CURRICULUM VITAE Joseph H. Abraham, ScD MS

EDUCATION AND TRAINING

EDUCATION:

Harvard University Epidemiology ScD 2003

Environmental Health

Dissertation: Associations of Household Endotoxin and Maternal Allergy With

Childhood Immune Responses, Asthma and Allergic Disease

Advisor: Dr. Doug Dockery

Harvard University Epidemiology MS 2001

Brigham and Women's Hospital Medicine Fellow 1998

Brandeis University Philosophy BS 1989

PROFESSIONAL EXPERIENCE

Senior Epidemiologist / 2003-present

Apex Epidemiology Research, LLC

Provide advanced biostatistical and epidemiologic consulting and contract research services.

Provide study design and data analysis support to businesses, government agencies, academic institutions, law firms, clinicians and researchers in private practice

Provide training in modern epidemiological and biostatistical methods.

Assistant Scientist / 2003-2005

Johns Hopkins University, Bloomberg School of Public Health, Department of Epidemiology

Received post-doctoral training

Provide technical assistance in development, application and evaluation of epidemiologic methods

Conduct observational analyses utilizing large administrative database and routinely collected environmental data

Research Associate / 1998-2003

Harvard University Medical School, Brigham and Women's Hospital Channing Laboratory, Department of Medicine

Investigated indices of airway responsiveness following bronchodilator administration

Research Assistant / 1996-1998

Harvard University, School of Public Health, Department Environmental Health

Assisted in the conduct and analysis of physiologic responses to ozone glucocorticoid exposure utilizing whole animal and cultured human cell models.

Research Assistant / 1996-1998

Boston Children's Hospital, Department of Medicine

Assisted in research of cardiovascular events during sleep in an animal model of coronary artery stenosis.

Program Coordinator / 1993-1994

The McCall Foundation

Developed and supervised youth chemical dependency prevention programs

TEACHING EXPERIENCE:

Instructor / 2003-2005

Johns Hopkins School of Public Health

Principles of Epidemiology Intermediate Epidemiology Cohort Studies: Design, Analysis and Applications

Visiting Instructor / 2003-2005

Genetic and Molecular Epidemiology Program, National Institute of Singapore.

Principles of epidemiology

Visiting Instructor / 2004

Genetic and Molecular Epidemiology Program, Karolinska Institutet.

Advanced epidemiologic methods

Teaching Assistant / 1999-2003

Department of Epidemiology, Harvard School of Public Health.

Introduction to Epidemiology (head teaching assistant) Elements of Epidemiologic Research (head teaching assistant) Environmental Epidemiology

COMPUTER SKILLS:

Technical software: SAS, S-plus, R

PUBLICATIONS:

Abraham JH, Finn PW, Milton DK, Ryan LM, Perkins DL, Gold DR. Infant Home Endotoxin is Associated with Reduced Allergen-stimulated Lyphocyte Proliferation and IL-13 Production in Childhood. *J. Al. Clin. Med.* 116(2):431-7 2005.

Abraham JH, Gold DR, Dockery DW, Ryan LM, Park JH, Milton DK. Within-home versus Between-home Variability of House Dust Endotoxin in a Birth Cohort, *Env. Health Persp.* Submitted, 2004.

Launois SH, Averill N, Abraham JH, Kirby DA, Weiss JW. Cardiovascular responses to non-respiratory and respiratory arousals in a porcine model. *J. App. Physiol.* 90 (1):114-120, 2001.

Shore SA, Abraham JH, Schwartzman IN, Murthy GG, Laporte JD. Ventilatory responses to ozone are reduced in immature rats. *J. App. Physiol*. 88 (6):2023-2030, 2000.

Moore PE, Laporte JD, Abraham JH, Schwartzman IN, Yandava CN, Silverman ES, Drazen JM, Wand MP, Panettieri RA, Shore SA. Polymorhism of the beta(2)-adrenergic receptor gene and desensitization in human airway smooth muscle. *Am. J. Respir. Crit. Care Med.*, 162(6):2117-2124, 2000.

Long NC, Abraham JH, Kobzik L, Weller EA, Murthy GG, Shore SA. Respiratory tract inflammation during the induction of chronic bronchitis in rats: Role of C-fibers. *Eur. Resp. J.*, 14(1):46-56, 1999.

Laporte JD, Moore PE, Abraham JH, Maskym G, Fabry B, Panettieri RA, Shore SA. Role of ERK MAP kinases in responses of cultured airway smooth muscle cells to IL-1β. *Am. J. Phy.*, 227(5):L943-L951, 1999.

Launois SH, Abraham JH, Weiss JW, Kirby DA. Patterned cardiovascular responses to sleep and non-respiratory arousals in a porcine model. *J. Appl. Physiol.*, 85(4):1285-1291, 1998.

