelikoff**, R.B. Schlesinger, Eds.), Klewar Publ., MA. pp. 337-353.

18. **Zelikoff, J.T.**, E. Carlson, E., Y. Li, A. Raymond, and J.R. Beaman. 2002. Immune system biomarkers in fish for predicting the effects of environmental pollution. In: *Proceedings of the Fourth Princess Chulabhorn International Science Congress. Chemicals in the 21st Century/Chemicals for Sustainable Development*. (Chulabhorn Research Institute, Ed.), Trinity Publishing Co., Ltd., Bangkok, THAILAND, pp. 34-56.

19. Duffy, J., and J.T. **Zelikoff.** 2005. Approaches and models for the assessment of chemical-induced immunotoxicity in fish. In: *Investigative Immunotoxicology.* (H. Tryphonas, M. Fournier, B.R. Blakley, J.E. Smits, P. Brousseau, Eds.), Taylor and Francis, NY. pp. 49-63.

20. **Zelikoff, J.T.** 2005. Trace metals and the immune system. In: *Encyclopedic Reference of Immunotoxicology.* (H.W. Vorh). Springer-Verlag, Germany pp. 340-345.

21. Carlson, E. and **J.T. Zelikoff.** 2008. Fish immunology. In: *Toxicology of Fishes* (D. Hinton and R. Di Giulio, Eds.), CRC Press. pp. 340-352.

22. Ng, SP., K. Yoshido, and **J.T. Zelikoff**. *In press, 2009.* Host resistance tumor challenge assays. In: *Techniques in Immunotoxicology (R. Dietert, Ed.) Informa Press.*

23. **Zelikoff, J.T**. *In press*. 2009. Other environmental health issues: Inhaled woodsmoke. Submitted 2009. In: *Encyclopedia of Environmental Health*. J. Nriagu (Ed.). Elsevier, UK.

24. **Zelikoff, J.T.**, and M.D. Cohen. Submitted, 2009. Pulmonary Immunology. In: *Comprehensive Toxicology*. (C. McQueen, Ed.). Elsevier, UK.

INVITED LECTURES AND PRESENTATIONS (Present - 1999):

7th Congress of Toxicology in Developing Countries – Fetal insult and late onset diseases. Sun City, South Africa. Sept. 2009.

Japanese Society of Immunotoxicology – Prenatal exposure to cigarette smoke increases tumor susceptibility of juvenile mice via changes in anti-tumor immune mechanisms. Asahikawa, Japan. August, 2009.

Asia-Pacific Forum on Andrology, Hormonal changes accompanying cigarette smoke induced preterm births in a mouse model. Nanjing China, May 2009.

St. Johns University – Mechanistic insights into offspring cancer risk associated with maternal smoking. Queens, NY. December 2008.

U.S. EPA, National Center for Environmental Assessment - Gender-related effects on offspring tumor risk and response to prenatal cigarette smoke exposure may be related to testosterone: a toxicological model. Washington, DC. August 2008.

Institute for Science and Health (IFSH) – Early exposure to cigarette smoke may serve as an indicator of chronic diseases in the offspring later in life. Cardiff, Wales. June 2008.

Society of Toxicology –Prenatal exposure to tobacco smoke induces asthma-related responses in non-sensitized female offspring later in life. Seattle, Washington. March 2008.

Society of Toxicology – Prenatal exposure to cigarette smoke: Are our children paying the price? Seattle, Washington. March 2008.

United Nations Environmental Program (UNEP) – Toxicology of the Atmospheric Brown Cloud (ABC). Seoul, Korea. August 2007.

University of Louisville (KY) – Increased cancer risk: A possible birth defect associated with maternal smoking. Louisville, KY. March 2007.

Institute for Science and Health (IFSH) – Prenatal cigarette smoke exposure and offspring asthma. Louisville, KY. March 2007.

