

Curriculum Vitae for Academic Promotion
The Johns Hopkins University School of Medicine

Kathleen Carole Barnes, Ph.D.

July, 2009

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments:

- 2002 Associate Professor in Medicine
 Division of Allergy & Clinical Immunology, School of Medicine
 Johns Hopkins University
 Baltimore, Maryland
- 2004 Mary Beryl Patch Turnbull Scholar
 Johns Hopkins University
 Baltimore, MD
- 2004 Director, The Lowe Family Genomics Core
 Johns Hopkins University
 Baltimore, MD
- 2004 Director, Bayview Genetics Research Facility (BGRF)
 Johns Hopkins University
 Baltimore, MD
- 2000 *Joint Appointment*
 Dept. of Epidemiology, Bloomberg School of Public Health
 Johns Hopkins University
 Baltimore, MD
- 2003 *Joint Appointment*
 Division of Pulmonary & Critical Care Medicine, School of
 Medicine
 Johns Hopkins University
 Baltimore, MD

Personal Data:

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Education and Training:

- 1979- 1982 (no degree) James Madison University, Harrisonburg, Virginia (Music, Pre-nursing)
- B.S.N. 1984 Medical College of Virginia, Virginia Commonwealth University
Richmond, Virginia
Nursing
- Ph.D. 1992 Dept. of Anthropology, The University of Florida
Gainesville, Florida
Biomedical Anthropology
Doctoral Dissertation: *The Role of Household Pests in the Epidemiological Transition of Allergy: Modernization of the Domestic Environment in Barbados.*
- Postdoctoral Fellowship 1993 - 1995 Division of Clinical Immunology
Johns Hopkins University, School of Medicine
Baltimore, Maryland
- 1997 Short Course in Medical and Experimental Genetics, Jackson Laboratory, Bar Harbor, Maine

Professional Experience:

- 1993–1995 Postdoctoral Fellow
Department of Medicine
Johns Hopkins University
Baltimore, Maryland
- 1995–1997 Instructor in Medicine
Department of Medicine
Johns Hopkins University
Baltimore, Maryland
- 1997–2002 Assistant Professor
Department of Medicine
Johns Hopkins University
Baltimore, Maryland

2002–present

Associate Professor
Department of Medicine
Johns Hopkins University
Baltimore, Maryland

RESEARCH ACTIVITIES

Research Publications:

Peer-Reviewed Original Research Articles:

1. **Barnes KC.** An Evolutionary Perspective on Malaria and Pregnancy. *Florida J Anthropology.* 1990; 15: 15-21.
2. **Barnes KC, Brenner RJ.** Quality of Housing and Allergy to Cockroaches in the Dominican Republic. *Int Arch Allergy Immunol.* 1996; 109: 68-72.
3. **Barnes KC, Neely JD, Duffy DL, Freidhoff LR, Breazeale DR, Schou C, Naidu RP, Levett PN, Renault B, Kucherlapati R, Iozzino S, Ehrlich E, Beaty TH, Marsh DG.** Linkage of asthma and total serum IgE concentration to markers on chromosome 12q: Evidence from Afro-Caribbean and Caucasian populations. *Genomics.* 1996; 37: 41-50.
4. **Barnes KC, Fernández-Caldas E, Trudeau WL, Milne DE, Brenner RJ.** Spatial and temporal distribution of the house dust mite (Astigmata: Pyroglyphidae) allergens *Der p I* and *Der fI* in Barbadian homes. *Journal of Medical Entomology.* 1997; 34(2): 212-218.
5. **CSGA (Collaborative Studies on the Genetics of Asthma).** A genome-wide search for asthma susceptibility loci in ethnically diverse populations. *Nature Genetics.* 1997; 15: 389-392.
6. Morgan MS, Arlian LG, **Barnes KC, Fernandez-Caldas E.** Characterization of the allergens of the house dust mite *Euroglyphus maynei*. *Journal of Allergy and Clinical Immunology.* 1997; 100: 222-228.
7. Nickel R, Wahn U, Hizawa N, Maestri N, Duffy DL, **Barnes KC, Beyer K, Forster J, Bergmann R, Zepp F, Wahn V, Marsh DG.** Evidence for linkage of chromosome 12q15-q24.1 markers and high total serum IgE concentrations in children of the German Multicenter Study (MAS '90). *Genomics.* 1997; 46: 159-162.
8. Hizawa N, Collins G, Rafnar T, Huang SK, Duffy DL, Weber JL, Freidhoff LR, Ehrlich E, Marsh DG, Beaty TH, **Barnes KC,** Collaborative Study on the Genetics of Asthma (CSGA). Linkage analysis of *Dermatophagoides pteronyssinus* (Der p)-specific IgE responsiveness with polymorphic markers on chromosome 6p21 (HLA-D region) in Caucasian families by Transmission/Disequilibrium Test (TDT). *Journal of Allergy and Clinical Immunology.* 1998; 102(3): 443-448.
9. Hizawa N, Freidhoff LR, Chiu YF, Ehrlich E, Luehr CA, Anderson JL, Duffy DL, Dunston GM, Weber JL, Huang SK, **Barnes KC, Marsh DG, Beaty TH,** Collaborative Study on the Genetics of Asthma (CSGA). Genetic regulation of *Dermatophagoides pteronyssinus* (Der p)-specific IgE responsiveness: A genome-wide multipoint linkage analysis in families recruited through two asthmatic sibs. *Journal of Allergy and Clinical Immunology.* 1998; 102(3): 346-442.

10. Hizawa N, Freidhoff LR, Ehrlich E, Chiu YF, Duffy DL, Schou C, Dunston GM, Beaty TH, Marsh DG, **Barnes KC**, Huang SK, Collaborative Study on the Genetics of Asthma (CSGA). Genetic influences of chromosomes 5q31-q33 and 11q13 on specific IgE responsiveness to common inhaled allergens among African American families. *Journal of Allergy and Clinical Immunology*. 1998; 102(3): 449-453.
11. Armelagos G, **Barnes KC**. The evolution of human disease and the rise of allergy: Epidemiological transitions. *Medical Anthropology*. 1998; 18(2).
12. **Barnes KC**, Freidhoff LR, Nickel R, Chiu YF, Juo SH, Hizawa N, Naidu RP, Ehrlich E, Duffy DL, Schou C, Levett PN, Marsh DG, Beaty TH. Dense mapping of chromosome 12q13.12 – q23.3 and linkage for asthma and atopy. *Journal of Allergy and Clinical Immunology*. 1999; 104(1, Pt. 2): 485-491.
13. Nickel R, Willadsen SA, Freidhoff LR, Huang SK, Raana NP, Caraballo L, Ehrlich E, Ober C, Beaty T, **Barnes KC**. Determination of Duffy-genotypes in three populations of African descent using PCR and sequence specific oligonucleotides. *Human Immunology*. 1999; 60: 738-742.
14. **Barnes KC**, Freidhoff LR, Horowitz EM, Mathias RA, Mulkern DM, Bonacum J, Goldman MH, Polito A, Saini SS, Marsh DG, Beaty TH, Togias A. Physician-derived asthma diagnoses made on the basis of questionnaire data are in good agreement with interview-based diagnoses and are not affected by objective tests. *Journal of Allergy and Clinical Immunology*. 1999; 104: 791-796.
15. Nickel R, Casolaro V, Wahn U, Beyer K, **Barnes KC**, Plunkett B, Freidhoff LR, Sengler C, Plitt J, Schleimer RP, Caraballo L, Naidu RN, Beaty TH, Huang SK. Atopic dermatitis is associated with a functional mutation in the promoter of the CC chemokine RANTES. *Journal of Immunology*. 2000; Feb 1;164(3): 1612-1616.
16. Beyer K, Nickel R, Freidhoff LR, Bjoerksten B, Huang SK, **Barnes KC**, McDonald S, Forster J, Zepp F, Wahn V, Beaty T, Marsh DG, Wahn U. Association and linkage of atopic dermatitis with chromosome 13q12-14 and 5q31-33 markers. *Journal of Investigative Dermatology*. 2000;115: 906-908.
17. Mathias RA, Bickel CA, Beaty TH, Petersen GM, Hetmanski JB, Liang KY, **Barnes KC**. A study of contemporary levels and temporal trends in inbreeding in the Tangier Island, Virginia, population using pedigree data and isonymy. *Am Journal of Physical Anthropology*. 2000; 112: 29-38.
18. Lonjou C, **Barnes KC**, Chen H, Cookson WO, Deichmann KA, Hall IP, Holloway JW, Laitinen T, Palmer LJ, Wjst M, Morton NE. A first trial of retrospective collaboration for positional cloning in complex inheritance: assay of the cytokine region on chromosome 5 by the Consortium On Asthma Genetics (COAG). *Proc Natl Acad Sci USA*. 2000; 97(20): 10942-7.
19. Mathias RA, Freidhoff LR, Blumenthal MN, Meyers DA, Lester L, King R, Xu JF, Solway J, **Barnes KC**, Pierce J, Stine OC, Togias A, Oetting W, Marshik PL, Hetmanski JB, Huang SK, Ehrlich E, Dunston GM, Malveaux F, Banks-Schlegel S, Cox NJ, Bleecker E, Ober C, Beaty TH, Rich SS, CSGA. Genome-wide linkage analyses of total serum IgE using variance components analysis in asthmatic families. *Gen Epidemiol*. 2001; 20: 340-355.
20. **Barnes KC**, Mathias RA, Nickel R, Freidhoff LR, Stockton ML, Xue X, Naidu RP, Levett