Takebayashi T, Abraham JH, Krishna Murthy GG, Lilly C, Rodger I, Shore SA. Role of tachykinins in airway responses to ozone in rats. *J. Appl. Physiol.*, 85(2):442-50, 1998.

BOOK CHAPTERS:

Samet JM, Abraham JA, Environmental health studies: Environmental health methods for urban health. In Galea S, Vlahov D (Eds.), Handbook of Urban Health Populations, Methods, and Practice (Chapter 20). New York, NY: Springer. 2005

PRESENTATIONS

Scientific Meetings

Abraham JH, Finn PW, Perkins DL, Milton DK, Gold DR. House dust endotoxin and lymphocyte proliferative responses: An inverse association at age 2-3 years. *Am. J. Respir. Crit. Care Med.*, 165:8, A245, 2002.

Abraham JH, Milton DK, Gold DR. Components of variation in replicate measures of endotoxin activity in house dust. ISEE, 2001.

Abraham JH, Weiss ST. Comparison of four indices of airway reversibility following bronchodilation in a subgroup of the normative aging study. *Am. J. Respir. Crit. Care Med.*, 161:3, A107, 2000.

Moore PE, Laporte JD, Abraham JH, Schwartzman IN, Yandava CN, Drazen JM, Wand MP, Panettieri RA, Shore SA. The Glu27 polymorphism of the beta(2)-adrenergic receptor increases desensitization in human airway smooth muscle. *Am. J. Respir. Crit. Care Med.*, 161:3, A762, 2000.

Laporte JD, Moore PE, Abraham JH, Fabry B, Maksym GN, Panettieri RA, Shore SA. Role of MAP kinases in IL-1β induced β-adrenergic hyporesponsiveness of cultured human airway smooth muscle (HASM) cells. *Am. J. Respir. Crit. Care Med.*, 159:3, A400, 1999.

Moore PE, Laporte JD, Abraham JH, Panettieri RA, Shore SA. Short term homologous β-adrenergic desensitization in cultured human airway smooth muscle cells: Effect of glucocorticoids. *Am. J. Respir. Crit. Care Med.*, 159:3, A463, 1999.

Moore PE, Laporte JD, Abraham JH, Panettieri RA, Shore SA. Synergistic effects of IL-1β and TNF α on cultured human airway smooth muscle cell responses to β-adrenergic agonists. *Am. J. Respir. Crit. Care Med.*, 159:3, A400, 1999.

Shore SA, Abraham JH, Krishna Murthy GG. Ventilatory responses to ozone (O₃) are reduced in immature rats. *Am. J. Respir. Crit. Care Med.*, 159:3, A490, 1999.

Shore SA, Abraham JH, Schwartzman IN, Krishna Murthy GG. Airway responses to ozone are reduced in leptin deficient mice. *Am. J. Respir. Crit. Care Med.*, 159:3, A468, 1999.

Abraham JH, LeBlanc BW, Krishna Murthy GG, Doerschuk CM, Shore SA. Role of adhesion molecules in airway responses to ozone in mice. *Am. J. Respir. Crit. Care Med.*, 157:3, A155, 1998.

Launois SH, Abraham JH, Weiss JW, Kirby DA. Airway occlusions during sleep elicit patterned cardiovascular responses in pigs. *Am. J. Respir. Crit. Care Med.*, 157:3, A776, 1998.

Moore PE, Laporte JD, Abraham JH, Panettieri RA, Shore SA. Fluticasone proprionate inhibits il-1b induced b-adrenergic hyporesponsiveness and cox-2 expression in cultured human airway smooth muscle cells. *Am. J. Respir. Crit. Care Med.*, 157:3, A657, 1998.

Shore SA, Abraham JH, Lilly C, Krishna Murthy GG. Ventilatory responses of rats in ozone: Effect of c-fibers. *Am. J. Respir. Crit. Care Med.*, 157:3, A488, 1998.

Shore SA, Abraham JH, Lilly C, Krishna Murthy GG. Effect of capsaicin pretreatment on ventilatory responses of rats to so2 during induction of chronic bronchitis. *Am. J. Respir. Crit. Care Med.*, 157:3, A488, 1998.

Launois SH, Weiss JW, Abraham JH, Kirby DA. Regional vascular patterns during sleep and spontaneous arousals in juvenile pigs. *Am. J. Respir. Crit. Care Med.*, 155:4, A776, 1997.

Thesis Papers

Within-home versus between-home variability of house dust endotoxin in a birth cohort

Early-life exposure to house dust endotoxin and peripheral blood mononuclear cell responsiveness *in vitro* at age 2-3 years

Maternal allergen-specific IgE and asthma, eczema, and hay fever in offspring at age 6 years