International Conference on Environment: Survival and Sustainability - Sustaining a healthy fetal environment: A little told threat of increased cancer and asthma risk for the juvenile offspring exposed prenatally to cigarette Smoke. Near East University, Nicosia-Northern Cyprus. February 2007.

International Conference on Environment: Survival and Sustainability - Contamination of aquatic environments with polychlorinated biphenyls (PCBs) or benzo(a)pyrene (B[a]P) can adversely impact the immune health and sustainability of inhabiting Fish. Near East University, Nicosia-Northern Cyprus. February 2007.

Philip Morris External Review Symposia – Effects of prenatal exposure to cigarette smoke on tumor development and immune surveillance mechanisms in the developing offspring: A toxicological model. Landsdowne, VA. Dec. 2006.

MidAtlantic Chapter of Society of Toxicology (MASOT) – Increased cancer risk in the offspring: A birth defect associated with maternal smoking. Scotch Plans, NJ. May 2006.

University of Guelph – Maternal smoking and cancer: Are the unborn children paying the price? Kempville, Ontario Canada. April 2006

Institute for Science and Health – Prenatal exposure to mainstream cigarette smoke alters susceptibility of the offspring to asthma. Vienna, Austria. March 2006.

Society of Toxicology – Maternal smoking and cancer: Are the unborn children paying the price? San Diego, CA. March 2006.

Chulabhorn Research Institute – Immunotoxicology Course Series (2 wk). Scientific Research Institute of Thailand. Bangkok, Thailand. October 2005.

American Thorasic Society - Immunotoxicological mechanisms of prenatally-exposed respiratory contaminants. Symposia on "Impact of prenatal and early infancy environmental exposures on neonatal and infant health". San Diego, CA. May 2005.

California Society of Environmental Toxicology and Chemistry – Mechanisms of Fish Immunotoxicity. Berkley, CA. May 2005.

Life Science Research Organization (LSRO) – Prenatal exposure to cigarette smoke increases tumor susceptibility in the offspring: A toxicological model. St. Louis, MO. April 2005.

Society of Toxicology – Immunotoxicity of prenatal mainstream cigarette smoke exposure. Symposia on "Mechanisms Linking the Lung and Immune System". New Orleans, LA. March 2005

Institute for Science and Health (IFSH) – Effects of in utero cigarette smoke exposure on asthma development in the offspring. Washington, DC. February 2005

Canadian Lung Association – Health Effects of Woodburning. New Brunswick, Canada. February 2005.

Environmental Mercury Research Forum. Metal toxicity in aquatic organisms. Energy & Environmental Research Center (U. of North Dakota). Grand Forks, ND. November 2004

VIIth Annual Conference of Soil, Sediments and Water. Immunological Alterations as Bioindicators of Environmental Health. Amherst, MA. October 2004.

Slovenian Society of Toxicology – Immunological biomarkers. Slovenia. September 2004.

Society of Toxicology – Inhalation of concentrated ambient particulate matter and associated metals increases host susceptibility to pulmonary pneumonia. Baltimore, MD. March 2004.

University of Arizona – Toxicological impact of inhaled wood smoke on pulmonary antimicrobial defense. Tucson, AZ. Jan. 2004.

College of Staten Island – Toxic insult and human health effects: Lessons learned from an aquatic species. Staten Island, NY. Jan. 2004.

Sixth National Environmental Public Health Conference (Center for Disease Control) - Woodsmoke: A closer look at public health concerns and mechanisms of toxicity. Atlanta, GA. Dec. 2003.

Society of Environmental Toxicology and Chemistry - Immunotoxicology and Risk Assessment. Austin, TX. Nov. 2003.

Chulabhorn Research Institute – Immunotoxicology Course Series (10d). Bangkok, Thailand. October 2003.

International Symposium on Pharmaceutical Sciences - Health Effects of Inhaled Particulates. University of Pharmaceutical Sciences. Ankara, Turkey. June 2003.