- PN, Casolaro V, Beaty TH. Testing for gene-gene interaction controlling total IgE in families from Barbados: Evidence of sensitivity regarding linkage heterogeneity among families. *Genomics*. 2001; 71(2): 246-251.
21. Palmer LJ, Lonjou C, **Barnes K**, Chen H, Cookson WO, Deichmann KA, Holloway JW, Laitinen T, Wjst M, Morton NE. Special Report: A retrospective collaboration on chromosome 5 by the International Consortium on Asthma Genetics (COAG). *Clin Exp Allergy*. 2001; 31(1): 152-154.
 22. Liang KY, Hsu FC, Beaty TH, **Barnes KC**. Multipoint linkage disequilibrium mapping approach based on the case-parent trio design. *Am. J. Hum. Genet.* 2001; 68: 937-950.
 23. Xu J, Meyers DA, Ober C, Blumenthal MN, Mellen B, **Barnes KC**, King RA, Lester LA, Howard TD, Solway J, Langefeld CD, Beaty TH, Rich SS, Bleeker ER, Cox NJ, CSGA. Genomewide screen and identification of gene-gene interactions for asthma-susceptibility loci in three U.S populations: Collaborative Study on the Genetics of Asthma (CSGA). *Am J Hum Genet.* 2001; 68: 1437-1446.
 24. Becker KG, **Barnes KC**. Underlying disease specificity of loci in atopic dermatitis. *J Invest Derm.* 2001; 117(5): 1325-1327.
 25. Hsu FC, Liang KY, Beaty TH, **Barnes KC**. Unified sampling approach for multipoint linkage disequilibrium mapping of qualitative and quantitative traits. *Genetic Epidemiology*. 2002; 22(4): 298-312.
 26. Huang SK, Mathias RA, Ehrlich E, Plunkett B, Liu X, Cutting GR, Wang XJ, Li XD, Togiias A, **Barnes KC**, Malveaux F, Rich S, Mellen B, Lange E, Beaty TH. Evidence for asthma susceptibility genes on chromosome 11 in an African-American population. *Hum Genet.* 2003; 113: 71-75.
 27. Manolio TA, **Barnes KC**, Naidu RP, Levett PN, Beaty TH, AF Wilson. Correlates of sensitization to *Blomia tropicalis* and *Dermatophagoides pteronyssinus* in asthma in Barbados. *Int Arch Allergy Immunol.* 2003; 131: 119-126.
 28. Manolio TA, **Barnes KC**, Beaty TH, Levett PN, Naidu RP, Wilson AF. Sex differences in heritability of sensitization to *Blomia tropicalis* in asthma using regression of offspring on midparent (ROMP) methods. *Hum Genet.* 2003; 113(5): 437-46.
 29. Blumenthal MN, Langefeld CD, Beaty TH, Bleeker ER, Ober C, Lester L, Lange E, **Barnes KC**, Wolf R, King RA, Solway J, Oetting W, Meyers DA, Rich SS. A genome-wide search for allergic response (atopy) genes in three ethnic groups: Collaborative Study on the Genetics of Asthma. *Hum Genet.* 2004; 114: 157-64.
 30. **Barnes KC**, Caraballo L, Munoz M, Zambelli-Weiner A, Ehrlich E, Burki M, Jimenez S, Mathias RA, Stockton ML, Deindl P, Hershey GK, Nickel R, Wills-Karp M. A novel promoter polymorphism in the gene encoding complement component 5 receptor 1 (C5R1) on chromosome 19q13.3 is not associated with asthma and atopy in three independent populations. *Clin Exp Allergy*. 2004; 34: 736-44.
 31. Becker KG, **Barnes KC**, Bright TJ, Wang SA. The Genetic Association Database. *Nat Genet.* 2004; 36(5): 431-32.
 32. Blumenthal MN, Ober C, Beaty TH, Bleeker ER, Langefeld CD, King RA, Lester L, Cox N, **Barnes K**, Togiias A, Mathias R, Meyers DA, Oetting W, Rich SS for the CSGA. Genome scan for loci linked to mite sensitivity: the Collaborative Study on the Genetics of

- Asthma (CSGA). *Genes & Immunity*. 2004; 5: 226-31.
33. Pillai SG, Cousens DJ, Barnes AA, Buckley PT, Chiano MN, Hosking LK, Cameron L-A, Fling ME, Foley JJ, Green A, Sarau HM, Schmidt DB, Sprankle CS, Blumenthal MN, Vestbo J, Kennedy-Wilson K, Wisted WE, Wagner MJ, Anderson WH, **investigators of the GAIN Network**, Ignar DM. A coding polymorphism in the CYSLT2 receptor with reduced affinity to LTD₄ is associated with asthma. *Pharmacogenetics*. 2004; 14: 627-33.
 34. Huang JL, Gao PS, Mathias RA, Yao TC, Chen LC, Kuo ML, Hsu SC, Plunkett B, Togias A, **Barnes KC**, Stellato C, Beaty TH, Huang SK. Sequence variants of the gene encoding chemoattractant receptor expressed on Th2 cells (CRTH2) are associated with asthma and differentially influence mRNA stability. *Hum. Mol. Genet.* 2004; 13(21): 2691-97.
 35. Ye SQ, Simon BA, Maloney JP, Zambelli-Weiner A, Gao L, Grant A, Easley RB, McVerry BJ, Tuder RM, Standiford T, Brower RG, **Barnes KC**, Garcia JGN. Pre-B-cell colony-enhancing factor as a potential novel biomarker in acute lung injury. *Am J Respir Crit Care Med*. 2005; 171: 361-70.
 36. Zambelli-Weiner A, Ehrlich E, Stockton ML, Grant AV, Zhang S, Levett PN, Beaty TH, **Barnes KC**. Evaluation of the CD14/-260 polymorphism and house dust endotoxin exposure in the Barbados asthma genetics study. *J. Allergy Clin. Immunol.* 2005; 115: 1203-9.
 37. Gao PS, Mathias RA, Plunkett B, Togias A, **Barnes KC**, Beaty TH, Huang SK. Genetic variants of the T-cell immunoglobulin mucin 1 (TIM-1), but not TIM-3, genes are associated with asthma in an African American population. *J Allergy Clin Immunol.* 2005; 115: 982-8.
 38. Mathias RA, Beaty TH, Bailey-Wilson JE, Bickel C, Stockton ML, **Barnes KC**. Inheritance of total serum IgE in the isolated Tangier Island population from Virginia: complexities associated with genealogical depth of pedigrees in segregation analyses. *Human Heredity*. 2005; 59: 228-38.
 39. **Barnes KC**, Grant AV, Baltadzhieva D, Zhang S, Berg T, Shao L, Zambelli-Weiner A, Anderson W, Nelsen A, Pillai S, Yarnall DP, Dienger K, Ingersoll RG, Scott AF, Fallin MD, Mathias RA, Beaty TH, Garcia JGN, Wills-Karp M. Variants in the gene encoding C3 are associated with asthma and related phenotypes among African Caribbean families. *Genes and Immunity*. 2006; 7: 27-35.
 40. Pillai SG, Chiano MN, White NJ, **Barnes KC**, Carlsen K, Gerritsen J, Helms P, Lenney W, Silverman M, Sly P, Sundry J, Tsanakas J, von Berg A, Whyte M, Speer M, Varsani S, Skelding P, Hauser M, Vance J, Pericak-Vance M, Burns DK, Middleton LT, Brewster SR, Anderson WH, Riley JH. A genome-wide search for linkage to asthma phenotypes in the Genetics of Asthma International Network families: Evidence for a major susceptibility locus on chromosome 2p. *European J Human Genetics* 2006; 14: 307-16.
 41. Blumenthal MN, Langefeld CD, **Barnes KC**, Ober C, Meyers DA, King RA, Beaty TH, Beck SR, Bleecker ER, Rich SS for the Collaborative Study on the Genetics of Asthma (CSGA). A genome-wide search for quantitative trait loci contributing to variation in pollen reactivity. *J Allergy Clin Immunol.* 2006; 117: 79-85.
 42. Lima JJ, Zhang S, Grant A, Shao L, Tantisira KG, Allayee H, Wang J, Sylvester J, Holbrook J, Wise R, Weiss ST, **Barnes K**. Influence of leukotriene pathway

- polymorphisms on response to montelukast in asthma. *Am J Respir Crit Care Med.* 2006; 173: 379-85.
43. Gao L, Grant A, Halder I, Brower R, Sevransky J, Maloney JP, Moss M, Shanholtz C, Yates CR, Meduri GU, Shriver MD, Ingersoll R, Scott AF, Beaty TH, Moitra J, Ma SF, Ye SQ, **Barnes KC**, Garcia JGN. Novel polymorphisms in the myosin light chain kinase gene confer risk for acute lung injury. *Am J Respir Cell Mol Biol.* 2006; 34: 487-95.
 44. **Barnes KC**, Grant A, Gao P, Baltadjieva D, Berg Tiina, Chi P, Zhang S, Zambelli-Weiner A, Ehrlich E, Zardkoohi O, Brummet ME, Stockton M, Watkins T, Gao L, Gittens M, Wills-Karp M, Cheadle C, Beck LA, Beaty TH, Becker KG, Garcia JGN, Mathias RA. Polymorphisms in the novel gene *Acyloxyacyl Hydroxylase* (AOAH) are associated with asthma and associated phenotypes. *J Allergy Clin Immunol.* 2006; 118: 70-7.
 45. Chi PB, Duggal P, Kao WHL, Mathias RA, Grant AV, Stockton ML, Garcia JGN, Ingersoll RG, Scott AF, Beaty TH, **Barnes KC**, Fallin MD. Comparison of SNP tagging methods using empirical data: Association study of 713 SNPs on chromosome 12q14.3-12q24.21 for asthma and total serum IgE in an African Caribbean population. *Genetic Epidemiology.* 2006; 30: 609-19.
 46. Mathias RA, Gao P, Goldstein JL, Wilson AF, Pugh EW, Furbert-Harris P, Dunston GM, Malveaux FJ, Togias A, **Barnes KC**, Beaty TH, Huang SK. A graphical assessment of p-values from sliding window haplotype tests of association to identify asthma susceptibility loci on chromosome 11q. *BMC Genetics* 2006; 7: 38-48.
 47. Grigoryev DN, Liu M, Cheadle C, **Barnes KC**, Rabb H. Genomic profiling of kidney ischemia-reperfusion reveals expression of specific alloimmunity-associated genes: linking 'immune' and 'nonimmune' injury events. *Transplantation Proceedings* 2006; 38: 3333-6.
 48. Cheadle C, Becker KG, Cho-Chung YS, Nesterova M, Watkins T, Wood W III, Prabhu V, **Barnes KC**. A rapid method for microarray cross platform comparisons using gene expression signatures. *Molecular & Cellular Probes* 2007; 21: 35-46.
 49. Webb BT, van den Oord E, Akkari A, Wilton S, Ly T, Duff R, **Barnes KC**, Carlsen K, Gerritsen J, Lenney W, Silverman M, Sly P, Sundry J, Tsanakas J, von Berg A, Whyte M, Blumenthal M, Vestbo J, Middleton L, Helms PJ, Anderson WH, Pillai SG. Quantitative linkage genome scan for atopy in a large collection of Caucasian families. *Hum Genet.* 2007; 121: 83-92.
 50. Gao L, Grant AV, Rafaels N, Stockton-Porter M, Watkins T, Gao P, Chi P, Munoz M, Watson H, Dunston G, Togias A, Hansel N, Sevransky J, Maloney JP, Moss M, Shanholtz C, Brower R, Garcia JGN, Grigoryev DN, Cheadle C, Beaty TH, Mathias RA, **Barnes KC**. Polymorphisms in the myosin light chain kinase gene that confer risk of severe sepsis are associated with a lower risk of asthma. *J Allergy Clin Immunol.* 2007; 119: 1111-8.
 51. Howell MD, Kim BE, Gao P, Grant AV, Boguniewicz M, DeBenedetto A, Schneider L, Beck LA, **Barnes KC**, Leung DYM. Cytokine modulation of atopic dermatitis filaggrin skin expression. *J Allergy Clin Immunol.* 2007; 120: 150-5.
 52. Williams MA, Cheadle C, Watkins T, Tailor A, Killedar S, Breyse P, **Barnes KC**, Georas SN. TLR2 and TLR4 as potential biomarkers of environmental particulate matter exposed human myeloid dendritic cells. *Biomarker Insights* 2007; 2: 225-39.
 53. Gao L, Flores C, Ma SF, Miller EJ, Moitra J, Moreno L, Wadgaonkar R, Simon B, Brower

- R, Sevransky J, Tudor RM, Maloney JP, Moss M, Shanholtz C, Yates CR, Meduri GU, Ye SQ, **Barnes KC**, Garcia JGN. Macrophage migration inhibitory factor in acute lung injury: expression, biomarker and associations. *Translational Research* 2007; 150: 18-29.
54. Cheadle C, Watkins T, Fan J, Williams MA, Georas S, Hall J, Rosen A, **Barnes KC**. GSMA: Gene Set Matrix Analysis, an automated method for rapid hypothesis testing of gene expression data. *Bioinformatics and Biology Insights*. 2007; 1:49-62.
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 56. Pillai SG, Tang Y, van den Oord E, Klotsman M, **Barnes K**, Carlsen K, Gerritsen J, Lenney W, Silverman M, Sly P, Sundry J, Tsanakas J, von Berg A, Whyte M, Ortega HG, Anderson WH, Helms PJ. Factor analysis in the Genetics of Asthma International Network family study identifies five major quantitative asthma phenotypes. *Clin Exp Allergy* 2008; 38:421-9.
 57. Grigoryev DN, Liu M, Hassoun HT, Cheadle C, **Barnes KC**, Rabb H. The local and systemic inflammatory transcriptome after acute kidney injury. *J Am. Society Nephrol*. 2008; 19:547-58.
 58. Hansel NN, Cheadle C, Diette GB, Wright J, Thompson KM, **Barnes KC**, Georas SN. Analysis of CD4+ T-cell gene expression in allergic subjects using two different microarray platforms. *Allergy* 2008; 63:366-9.
 59. Grigoryev DN, Mathai SC, Fisher MR, Girgis RE, Zaiman AL, Houston-Harris T, Cheadle C, Gao L, Hummers LK, Champion HC, Garcia JGN, Wigley FM, Tudor RM, **Barnes KC**, Hassoun PM. Identification of candidate genes in scleroderma-related pulmonary arterial hypertension. *Translational Research* 2008; 151:197-207.
 60. Harris ML, Darrah E, Lam GK, Bartlett SJ, Giles JT, Grant AV, Gao P, Scott WW, El-Gabalawy H, Casciola-Rosen L, **Barnes KC**, Bathon JM, Rosen A. Association of autoimmunity to Peptidyl Arginine Deiminase Type 4 with genotype and disease severity in rheumatoid arthritis. *Arthritis & Rheumatism* 2008; 58:1958-67.
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 62. Grant AV, Araujo MI, Ponte EV, Oliveira RR, Cruz AA, **Barnes KC**, Beaty TH. High heritability but uncertain mode of inheritance for total serum IgE level and *Schistosoma mansoni* infection intensity in a Schistosomiasis-endemic Brazilian population. *J Infect Dis*. 2008; 198:1227-36.
 63. Cheadle C, Nesterova M, Watkins T, **Barnes KC**, Hall JC, Rosen A, Becker KG, Cho-Chung YS. Regulatory subunits of PKA define an axis of cellular proliferation/differentiation in ovarian cancer cells. *BMC Med Genomics* 2008; 1:43-56.
 64. Vergara C, Tsai YJ, Grant AV, Rafaels N, Gao L, Hand T, Stockton M, Campbell M,

- Mercado D, Faruque M, Dunston G, Beaty TH, Oliveira RR, Ponte EV, Cruz AA, Carvalho E, Araujo MI, Watson H, Schleimer RP, Caraballo L, Nickel RG, Mathias RA, **Barnes KC**. Gene encoding Duffy antigen/receptor for chemokines is associated with asthma and IgE in three populations. *Am J Respir Crit Care Med*. 2008; 178:1017-22.
65. White JH, Chiano M, Wigglesworth M, Geske R, Riley J, White N, Hall S, Zhu G, Maurio F, Savage T, Anderson W, Cordy J, Ducceschi M, **GAIN Investigators**, Vestbo J, Pillai SG. Identification of a novel asthma susceptibility gene on chromosome 1qter and its functional evaluation. *Hum Mol Genet*. 2008; 17:1890-1903.
66. Hansel NN, Gao L, Rafaels NM, Mathias RA, Neptune ER, Tankersley C, Grant AV, Connett J, Beaty TH, Wise RA, **Barnes KC**. Leptin receptor polymorphisms and lung function decline in COPD. *Eur Resp J*, 2009; In press.
67. Hersh CP, Hansel NN, **Barnes KC**, Lomas DA, Pillai SG, Coxson HO, ICGN Investigators, Mathias RA, Rafaels NM, Wise RA, Connett JE, Klanderma BJ, Jacobson FL, Gill R, Litonjua AA, Sparrow D, Reilly JJ, Silverman EK. Transforming growth factor beta receptor-3 is associated with pulmonary emphysema. *Am J Resp Cell Mol Biol*, epub ahead of print. Doi:10.1165/rcmb.2008-0427OC.
68. Vergara C, Caraballo L, Mercado D, Jimenez S, Rojas W, Rafaels N, Hand T, Campbell M, Tsai YJ, Gao L, Duque C, Lopez S, Bedoya G, Ruiz-Linares A, **Barnes KC**. African ancestry is associated with risk of asthma and high total serum IgE in a population from the Caribbean coast of Colombia. *Hum Genet*. 2009; 125:565-79.
69. Himes BE, Hunninghake GM, Baurley JW, Rafaels NM, Sleiman P, Strachan DP, Wilk JB, Willis-Owen SA, Klanderma B, Lasky-Su J, Lazarus R, Murphy AJ, Soto-Quiros ME, Avila L, Beaty T, Mathias RA, Ruczinski I, **Barnes KC**, Celedón JC, Cookson WO, Gauderman WJ, Gilliland FD, Hakonarson H, Lange C, Moffatt MF, O'Connor GT, Raby BA, Silverman EK, Weiss ST. Genome-wide association analysis identifies PDE4D as an asthma-susceptibility gene. *Am J Hum Genet*. 2009; 84:581-93.
70. Price AL, Tandon A, Patterson N, **Barnes KC**, Rafaels N, Ruczinski I, Beaty TH, Mathias R, Reich D, Myers S. Sensitive detection of chromosomal segments of distinct ancestry in admixed populations. *PLoS Genet*. 2009; Jun;5(6):e1000519. Epub 2009 Jun 19.
71. Beck LA, Boguniewicz M, Hata T, Schneider LC, Hanifin J, Gallo R, Paller AS, Lieff S, Reese J, Zaccaro D, Milgrom H, **Barnes KC**, Leung DYM. Phenotype of atopic dermatitis subjects with a history of eczema herpeticum. *J Allergy Clin Immunol*. 2009; In press.
72. Gao P, Rafaels NM, Hand T, Murray T, Boguniewicz M, Hata T, Schneider L, Hanifin JM, Gallo RL, Gao L, Beaty TH, Beck LA, **Barnes KC**, Leung DYM. Filaggrin mutations that confer risk of atopic dermatitis confer greater risk for eczema herpeticum. *J Allergy Clin Immunol*. 2009; In press.
73. Mathias RA, Grant AV, Rafaels N, Hand T, Gao L, Vergara C, Tsai YJ, Yang M, Campbell M, Foster C, Gao P, Togias A, Hansel NN, Diette G, Adkinson NF, Liu MC, Faruque M, Dunston GM, Watson HR, Bracken MB, Hoh J, Maul P, Maul T, Jedlicka AE, Murray T, Hetmanski JB, Ashworth R, Ongaco CM, Hetrick KN, Doheny KF, Pugh EW, Ford J, Eng C, Burchard EG, Sleiman PMA, Hakonarson H, Forno E, Raby BA, Weiss ST, Scott AF,

Kabesch M, Liang L, Abecasis G, Moffatt MF, Cookson WOC, Ruczinski I, Beaty TH, **Barnes KC**. A genome-wide association study on African-ancestry populations for asthma. *J Allergy Clin Immunol*. 2009; In press.