United States Army Center for Environmental Health Research - Immune Assays for Hazard Assessment and Species Extrapolation. Fort Detrick, MD. June 2003.

Pollutant Responses of Marine Organisms (PRIMO) - Immunotoxicology in Fish. Tampa, FL. May 2003.

Society of Toxicology - Woodsmoke: Cozy Atmosphere or Public Menace? Salt Lake City, UT. March 2003.

Society of Toxicology and Chemistry - Immune Biomarkers for Use in Ecological Risk Assessment. Salt Lake City, UT. November 2002.

Padova University - Lessons Learned About Human Health From Aquatic Species. Padova, Italy. October 2002.

Slovenia Society of Toxicology - Biomarkers for Ecotoxicology. Ljubljana, Slovinia. October 2002.

University of Florida - Effects and Mechanisms of Benzo(a)pyrene-induced Immunosuppression in Fish. Gainsville, FL. September 2002.

Yale University, Dept. of Occupational and Environmental Medicine - Lessons on Human Health and Toxic Impact Learned from our Aquatic Counterparts. June, 2002.

Third International Meeting on Molecular Mechanisms of Metal Toxicity and Carcinogenicity - Immunodysfunction: An underlying Mechanism of Metal Toxicity in Aquatic Organisms. Sardinia, Italy. September 2001

PRIMO-11 (Pollutant Responses in Marine Organisms) - Immunotoxicology in fish - Applications and Mechanisms of Response. Plymouth, England. July 2001.

Conference on Women in Science - Aging: Good or Bad News for the Immune Response. Rutgers University. New Brunswick, NJ. Oct. 2000

International Conference on Environmental and Occupational Lung Disease (M.D. Cohen and J.T. Zelikoff) - Woodsmoke Impairs Host Resistance Against Pulmonary Infections in an Animal Model. Lucknow, India. October, 2000.

EPA-Duluth - Fish Immune Status: A Sensitive System for Assessing Toxicological Impact of Aquatic Environments. Duluth, MN. May 2000.

University of Minnesota-Duluth - Processes and Mechanisms of Woodsmoke-induced Immunosuppression. Duluth, MN. May 2000.

International Symposia on Medaka (J. Beaman and J.T. Zelikoff)- Japanese Medaka: A Sensitive Teleost Model for Assessing the Immunotoxic Effects of Potential Endocrine-Disrupting Chemicals. Osako, Japan. March 2000.

The Fourth Princess Chulabhorn Science Congress- Immune System Biomarkers for Predicting the Effects of Environmental Pollution. Bangkok, Thailand. November 1999.

Aquatic Toxicity Workshop (SETAC Canada)- Immunotoxicity In Fish. Edmonton, Canada. October 1999.

Eurotox '99- Biomarkers of Immunotoxicity in Fish: From the Lab to the Ocean. Oslo, Norway. June 1999

American Lung/Thoracic Association- Pulmonary infection. Presented as part of a Symposium on "Host Susceptibility Factors to Environmental Lung Disease. San Diego, CA. April 1999.

Society of Toxicology- Animal Models of Infection. Presented as part of a Workshop on "Compromised Animal Models and At Risk Populations". New Orleans, LA. March 1999.

Society of Toxicology- Everything you Ever Wanted to Know About Immunotoxicology, But Were Afraid to Ask. Presented to minority undergraduates as part of the SOT Education Committee. New Orleans, LA. March 1999.

University of California - Davis. Woodsmoke: Adverse Health Effects and Mechanisms of Pulmonary Toxicity. Davis, CA. March 1999.

The American College, India Academy of Science. Impact of Aquatic Pollution on Animal Health. Madurai, India. February 1999.

The American College, India. 3-Day Workshop on "Fish Immunotoxicology". Madurai, India, February 1999.