Extramural Funding:

Grants:

Current:

9/30/03 – 6/30/09 “Molecular Approaches to Ventilator Associated Lung Injury”

P50 HL073994

NIH

\$13,740,424

Roy G. Brower, M.D.

Project Leader (“Genetic Modifiers in VALI”) 2.4

Core Leader (“Genomics & Genotyping Core”) .6

8/1/06 – 3/30/10 “Atopic Dermatitis and Vaccinia Network-Clinical Studies Consortium”

HHSN266200400029C

NIH

\$2,478,404

Donald YM Leung, M.D., Ph.D.

Co-Investigator .6

9/1/04 – 2/28/09 “Airway Disease and Cockroach Exposure in Public Housing”

R18 AI44840

NIH (Renewal) (No Cost Extension to 2/28/10)

\$2,350,890

Kathleen C. Barnes, Ph.D.

Principal Investigator .6

4/1/05 – 3/31/10 “Genetics of Asthma Severity and Lung Function Decline”

K23HL076322-01

NIH

\$745,000

Nadia Hansel, M.D., MPH

Co-Investigator .12

9/1/06 – 7/30/11 “Rheumatic Disease Research Core Center”

1 P30 AR053503

NIAMS

\$2,000,000

Antony Rosen, M.D.

Core Leader	1.2
9/25/06 – 7/31/09	“Genome-Wide Association Studies of Asthma in Populations of African Descent”
R01 HL087699	
NHLBI	
\$4,434,665	
Kathleen C. Barnes, Ph.D. and Terri H. Beaty, Ph.D.	
Co-Principal Investigator	1.8
1/12/07 – 12/31/11	“Molecular Determinants of Scleroderma-Associated Pulmonary Arterial Hypertension”
1 P50 HL084946-01	
NIH	
\$2,500,000	
Paul M. Hassoun, M.D.	
Core Leader (Core D Genomics/Genotyping)	1.2
Project Leader (“Scleroderma-Associated PAH”)	1.2
7/1/08 – 6/30/10	“A Novel, Robust Strategy to Map Human Embryonic ‘Stem-cellness’ Transcriptional Networks”
Grant # 104068	
TEDCO, MSCRF Exploratory	
\$200,000	
Chi V. Dang, M.D., Ph.D.	
Co-Investigator	0
11/14/07 – 11/30/09	“Genetic Polymorphisms and Hypersensitivity Reactions to Vaccines”
Grant # 103019	
GovWorks/NBC	
\$873,800	
Neal A. Halsey, M.D.	
Co-Investigator	.6
09/18/2008 – 07/31/2010	“Genetic Determinants of Food Allergy Among Pediatric Populations”
R21 AI079984	
NIH	
\$292,375	
Kathleen C. Barnes, Ph.D.	
Principal Investigator	1.8

09/20/2008 – 08/31/2010 “Genome-Wide Associations Environmental Interactions in the Lung Health Study”

U01 HG004738

NIH

\$803,258

Kathleen C. Barnes, Ph.D.

Principal Investigator 1.8

9/19/08 – 7/31/10

“Tissue-based Validation of COPD Genetic Studies Using Lung Health Study Cohort”

R03 HL095406

NIH

\$164,000

Enid Neptune, M.D.

Co-Investigator .12

Pending:

5/1/09 – 4/30/14

“Center for the Epigenetics of Common Human Disease”

P50

NIH/NHGRI/NIMH

\$2,874,398

Andrew Feinberg, M.D.

Co-Investigator 1.2

7/1/09 – 6/30/11

“Statistical Genetic Studies of ADRB2 Variants in Asthma”

NIH

\$23,169

Kathleen C. Barnes, Ph.D. (Subcontract)

Principal Investigator .6

9/1/09 - 8/31/14

“Genetic Determinants of Asthma in Pacific Islanders from Hawaii”

NIH/NCMHD

\$662,789

Kathleen C. Barnes, Ph.D. & Elizabeth Tam, M.D.

Co-Principal Investigator 1.2

Previous:

12/1/02 – 11/30/07

“Genetic Studies of Immune Responsiveness to Cockroach”

R01 (AI50024-03)

NIH

(No cost extension to 11/30/08)

\$1,250,000

Kathleen C. Barnes, Ph.D.

Principal Investigator	1.8
5/7/04 – 10/31/08	“Center for Childhood Asthma in the Urban Environment”
P01 ES09606 & RD 83213901	
NIEHS & EPA (Renewal)	
\$5,332,775	
Gregory Diette, M.D.	
Co-Investigator	1.2
9/30/02 – 7/31/08	“Howard/Hopkins Center for Reducing Asthma Disparities”
U01 HL72455	
NIH	(No cost extension)
\$2,094,641	
Cynthia Rand, Ph.D.	
Project Leader	1.44
8/1/05 – 7/31/06	“Applied Genomics in Cardiopulmonary Disease”
5 U01 HL066583-04 (Revised)	
NHLBI	
\$480,701	
Kathleen C. Barnes, Ph.D.	
Principal Investigator	
9/30/02 – 7/31/06	“Baltimore Asthma Severity Study (BASS)”
R01 HL67905	
NHLBI	
\$2,145,249	
Jean Ford, M.D.	
Co-Investigator	1.2
10/29/00 – 9/30/05	“Asthma Positional Candidate Genes in Mice and Humans”
5 R01 HL67736	
NHLBI	
\$1,750,000	
Marsha Wills-Karp, Ph.D.	
Co-Investigator	1.2
9/29/00 – 7/31/04	“Applied Genomics in Cardiopulmonary Disease”
U01 HL99024	
NHLBI	
\$14,000,000	
Joe G.N. Garcia, M.D.	
Co-Investigator (Steering Committee Member, Genotyping Committee Co-Chair, Candidate Gene Committee Chair)	1.2

4/1/99 – 6/30/04 R18 AI44840 NIAID \$1,536,335 Alkis Togias, M.D. Co-Investigator	“Airway Disease and Cockroach Exposure in Public Housing” 1.8
11/1/02 – 10/31/03 R01 HL71392 NIH \$358,500 John Lima, M.D. Co-Investigator	“The Leukotriene Modifier or Corticosteroids Trial (The LOCS Trial)” .24
4/1/99 – 3/31/02 Center for Indoor Air Research \$517,706 Kathleen C. Barnes, Ph.D. Principal Investigator	“Genetic Susceptibility of Atopy and the Indoor Environment” 1.2
9/1/97 – 8/31/02 5 U01 HL49612-08 NHLBI \$2,090,326 Terri H. Beaty, Ph.D. Co-Investigator	“Molecular Genetic Analysis of Asthma” 3.6
9/1/97 – 12/31/99 Asthma & Allergy Foundation of America \$40,000 Kathleen C. Barnes, Ph.D. Principal Investigator	“Genetic Studies of Asthma & Atopy on Tangier Island” 2.4
4/1/92 – 11/30/98 5 R01 (AI20059-14, Years 2-6) NIAID David G. Marsh, Ph.D. Co-Investigator	“Genetic Studies of Human Immune Response”
3/1/94 – 2/28/97 Center for Indoor Air Research	"Epidemiology & Genetics of Atopic Asthma"

Mark C. Liu, M.D.
Co-Investigator

Contracts:

7/1/99 – 12/31/01 “Molecular Genetics of Asthma in Barbados”
Research Grant
Glaxo-Wellcome
\$589,171
Kathleen C. Barnes, Ph.D.
Principal Investigator 1.08

3/1/00 – 12/31/00 “Genetic Regulation of MYPT1 in Allergic Disease”
Research Grant
Kirin Brewery
\$19,497
Kathleen C. Barnes, Ph.D.
Principal Investigator .12

8/1/04 – Completion “Genetics of Asthma International Network (GAIN): Exacerbation
follow-up study”
Research Grant
GlaxoSmithKline Research & Development Ltd
\$31,000
Kathleen C. Barnes, Ph.D.
Principal Investigator

5/1/06 – 9/8/06 “Candidate Gene Association Studies in the Barbados Family-based
Dataset”
Research Grant
GlaxoSmithKline Research & Development Ltd
\$75,000
Kathleen C. Barnes, PhD
Principal Investigator .24

Other:

2005 “Candidate Genes in COPD: The Lung Health Study”
NHLBI Resequencing and Genotyping Service (RS&G)

2008 “Validation of Associations from a Genome-Wide Association
Study on Asthma in Four Ethnically Diverse Populations Selected
for Asthma”

NHLBI Resequencing and Genotyping Service (RS&G)

2008 “A Re-Sequencing Study to Identify Variants in the Aquaporin (AQP) Gene Cluster Associated with COPD and Asthma: A Case-Control Study in Two Racial Groups”

NHLBI Resequencing and Genotyping Service (RS&G)

Research Program Building / Leadership:

2004 Bayview Genetics Research Facility (BGRF), Director

2004 The Lowe Family Genomics Core, Director

EDUCATIONAL ACTIVITIES

Publications:

Invited Review Articles:

1. Brenner RJ, **Barnes KC**, Helm RM. 1990 Arthropod allergens in the urban environment. *Proceedings of the National Conference on Urban Entomology*, February, Orlando, Florida p. 25-8.
2. Cuisik J, **Barnes KC.**, ed. 1991 Topics in Caribbean Anthropology. *Special Publication #7. Florida J Anthropology*. Vol. 16.
3. Brenner RJ, **Barnes KC**, Helm R, Williams LW. Modernized society and allergies to arthropods. *American Entomologist*. 1991; 37(3): 143-55.
4. **Barnes KC**, Marsh DG. The genetics and complexity of allergy and asthma. *Immunology Today*. 1998; 19(7): 325-32.
4. 5. **Barnes KC**. Atopy and Asthma Genes — Where Do We Stand? *Allergy*. 2000; 55: 803-17.
6. **Barnes KC**. Horizons of asthma genetics. *Intl. Rev. of Asthma*. 2004; 6(4): 70-89.
7. Garcia JGN, Nonas S, Kawkitinarong K, **Barnes KC**. SNPs, chips and functional genomics in acute lung injury. *Am J Resp Cell Mol Biol*. 2004; 31(2): S18-S22.
8. **Barnes KC**, Grant AV, Gao P. A review of the genetic epidemiology of resistance to parasitic disease and atopic asthma: common variants for common phenotypes? *Current Opinion in Allergy and Clinical Immunology*. 2005; 5: 379-85.
9. **Barnes KC**. Genetic determinants and ethnic disparities in sepsis-associated acute lung injury. *Proc. Am. Thoracic Soc*. 2005; 2: 195-201.
10. **Barnes KC**. Parasite evolution and the immune system. *Allergy Clin. Immunol. In.: J World Allergy Org*. 2005; 17: 229-36.
11. **Barnes KC**. Genetic epidemiology of health disparities in allergy and clinical immunology. *J Allergy Clin Immunol*. 2006; 117: 243-54.
12. **Barnes KC**, Grant AV, Hansel NN, Gao P, Dunston GM. African Americans with asthma. *Proc. Am. Thoracic Soc*. 2007; 4: 58-68.
13. Gao L, Tsai YJ, Grigoryev DN, **Barnes KC**. Host defense genes in asthma and sepsis and the role of the environment. *Current Opinion in Allergy and Clinical Immunology*. 2007; 7:

459-67.

14. Gao L, **Barnes KC**. Recent advances in genetic predisposition to clinical acute lung injury. *Am J Physiology Lung* 2009; 296:713-25.

Editorials:

1. **Barnes KC**. Genetics and epidemiology. *Current Opinion in Allergy and Clinical Immunology*. 2001; 1: 383-85.
2. **Barnes KC**. Genetics and epidemiology. *Current Opinion in Allergy and Clinical Immunology*. 2002; 2(5): 375-78.

Book Chapters and Monographs:

1. Lieberman L, **Barnes KC**. 1990 Food Allergies and Adverse Food Reactions: An Anthropological Perspective. In *Food Allergies and Adverse Reactions*. J. Perkin, Ed. Aspen Pub. Inc. p. 207-32. Gaithersburg, MD.
2. **Barnes KC**. Genetic studies of cystic fibrosis and atopic asthma: current approaches and future aspects. *Ped Allergy & Immunol*. 1996; 7(suppl 9): 74-81.
3. **Barnes KC**. Genetics and bronchial asthma: what is new? *Pediatric Pulmonol Suppl*. 1997; 16: 80-1.
4. Armelagos GJ, **Barnes KC**, Lin J. 1998 Disease in Human Evolution: The Reemergence of Infectious Disease in the Third Epidemiological Transition. in *Anthropology Explored. The Best of Smithsonian AnthroNotes*. R.O. Selig & M.R. London, Ed. Smithsonian Institution Press. p. 96-108. Washington, D.C.
5. **Barnes KC**, Liu MC. 1999 The role of genetics and indoor allergen exposure in atopic asthma. In Platts-Mills TAE, et al. *Causes and Mechanisms of an Epidemic Inflammatory Disease*. Lewis Publishers. 256 pp. Center for Indoor Air Research. pp. 197-224.
6. **Barnes KC**, Armelagos GJ, Morreale SC. 1999. Darwinian medicine and the emergence of allergy. In Trevathan, W., McKenna, J.J., Smith, E.O. *Evolutionary Medicine*. Oxford University Press. p. 209-44.
7. Nickel RE, Saitta FP, Freidhoff LR, Yu XY, Ehrlich E, **Barnes KC**, Beaty TH, Huang SK. Positional candidate gene approach and functional genomics strategy in atopy gene discovery. *Int. Arch. Allergy Immunol*. 1999; 118: 282-84.
8. **Barnes KC**. Gene-environment and gene-gene interaction studies in the molecular genetic analysis of asthma and atopy. *Clinical and Experimental Allergy*. 1999; 29 (Suppl 4): 47-51.
9. Nickel R, Beyer K, Huang SK, **Barnes KC**, Wahn U. Genetic markers of atopy in infancy: results from the German Multicenter Allergy Study. *Clinical and Experimental Allergy*. 1999; 29 (Suppl): 23-5.
10. **Barnes KC**. Evidence for common genetic elements in allergic disease. *Journal of Allergy and Clinical Immunology*. 2000; 106: S192-200.
11. Armelagos GJ, **Barnes KC**, Lin J. 2004. Disease in Human Evolution: The Resistance of Many Infections to Antibiotics Today is Seen as the Latest Major Health Crisis in Human

History. in *Anthropology Explored. Revised and Expanded*. R.O. Selig, M.R. London & P.A. Kaupp, Ed. Smithsonian Institution Press, p. 115-25. Washington, D.C.

12. Sevransky J, Georas S, **Barnes K**. Single nucleotide polymorphisms in patients with sepsis and Acute Lung Injury. *Contemporary Critical Care*. 2006; 3: 1-8.

Other Media:

1. Audiocast: "Asthma, Genes and the Environment"
Original airing date: Thu, January 11, 2001 at 2 pm EST
(<http://www.dna.com/eventTranscript/eventTranscript.jsp?link=audiocastasthmagenesandtheenvironment.htm>)
Produced by: DNA Sciences and the Gene Trust
2. Radio Broadcast: "Genes Work in Concert to Produce Asthma"
Official radio air date: Tuesday, February 20, 2001
Produced by: Tom Haederle, Director, Health Newsfeed, WJHU
3. Radio Broadcast: "Barbados Genes"
Official radio air date: March 14, 2001 (
Produced by: Science Update, American Association for the Advancement of Science
4. Henry Stewart Talks on Tape: "Health Disparities in Common, Complex Diseases: A Role for Genetics?", April, 2007.
5. British Broadcasting Corporation (BBC) Horizons Program Documentary. December 2008.

Teaching:

CME Instruction:

- | | |
|------|---|
| 1997 | "Update on Genetics of Allergic Disease", Invited Speaker
Breakfast Seminar, 53 rd Annual Meeting, AAAAI, San Francisco, CA |
| 1998 | "Update on Genetics of Allergic Disease", Invited Speaker
Lunch Seminar, 54 th Annual Meeting, AAAAI, Washington, D.C. |
| 1999 | "Update on Genetics of Allergic Disease", Invited Speaker
Lunch Seminar, 55 th Annual Meeting, AAAAI, Orlando, FL |
| 2000 | "Gene-environment Interaction Studies in the Molecular Genetic Analysis of Asthma & Atopy", Invited Speaker
Lunch Seminar, 56 th Annual Meeting, AAAAI, San Diego, CA |
| 2001 | "The Search for Allergy & Asthma Genes", Invited Speaker,
Breakfast Seminar, 57 th Annual Meeting, AAAAI, New Orleans, LA |

- 2002 “The Search for Allergy & Asthma Genes”, Invited Speaker
Breakfast Seminar, 58th Annual Meeting, AAAAI, New York, NY
- 2002 “Characterizing the Asthmatic Phenotype & Genotype”, Invited Speaker
Lunch Seminar, 58th Annual Meeting, AAAAI, New York, NY
- 2002 “Endotoxin Response in Asthma”, Invited Speaker
Research Conference, Center for Childhood Asthma in the Urban
Environment
Johns Hopkins Bloomberg School of Public Health
- 2003 “Characterizing the Asthmatic Phenotype & Genotype”, Invited Speaker
Lunch Seminar, 59th Annual Meeting, AAAAI, Denver, CO
- 2003 “Ethnic Diversity and Population Stratification in Association
Studies”, Invited Speaker
Postgraduate Course, ‘Genetic Association Studies in Complex Lung Disease’,
Annual Meeting, American Thoracic Society, Seattle, WA
- 2003 “Genetic Susceptibility to Allergy and Asthma in People of African Origin”,
Invited Speaker
“Advances in the Genetics of Asthma: Positional Cloning and Evolutionary
Genetics” Symposium, Annual Meeting, American Thoracic Society, Seattle, WA
- 2004 “The Immunogenetics of Innate Immunity in Acute & Chronic Lung
Disease”, Invited Speaker
Research Conference, Center for Childhood Asthma in the Urban
Environment
Johns Hopkins Bloomberg School of Public Health
- 2004 Genetics of Hypersensitivity MSII”, Lecturer
Immunological Pathophysiology Clinical Presentation, Johns Hopkins University
- 2004 “Introductory to Genetics of Allergic Disease”, Invited Speaker
Fellows-in-Training Symposium, ‘Genetics of Allergic Disease’, 60th Annual
Meeting, AAAAI, San Francisco, CA
- 2004 “Interaction Between the Environment & Genetics in Allergic Disease”,
Invited Speaker
Breakfast Seminar, 60th Annual Meeting, AAAAI, San Francisco, CA