ADJUNCT APPOINTMENTS AND CONSULTING

Chulabhorn Research Institute & University (Bangkok, Thailand) **-** Adjunct Professor (2003-present)
Cornell University, Inst. for Comparative and Environmental Toxicology (Ithaca, NY) - Adjunct Professor (1996-2005)
American Lung Association - Criteria Document on Woodsmoke (2001)
Fish and Wildlife Services - Status of the Hudson River (2000)
International Life Sciences Institute - Research strategy on age-related differences in susceptibility (1998)
Stratus Consulting Inc. - Assessment of PCB-contaminated sites (1997 - 2000)
U.S. EPA - Criteria document on the immunotoxicity of endocrine disruptors (1997)

PROFESSIONAL SOCIETIES

Society of Toxicology (SOT)
Midatlantic Society of Toxicology (MASOT)
Society of Environmental Toxicology and Chemistry (SETAC)
Hudson-Delaware Regional Chapter of SETAC (HDR-SETAC)

EDITOR/EDITORIAL BOARD APPOINTMENTS

Editor and Co-Editor-

Pulmonary Immunotoxicology (Klewar Publ.) - (2000)
Immunotoxicology of Occupational and Environmental Metals. (Taylor and Francis) - (1998)
Ecotoxicology: Responses, Biomarkers and Risk Assessment. (SOS Publications) - (1997)
Modulators of Immune Responses: A Phylogenetic Approach - Vol. 2 (SOS Publications)-(1996)
Modulators of Immune Responses - Vol. 1 (SOS Publications) - (1994)
Toxicology and Ecotoxicology News (Taylor & Francis) - (1995-1998)
Book series on: Ecotoxicology (John Wiley & Sons) - (1995-1997)

Associate Editor-

Journal of Toxicology and Applied Pharmacology – Special Reviews Editor (2005-2009)
Journal of Toxicology and Environmental Health - Part A - (2001 - Present)
Biomarkers: Exposure, Effects and Susceptibility - (1995 – 2007)

Editorial Advisory Board-

Open Journal on Immunology (2009-2012)
Environmental Health Perspectives (2009 – 2012)
Environmental Bioindicators (2005- Present)
Toxicology (1997- Present)
Toxicol. Sci. (2007-2010)
Journal of Immunotoxicology (2004 - 2010)
Inhalation Toxicology (2004 - 2008)
Toxicology Applied Pharmacology (1996 - 2005)
Fish and Shellfish Immunology (1997 - 2008)
Diseases of Aquatic Organisms (1995 - 2006)
Aquatic Toxicology (1998 - Present)
Journal of Toxicology and Environmental Health (1996 - 2001)
Fish Immunology Technical Communications- Vols. 2-5 (1994 - 1997)

CHAIRED SESSIONS/MEETING ORGANIZER (1997 - present)

Outside University

Organizer/Instructor of International Student & Faculty Workshop on "Fish Immunology" (Tasmania, Australia; February 1997)
Organizer/Instructor of Student & Faculty Mini-workshop on "Fish Immunology" (Christ Church, New Zealand; February 1997)

Chairperson at International Meeting on "Developmental and Comparative Immunology" (Williamsburg VA; July 1997)

Organizer of Student & Faculty International Workshop on "Fish Immunotoxicology Techniques" (American College, Madurai India; February 1999).

Organizer of Continuing Education Course on "Exposure Assessment: Methods and Applications" at Aquatic Toxicity Workshop Meeting (Edmonton, Canada; October 1999).

Chairperson of Symposium on "Profiling Immunotoxicology" at Aquatic Toxicity Workshop Meeting (Edmonton, Canada; October 1999).