- 2004 “From Genome to Proteome/Mechanisms of Allergy: Lessons from Microarrays & Proteomics”, Invited Speaker
Lunch Seminar, 60th Annual Meeting, AAAAI, San Francisco, CA
- 2005 “What is the Role of Genetic Research in Addressing Health Disparities?”, Invited Speaker
Breakfast Seminar, 61st Annual Meeting, AAAAI, San Antonio, TX
- 2005 “Interaction Between the Environment & Genetics in Allergic Disease”, Invited Speaker
Breakfast Seminar, 61st Annual Meeting, AAAAI, San Antonio, TX
- 2005 “The Genetic Epidemiology of Health Disparities”, Invited Speaker
Postgraduate Course, ‘Health Disparities – Understanding and Addressing Them Through Research and Practice’, Annual Meeting, American Thoracic Society, San Diego, CA
- 2006 “Genetic Determinants and Ethnic Disparities in Acute Lung Injury”, Invited Speaker
35th Critical Care Congress, San Francisco, CA
- 2006 “Interaction Between the Environment & Genetics in Allergic Disease”, Invited Speaker
Breakfast Seminar, Annual Meeting, AAAAI, Miami, FL
- 2007 “Immunologic Basis of Food Allergy”, Invited Speaker
NIAID Afternoon Symposium, Annual Meeting, AAAAI, San Diego, CA
- 2007 “Environmental Effects on Allergic Respiratory Diseases”, Invited Speaker
EORD-NIEHS, Annual Meeting, AAAAI, San Diego, CA
- 2007 “What’s All the Flap About the Hapmap?”, Invited Speaker
Scientific Symposium, Annual Meeting, American Thoracic Society, San Francisco, CA
- 2008 “Genetic and Epigenetic Approaches to Allergic Disease”, Invited Speaker
“Molecular Biology: What’s Hot? Novel Applications to Allergic Diseases (Part 2)” Course, Annual Meeting, AAAAI, Philadelphia, PA
- 2008 “Genetic Determinants Associated with Skin Barrier Dysfunction in Atopic

Dermatitis”, Invited Speaker
“Novel Developments in our Understanding of Atopic Dermatitis” Symposium,
Annual Meeting, AAAAI, Philadelphia, PA

2008 BCI Interest Section Forum, Co-Moderator
Annual Meeting, AAAAI, Philadelphia, PA

2008 “Genetic Determinants and Ethnic Disparities in Sepsis-Associated Acute Lung
Injury”, Invited Speaker
“Celebrating 50 Year: The Gold Standard in Multidisciplinary Intensive Care”
Johns Hopkins Asthma & Allergy Center, Baltimore, MD

Workshops/Seminars:

2000 Consortium on Asthma Genetics (COAG)12 Workshop, Coordinator
American Society of Human Genetics Meeting, Philadelphia, PA

2001 Advanced Molecular Biology Course, “Immunogenetics”, Chair
57th Annual Meeting, AAAAI, New Orleans, LA

2002 “Gene Transfer in Animal Models”, Symposium Moderator
58th Annual Meeting, AAAAI, New York, NY

2002 “Genetics and Epidemiology of Allergic Response”, Co-chair Oral Abstract
Session
58th Annual Meeting, AAAAI, New York, NY

2002 Consortium on Asthma Genetics (COAG)12 Workshop, Coordinator
American Society of Human Genetics Meeting, Baltimore, MD

2002 “Gene Expression Array Analysis in Asthma”, Invited Speaker
Symposium, “Approaches to the Genetics of Asthma: From Genetic
Epidemiology to Functional Genomics”, Annual Meeting, American Thoracic
Society, Atlanta, GA

2003 “The Functional Genomic Revolution and Its Application to Allergic Diseases”,
Symposium Moderator
59th Annual Meeting, AAAAI, Denver, CO

2003 “Genetics and Epidemiology of Allergic Diseases” Oral Abstract Session
Moderator
59th Annual Meeting, AAAAI, Denver, CO

- 2003 “Update on Genetics of Asthma”, Advanced Seminar Discussion Leader
59th Annual Meeting, AAAAI, Denver, CO
- 2003 “What is a SNP? Association Study Designs and Current Tools for Analysis”,
Invited Speaker
NIH/NHLBI Sponsored Functional Genomics Workshop, Annual Meeting,
American Thoracic Society, Seattle, WA
- 2004 “Allergy, Asthma & Parasites” Workshop, Moderator
60th Annual Meeting, AAAAI, San Francisco, CA
- 2004 “Advances in Genetics of Allergy & Asthma: Part 1”, Symposium Co-Moderator
60th Annual Meeting, AAAAI, San Francisco, CA
- 2004 “Genetics, The Environment & Asthma”, Postgraduate Symposium Moderator
60th Annual Meeting, AAAAI, San Francisco, CA
- 2006 “Strategic Training in Allergy Research (ST*AR)”, Program Co-Moderator
Annual Meeting, AAAAI, Miami, FL
- 2006 “Genomics & the Practice of Allergy, Asthma, & Immunology”, Symposium
Moderator
Annual Meeting, AAAAI, Miami, FL
- 2007 “Strategic Training in Allergy Research (ST*AR)”, Symposium Speaker &
Interactive Lunch Session Co-Moderator
Annual Meeting, AAAAI, San Diego, CA
- 2008 “Genetics of Asthma”, FIT Breakfast Symposium, Speaker
Annual Meeting, AAAAI, Philadelphia, PA
- 2008 “Genome-wide Association Studies of Asthma in Populations of African Descent”
Speaker
Annual Meeting, ATS, Toronto, Canada

Mentoring:

Pre-doctoral:

George Stanton
Position: High School Student in NIH-sponsored minority program
Dates: 1994 – 1995

Heather Busick, B.S. (Smith College, Massachusetts)
Position: Undergraduate Student
Dates: 1995, 1996

Peter Hussey, B.S. (Johns Hopkins University)
Position: Undergraduate Work Study Student
Dates: 1995

Larry Levan (Yale University)
Position: High School Student
Dates: 1999
Current Position & Institution: Pre-Med Student, Yale University

Mark Collins, B.S.
Position: Undergraduate Student
Dates: 1999
Current Position & Institution: Pre-Doctoral Student, University of Glasgow

Eric Chung
Position: High School Student
Dates: 2000
Current Position & Institution: Pre-Med Student, University of British Columbia

Aleruchi Mpi
Position: Undergraduate Student
Dates: 2000
Current Position & Institution: Pre-Med Student, Johns Hopkins University

Jan Smith, Medical Sciences (Cambridge University)
Position: Undergraduate student
Dates: 2000
Current Position & Institution: Medicine Student, Cambridge University

Rasika Mathias, Sc.D.
Position: Doctoral Student
Dates: 2000 – 2002
Current Position & Institution: Assistant Professor of Medicine, Johns Hopkins University

Brandon Levan

Position: High School Student
Dates: 2001

John Oldewurtel
Position: Undergraduate Student
Dates: 2002
Current Position & Institution: English Language Instructor, Peppy Kids Club Foreign Language Institute, Japan

Melba Muñoz, M.D.
Position: Visiting Student
Dates: 2002
Current Position & Institution: Doctoral Student, Max Planck Institute for Infectious Biology, Berlin, Germany

Meher Burki, M.D.
Position: Visiting Student
Dates: 2002, 2003
Current Position & Institution: Medical Student, Aga Kan University, Karachi, Pakistan

Omeed Zardkoohi, B.S.
Position: Medical Student
Dates: 2002
Current Position & Institution: Medical Student, Johns Hopkins University

Caitlin Dorer, B.S.
Position: Undergraduate Student
Dates: 2003
Current Position & Institution: Nursing Student, Johns Hopkins School of Nursing

Audrey V. Grant, M.S.
Position: Doctoral Student
Dates: 2003 - 2004
Current Position & Institution: Postdoc Fellow, Université de Paris René Descartes
Recipient of GlaxoSmithKline grant entitled “Genetic control of susceptibility to Schistosomiasis & its potential modulation of asthma severity in Bahia, Brazil”, 2004, 2005

Peter Akerboom
Position: Undergraduate Student
Dates: 2003
Current Position & Institution: Biology Student, Mount Saint Mary’s College

Andrew Patrick

Position: High School Student (Internship)
Dates: 2004 – 2005
Current Position & Institution: Science Student, Ohio State University

Peter Chi, M.H.S.
Position: Masters Student
Dates: 2004 – 2006
Current Position & Institution: Doctoral Student, University of Washington, Seattle

Itael Evgey
Position: Undergraduate MSIP Student
Dates: 2005 – 2007
Current Position & Institution: Private Industry

Andrew Zayac
Position: High School Student (Internship)
Dates: 2005 – 2006
Current Position & Institution: College Student

Kanika Staten
Position: High School Student (Internship)
Dates: 2005 – 2006
Current Position & Institution: Biomedical Student, Goucher College

Post-doctoral:

Lili Barouch, M.D.
Position: Johns Hopkins Department of Medicine Mentoring Program Mentee
Dates: 1999 – 2001
Current Position & Institution: Assistant Professor, Johns Hopkins University

Luis Caraballo, M.D., Ph.D.
Position: Visiting Scientist
Dates: 2000 – 2001
Current Position & Institution: Professor of Medicine, University of Cartagena, Colombia

Silvia Jimenez
Position: Visiting Scientist
Dates: 2000 – 2001
Current Position & Institution: Scientist, University of Cartagena, Colombia

Katherine Held, Ph.D.
Position: Post-doctoral Fellow
Dates: 2000 – 2003

Current Position & Institution:

Daniela Baltadjieva, M.D., Ph.D.

Position: Visiting Scientist

Dates: 2003 – 2004

Current Position & Institution: Associate Professor, Central Lab for Clinical Immunology, “Aleksandrovska” University Hospital, Sofia, Bulgaria

Melba Muñoz, M.D.

Position: Post-doctoral Fellow

Dates: 2003 – 2005

Current Position & Institution: Doctoral Student, Max Planck Institute for Infectious Biology, Berlin, Germany

Recipient of American Academy of Allergy, Asthma & Immunology Travel Grant 2004, 2005

April Zambelli-Weiner, Ph.D.

Position: Post-doctoral Fellow

Dates: 2003 – 2004

Current Position & Institution: Private Industry

Nadia Hansel, MD, MPH

Current Position: Assistant Professor, Johns Hopkins University

Dates: 2004 – present

Recipient of K23 award entitled “Genetics of Asthma Severity & Lung Function Decline”

Candelaria Vergara, MD

Position: Post-doctoral Fellow

Dates: 2004 – 2005, 2006 – 2007

Current Position & Institution: Assistant Professor, University of Cartagena, Colombia

Li Gao, MD, PhD

Current Position: Research Associate, Johns Hopkins University

Dates: 2005 – present

Recipient of 2006 AAAAI Interest Section Award Grant

Peisong Gao, MD, PhD

Current Position: Instructor of Medicine, Johns Hopkins University

Dates: 2005 – present

Recipient of 2007 AAAAI Interest Section Award Grant

Dmitry Grigoryev, MD, PhD

Current Position: Instructor in Medicine, Johns Hopkins University

Dates: 2005 – present

Recipient of National Kidney Foundation Young Investigator Grant, 2006

Jinshui Fan, MD, PhD

Current Position: Instructor in Medicine, Johns Hopkins University

Dates: 2006 – present

Yuh-Jung (John) Tsai, MD

Current Position: Private practice, San Francisco, CA

Dates: 2006 – 2009

Recipient of David G. Marsh Genetics of Asthma & Allergic Diseases Award, 2007

Recipient of JACI Developing Researcher Award, 2007

Thesis Committees

Rasika A. Mathias, MPH, Sc.D. (Genetic Epidemiology)

“A Genealogical Analysis of the Tangier Island Population”

Department of Epidemiology, Johns Hopkins School of Hygiene and Public Health

Role: Doctoral Thesis Committee Member

Teri Manolio, M.D., MHS, Ph.D. (Genetic Epidemiology)

“Genetic and Environmental Factors Related to *B. tropicalis* Sensitization in Asthma”

Department of Epidemiology, Johns Hopkins School of Hygiene and Public Health

Role: Doctoral Thesis Committee Member

April Zambelli-Weiner, Ph.D. (Genetic Epidemiology)

“Genetic and Environmental Factors Related to Endotoxin and Asthma”

Department of Epidemiology, Johns Hopkins School of Hygiene and Public Health

Role: Doctoral Thesis Committee Member

Grace Posa Ibay, MS (Genetic Epidemiology)

“Interaction Between Loci for Asthma and Mite-Specific IgE Responsiveness”

Department of Epidemiology, Johns Hopkins School of Hygiene and Public Health

Role: Masters Thesis Committee Member

Nilsa I. Loyo-Berrios, PhD (Environmental Health Sciences)

“Asthma Attacks and Air Pollution in the Cataño Municipality, Puerto Rico”

Department of Epidemiology, Johns Hopkins School of Hygiene and Public Health

Role: Doctoral Thesis Committee Member

Elizabeth Matsui, MD, MHS (Epidemiology)

“Mouse Allergen Exposure and Immunologic Responses: IgE-Mediated Mouse Sensitization, Mouse-Specific IgG and IgG4”

Department of Epidemiology, Johns Hopkins School of Hygiene and Public Health

Role: Masters Thesis Reader

P.K. Judge, MD

“Comparison of Genetic Factors Influencing IgE, Asthma and Parasites Between a Caribbean and West Australian Population”

School of Paediatrics and Child Health, University of Western Australia

Role: Doctoral Thesis Reader

Erika Avila Tang, MHS (Epidemiology)

“Case-Crossover Studies of Particulate Air Pollution and Risk of Death from Asthma and from Chronic Obstructive Pulmonary Disease in the United States”

Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health

Role: Doctoral Thesis Committee Chair

Audrey V. Grant, MS (Epidemiology)

“Genetic Susceptibility to Schistosomiasis and Atopy in an Isolated Brazilian Population”

Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health

Role: Doctoral Thesis Committee Member

Peter Chi (Epidemiology)

“Comparison of Haplotype-Tagging, Sliding Window, & Single SNP Methods Using Asthma & Total Serum IgE Markers on Chromosome 12q from an African Caribbean Population”

Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health

Role: Doctoral Thesis Committee Member

Dr. Raewyn Cheryll Mutch

“Familial Associations of Asthma and Atopy”

School of Paediatrics and Child Health, University of Western Australia

Role: Doctoral Thesis Reader

Anna Hill

“The Genetics and Genomics of Severe Asthma”

Lincoln College, University of Oxford

Role: Doctoral Thesis Examiner

Tanda Murray (Epidemiology)

“Using Genome-wide SNPs to Characterize Admixture in African Americans and an African Caribbean Population”

Johns Hopkins Bloomberg School of Public Health

Role: Doctoral Thesis Reader

Training Grant Participation

Environmental Health Sciences, National Institute of Environmental Health Sciences

2000-2003

Role: Mentor, April Zambelli-Weiner

T-35 NIH Multidisciplinary Fellowship Training Program

2000-2003

Role: Mentor, Kathryn Held

T-35 NIH Summer Minority Student-Training Grant

2001

Role: Mentor, Bernadette Gray

Project: "The CD14(-159) Polymorphism is not Associated with Circulating sCD14 nor Total Serum IgE in an Asthmatic Population of African Descent"

T-35 NIH Summer Minority Student-Training Grant

2001

Role: Mentor, Paula Diggs

Project: "Cockroach Sensitization and Cross-Reactivity to Shellfish on Tangier Island"

T-35 NIH Summer Minority Student-Training Grant

2002

Role: Mentor, Candra Rowell

Project: "sCD14 and Asthma in an Afro-Caribbean Population"

T-35 NIH Summer Minority Student-Training Grant

2003

Role: Mentor, Monica Lorenzo

Project: "Polymorphisms in the Gene Encoding MLCK and Asthma in a Population of African Descent"

T-35 NIH Multidisciplinary Fellowship Training Program

2003-2005

Role: Mentor, Melba Munoz

T-35 NIH Multidisciplinary Fellowship Training Program

2004-2005

Role: Mentor, Candelaria Vergara

T-35 NIH Multidisciplinary Fellowship Training Program

2004-present

Role: Mentor, Nadia Hansel

T-35 NIH Summer Minority Student-Training Grant

2005

Role: Mentor, Aaron Ilano
Project: “Single Nucleotide Polymorphisms in the Gene Encoding Myosin Light Chain Kinase (MLCK) are Associated with Increased Risk for Asthma”

T-35 NIH Multidisciplinary Fellowship Training Program
2005
Role: Advisor, Li Gao

T-35 NIH Multidisciplinary Fellowship Training Program
2005
Role: Co-Advisor, Dmitry Grigoryev

NIH Minority Graduate Research Assistant Supplement Grant
2006
Role: Mentor, Bradford Wilson

T-35 NIH Summer Minority Student-Training Grant
2007

Role: Mentor, Aleisha Baker

T-35 NIH Summer Minority Student-Training Grant
2007, 2008

Role: Mentor, Elizabeth Coe

T-35 NIH Summer Minority Student-Training Grant
2008, 2009

Role: Mentor, Richard Chace Auzenne

T-35 NIH Summer Minority Student-Training Grant
2009

Role: Mentor, Sharifa Avery

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

1996-2003	The Johns Hopkins University Department of Medicine Task Force on Women's Academic Careers
2002-present	Department of Medicine's Appointments and Promotions Committee
2003-present	Division of Allergy and Clinical Immunology Executive Committee
2004-2005	Division of Pulmonary and Critical Care Medicine Search Committee

- 2005-present David Marsh Fellowship Fund Committee, Johns Hopkins University
- 2005-present Johns Hopkins Medicine International Global Collaborations Group, Johns Hopkins University,
- 2006-present Task Force Committee on Biospecimen Processing & Storage, Johns Hopkins University
- 2006-present Task Force Subcommittee on Communication of Best Practices, Johns Hopkins University
- 2006-present Bayview Scientific Advisory Board (BSAB), Johns Hopkins University
- 2008-present Division of Pulmonary & Critical Care Medicine Equipment Committee
- 2009-present Office of Women in Science & Medicine (OWISM) Advising Board

Editorial Activities:

Editorial Board Appointments

Current Opinion in Allergy & Clinical Immunology (*Genetics & Epidemiology Sections*)

Journal Peer Review Activities

Genomics, Ad Hoc Reviewer
 Human Genetics, Ad Hoc Reviewer
 American Journal of Respiratory & Critical Care Medicine, Ad Hoc Reviewer
 American Journal of Respiratory Cell & Molecular Biology, Ad Hoc Reviewer
 Journal of Allergy and Clinical Immunology, Ad Hoc Reviewer
 Clinical and Experimental Allergy, Ad Hoc Reviewer
 Allergy, Ad Hoc Reviewer
 European Journal of Human Genetics, Ad Hoc Reviewer
 Genes & Immunity, Ad Hoc Reviewer
 American Journal of Human Genetics, Ad Hoc Reviewer

Advisory Committees, Review Groups/Study Sections

- 2004 - present Atopic Dermatitis Vaccinia Network Sample & Data Access Committee (NIAID)
Chair
- 2004 – present Atopic Dermatitis Vaccinia Network Clinical Steering Committee (NIAID)

	Member
2005 – present	Funding and Resource Strategies Committee, Minority Health & Health Disparities (MHHD) Member
2005, 2007	NHLBI/NIAID, Lung Cellular, Molecular & Immunobiology Study Section Ad Hoc Member
2005, 2006	NHLBI, Special Review Committee Ad Hoc Member
2005	NIH, Infectious Disease, Reproductive Health, Asthma, Pulmonary Epidemiology (IRAP): Quorum Ad Hoc Member
2005-2008	NIH, Infectious Disease, Reproductive Health, Asthma, Pulmonary Epidemiology (IRAP) Ad Hoc Member
2007-	Pulmonary Vascular Research Institute (PVRI) Taskforce on Pulmonary Hypertension Associated with Schistosomiasis Member
2007-	Atopic Dermatitis Vaccinia Network, Network Executive Committee NIAID Member
2008-	Global Asthma Workshop Planning Committee NIH/NHLBI Executive Committee Member
2008-2012	NIH, Infectious Disease, Reproductive Health, Asthma, Pulmonary Conditions (IRAP) Standing Member
2008-	Pulmonary Vascular Research Institute (PVRI) Genetics Taskforce Member