International Conference on Environmental and Occupational Lung Disease (Lucknow, India; October, 2000)

Symposium Coordinator/Chairperson at Society of Toxicology (1993, 1994, 1996-1999; 2005-2009)

Continuing Education Coordinator/Chairperson at Society of Toxicology (1994, 1995, 2000, 2001)

Slovenian Society of Toxicology (Nova Gorcia, Slovenia; September 2004, 2005)

Aerosol Dynamics and Health: Strategies to Reduce Exposure & Harm. (Chairperson, Public Health Issues Involving Environmental & Tobacco Aerosols; Cardiff, Wales 2008)

FEDERAL ADVISORY BOARDS/PANELS

NASA Lunar Science Institute, Moon Science Grant Review Panel. (2008)

NASA, Lunar Dust Non-Advocate Review Panel (Chair, 2007-2008)

United Nations Environmental Program (UNEP) Steering Committee (2006 – 2010)

- Atmospheric Brown Cloud Human Health Panel

National Institute of Health (NIH)

- NIH Innate Immunity and Inflammation (III) Study Section Full Member, 2005 – 2006
- NIEHS ALTX – 4 (Alcohol and Toxicology) Study Section Full Member, 1996 - 2000
- NIEHS P30 (NIEHS Center of Excellence grant), 2008, 2009
- NIEHS K01 grant applications, 2008
- NIEHS Program Project grants *2006-present*

National Institute of Environmental Health Sciences (NIEHS) & U.S.EPA & NASA

Expert Panel on “Global Earth Observations: Application to Air Quality and Human Health” (2005)

National Institute of Allergy & Infectious Disease (NIAID) & Department of Defense (DOD)

- Expert Panel Workshop on Pulmonary Threat Agents (2005)

National Academy of Science

- Institute of Medicine (IOM): Reviewer for Depleted Uranium final document (2008)
- National Research Council (NRC) - Committee on Toxicology/Subcommittee on Spacecraft Water Exposure Guidelines (2001 - 2008)
- Institute of Medicine (IOM): Committee on Gulf War and Health - Part 3 (2002 – 2004)
- Institute of Medicine (IOM): Reviewer for Agent Orange final document (2003)

U.S. EPA Science Advisory Board & Review Panel

- Metals Risk Assessment Framework Review Panel, (2004 – 2005); Nanoparticle Review Panel (2005)

APPOINTMENTS/ELECTED OFFICES

Society of Toxicology (SOT)

Nominating Committee (2007-2009)
Congressional Representative (2004 – 2005)
Education Committee (2002 – 2005; Chair, 2004 – 2005))
Education Sub-Committee for Minority Initiatives (2001 - 2004; Chair, 2003- 2004)

Continuing Education Committee (1998 - 2001; Chair, 1999 - 2000)
Program Committee (1995-1998)

Immunotoxicology Specialty Section
President (1999-2000)
Vice-President (1998-1999)
Secretary/Treasurer (1995-1997)
Program Committee (1993-1999)
Awards Committee (1993, 1998, 2000)
Education Committee (Chair, 1992-1996; 2004-2009)
Nominating Committee (1998 - 2001, Chair, 1999-2000)
Councilor (2000-2001)

Metals Specialty Section
President (2003-2004)
Vice President (2002-2003)
Awards Committee (Chair, 2001 - 2004)
Program Committee (Chair, 2001 - 2004)
Nominating Committee (2001 – 2004, Chair, 2001-2003)

MidAtlantic (Chapter) Society of Toxicology (MASOT)
President (2008-2009)
Vice President (2007-2008)
Vice President-elect (2006-2007)
Councilor (2001 - 2004)
Program Committee (2000 – Present; Chair 2006-2007)

GRANT REVIEWER *Ad hoc* (Federal/State/Private):
Federal
NASA, Moon dust program (2008)
NIEHS, *Ad hoc* P30 Center of Excellence Program Reviewer (2008)
NIEHS, *Ad hoc* Program Project Reviewer (2002, 2008,2009)
Canadian Centers for Research (2000 – 2004)
DOD (1999 - present)
EPA (2002)
Natural Sciences and Engineering Research Council of Canada (2002 – present)
NIEHS, *Ad hoc* RO1 Reviewer (2001 - present)
NIEHS Transitional Grants (TIP) (2002, 2003)
NIEHS ARCH Grant Program (2004)

State/Private
Center for Indoor Air Research
IFS Research Grants for Developing Nations
Johns Hopkins Pilot Projects
Michigan Sea Grant
New Jersey Sea Grant
New York Sea Grant
Philip Morris Foundation

COMMUNITY OUTREACH INITIATIVES:
Hospice volunteer and fundraiser

Director, Community Outreach & Education Program, NYU, Department of Environmental Medicine (**Director,** 2005- present; **Co-Director**, 2004-2005)

Y-2 Kids (NY State 4th – 12th grade, Career day representative, 2008, 2009)

Center for Talented Youth, New York University Department of Environmental Medicine & Johns Hopkins Center for Talented Youth (NYU Director, 2005 – 2010)

Environmental Commision of Ramsey (2001 – 2007; Vice-Chair; 2004-2006)
- Ramsey, New Jersey. Woodburning: A Cozy Atmosphere or a Public Menace? (2003)

Senior Citizen Advisory Board of Ramsey (2003 - 2005)
Youth Guidance Commision of Ramsey (1999 - 2001)

Rotary Club, Goshen, New York. Woodburning: A Cozy Atmosphere or a Public Menace? (2003)
Upper Saddle River Community Center, Upper Saddle River, New Jersey. The Hazards of Woodburning (1997)

NYU Internal Committees and Initiatives

IACUC Review Board (2008-2009)
Promotion & Tenure Committee (2006-2009; Chair, 2009-2010)
Biological Safety Committee- (Chair, 1990-1999)
Graduate Steering Committee (1999- 2008; Interim Co-chair 2001-2002)
Toxicology Masters Program (Director, 2002 – 2008; Co-director, 2008-2010)

STUDENTS

Advisor/Co-advisor:

College and High School

- Jeff Openheim (2009-2010; Suffern High School [Suffern, NY])
- Monica Feldman (2007-2010; Spring Valley High School [Spring Valley, NY])
- George Markt (2005-present; Ramapo High School [Ramapo, NY])
- Payal Roy (2006 – present; New York University [NY, NY])
- Rebecca Kurtzman (2005 – 2007; Spring Valley High School [Spring Valley, NY])
- Erica Stone (2006, Ramapo College [Mahwah, NJ])
- Elizabeth Nadziejko (2000; Washingtonville High School [Washingtonville, NY[)
- Kevin Hazard (1999 – 2000; Spring Valley High School [Spring Valley, NY])
- Songeeta Pachachuria (1997-2000; Spring Valley High School, [Spring Valley, NY])

Masters

- Sandra Parella (2008-2010)
- Kotaro Hoshido (2007-2009)
- Jacqueline Grabowski (2006-2008)
- Elizabeth Vanza (2004 – 2006)
- Elizabeth Berg (2003 - 2005)
- Shannon Doherty (2002 - 2005)
- Colette Prophete (1998 - 2001)
- Jessica Duffy (1999 - 2001)
- Migali Jorge (1998 - 2000)
- Cheryl Premdass (1998 - 2000)
- Andrea Raymond (1997 - 2000)
- Thomas McManus (1994 – 1996, Co-advisor)

Doctorate

- Sheung Pui Ng (2004 - present)
- Jessica Duffy (2001 – 2007)

- Chantana Settachan (Co-Advisor; 2003 – 2009; Chulabhorn Research Institute, Bangkok Thailand)
- Erik Carlson (1999- 2003)
- Ninah Enane (Co-Advisor, 1995 - 1999)
- Peter Atkins (Co-Advisor, 1992 - 1996)

Thesis Committees:

Doctorate

- Judy Blatt Nichols (Chair, 2007 – 2011)
- Patricia Gillespie (2006 - 2009)
- Elizabeth Vanza (Chair, 2006 – 2009)
- Ann Zulkosky (2005 – 2007; SUNY Stony Brook)
- Samantha DeLeon (Chair,1999 – 2003)