Professional Societies

Memberships

Phi Kappa Phi Honorary Society

American Association for the Advancement of Science (AAAS)
American Academy of Allergy, Asthma and Immunology (AAAAI)
American Society for Human Genetics (ASHG)
American Anthropological Association (AAA)
Society for Applied Anthropology (SfAA)
American Thoracic Society (ATS)
Pulmonary Vascular Research Institute (PVRI)
Collegium Internationale Allergologicum (CIA)
European Respiratory Society (ERS)

Committees

Committee on Women's Involvement in the American Academy of Allergy, Asthma & Immunology
1996-2002 Member

American Academy of Allergy, Asthma & Immunology Undergraduate and Graduate Medical Education Committee
1997-2000 Member

American Academy of Allergy, Asthma & Immunology Genetics, Molecular Biology & Epidemiology Committee
1999-2005 Member
1999-2001 Vice Chair
2001-2005 Chair
2005-2009 Member

BCI Abstract Review Subcommittee, American Academy of Allergy, Asthma & Immunology
2001-2003 Ad Hoc Representative
2005-2007 Vice Representative

American Academy of Allergy, Asthma & Immunology Symposium Committee
2002-present Member

American Thoracic Society, Assembly on Allergy Immunology & Inflammation
2004 -present Member

BCI Interest Section, American Academy of Allergy, Asthma & Immunology
2005-2007 Secretary
2005-2007 Symposia Representative
2007-2008 Vice Chair
2007-2009 Plenary Vice Representative

2008-2011 Chair

Annual Meeting Program Committee, American Academy of Allergy, Asthma & Immunology

2007-2010 Member

Plenary Committee, American Academy of Allergy, Asthma & Immunology

2007-2008 Vice-Chair

2008-2011 Chair

Conference Organizer/Session Chair

Seventh Annual Symposium, “The Genetics of Asthma and Atopic Disease”,
Johns Hopkins Asthma & Allergy Center at the Bayview Campus, Baltimore, MD

1996 Co-organizer

Symposium, “Genetic Studies of Asthma: Ethical, Legal and Social Challenges”,
American Academy of Allergy, Asthma, & Immunology (Washington, D.C.)

1998 Organizer/Moderator

Symposium, “The David G. Marsh Lectureship on Genetics of Asthma and Atopy”,
American Academy of Allergy, Asthma, & Immunology (Orlando, Florida)

1999 Co-organizer/Moderator

Advanced Molecular Biology Course, AAAAI (New Orleans, LA)

2001 Organizer/Moderator

Symposium, “The David G. Marsh Lectureship on New Directions in the Genetics Studies
of Allergic Disease”, American Academy of Allergy, Asthma, & Immunology (New
Orleans, LA)

2001 Co-organizer/Moderator

Symposium, “Johns Hopkins-Barbados Genetic Epidemiology of Obstructive Lung
Disease Research Conference”, (Barbados, WI)

2004 Organizer

Symposium, “Johns Hopkins University-Barbados Public Symposium on Asthma”,
(Barbados, WI)

2005 Organizer

Consultantships

1999-present Glaxo-Wellcome Pharmaceuticals

- Consultant in program on asthma genetics
- 2001 Merck Pharmaceuticals
Participant in 2001 Regional Respiratory Consultants Meeting
- 2007 Novartis Institutes for Biomedical Research
Consultant in genetic studies of complex lung diseases
- 2007 Clive Davis & Mann
Consultant regarding the use of Xolair in African American and Hispanic asthmatics

RECOGNITION

Awards, Honors

- 1982 VA Fellowship
Women's Business Association of Danville
- 1988 Vining Davis Field Research Award to conduct post-graduate fieldwork in the Dominican Republic
- 1988 S.C. Johnson Research Travel Award to conduct post-graduate fieldwork in the Dominican Republic
- 1991 Dow-Elanco Research Travel Award to conduct post-graduate fieldwork in Barbados
- 1992 University of Florida Graduate Student Council Travel Award
37th Annual Meeting of the Commonwealth Caribbean Medical Research Council; Curaçao, Netherlands Antilles
- 1994 American Academy of Allergy and Immunology Travel Award
50th Annual Meeting of the American Academy of Allergy & Immunology; Anaheim, California
- 1994 Boehringer Research Travel Award
39th Annual Meeting of the Commonwealth Caribbean Medical Research Council; Kingston, Jamaica
- 1994 Glaxo Research Travel Award
39th Annual Meeting of the Commonwealth Caribbean Medical Research Council Kingston, Jamaica

- 1995 American Academy of Allergy and Immunology Travel Award
51st Annual Meeting of the American Academy of Allergy & Immunology;
New York
- 1996 Maryland Chapter Research Grant (\$10,616)
Asthma and Allergy Foundation of America
- 1998, 1999 New Investigator Award Grant (\$20,000)
Asthma and Allergy Foundation of America
- 2003-present Loan Repayment Program Award for Clinical Research
National Institutes of Health
- 2004 Assembly on Allergy Immunology & Inflammation Travel Award
100th Annual Meeting of the American Thoracic Society
- 2005 Resequencing & Genotyping Service Application Award
(\$447,438)
National Heart, Lung and Blood Institute

Invited Talks, Panels

- 1995 “Research Update – What’s New? Genetics” (Workshop)
Seventh Annual Asthma, Allergy & Immunology Update for Nurses, Johns
Hopkins University, Baltimore, Maryland
Johns Hopkins Medical Institutions Office of Continuing Medical
Education
- 1996 The Philip Norman Lectureship “Genetics of IgE Responsiveness and
Asthma” (Plenary Session)
New Orleans, LA
American Academy of Allergy, Asthma and Immunology
- 1996 “Genetic Markers of Atopic Diseases: Future Aspects and Therapeutic
Interventions”
Odense, Denmark
Joint Meeting of the European Society of Pediatric Allergy & Clinical
Immunology and European Respiratory Society Pediatric Assembly
- 1996 “Genetics and Bronchial Asthma: What is New?”, 1996
Second International Congress on Pediatric Pulmonology, Nice, France
European Society of Pediatric Pulmonology

- 1996 “Linkage Analysis of Asthma & Atopic Disease in Diverse Populations”
The Seventh Annual Symposium, Johns Hopkins Asthma & Allergy Center
at the Bayview Campus, Baltimore, Maryland
The Asthma & Allergy Foundation of America
- 1997 “Genetics of Asthma (State-of-the-Art)”
12th Annual Update of Frontiers in Research and Clinical Management of
Asthma & Allergy, Baltimore, Maryland
The Asthma & Allergy Foundation of America
- 1997 “Linkage of Clinical and IgE Phenotypes Associated with Asthma and
Atopy to Loci on Chromosome 12q”
42nd Annual Meeting of the Japan Society of Human Genetics, Kobe,
Japan
The Japan Society of Human Genetics
- 1997 “Genetics of the Immune Response to Atopic Allergens”
First International Meeting of the Allergology Department of Milan, Italy
Allergology Department of Milan, Aula Magna of the University of Milan
- 1997 “The Genetics of Asthma”
The First Department of Medicine, School of Medicine, Hokkaido
University Sapporo, Japan
Astra Japan
- 1997-2001 “Update on Genetics of Allergic Disease”
Annual Meeting of the American Academy of Allergy, Asthma and
Immunology (Breakfast Seminar)
The American Academy of Allergy, Asthma and Immunology
- 1998 “Molecular Linkage of Candidate Genes”
16th Annual Aspen Allergy Conference, Given Biomedical Institute,
Aspen, Colorado
Aspen Allergy Conference
- 1998 “Risk Factors in Asthma”
XV Annual Meeting of the Colombian Society of Internal Medicine,
Cartagena, Colombia
Colombian Society of Internal Medicine
- 1999 “Gene-environment and gene-gene interactions in asthma”
International Symposium on the Development of Atopy & Asthma in

Childhood, Fulda, Germany
The UCB Institute of Allergy

- 2000 “Evidence for Common Genetic Elements in Allergic Disease”
‘Systemic Aspects of Allergic Inflammatory Disease’ Meeting, Orlando,
Florida
Schering-Plough Pharmaceuticals
- 2000 “Applying Genetics to Clinical Practice”
‘Successful Management of Asthma in Children’ (CME Activity) Meeting,
Tarrytown, New York
Albert Einstein College of Medicine & Montefiore Medical Center
- 2001 “Genetic analysis of Asthma: The Tangier Island Experience”
The Fortieth Annual Swineford Allergy Conference (CME Activity)
Charlottesville, VA
Office of Continuing Medical Education, University of Virginia School of
Medicine
- 2001 “Genetics of Asthma”
Caribbean Allergy & Respiratory Association, 4th Annual Scientific
Meeting, Kingston, Jamaica
GSK, AstraZeneca, Boehringer Ingelheim, Pfizer, Novartis Caribe, Merck
Sharp & Dohme
- 2001 “Dissecting gene-gene & gene-environment interactions of allergic disease
in diverse populations”
XXth Congress of the European Academy of Allergology & Clinical
Immunology, Berlin, Germany
European Academy of Allergology & Clinical Immunology
- 2002 “DNA Microarrays and Gene Discovery in Asthma”
5th International Congress on Pediatric Pulmonology, Nice, France
International Congress on Pediatric Pulmonology
- 2002 “Gene Expression Array Analysis in Asthma”
Annual Meeting of the American Thoracic Society (ATS) & American
Lung Association (ALA), Atlanta, GA
ATS/ALA
- 2002 “Genetic Protection Against Atopy”
XXVII Meeting of the Brazilian Society of Immunology / V International

- 2002 Symposium on Allergy and Clinical Immunology, Salvador, Brazil
 “Inhaled Allergen: Genetic Interaction and Environment”
 XXVII Meeting of the Brazilian Society of Immunology / V International
 Symposium on Allergy and Clinical Immunology, Salvador, Brazil
- 2002 “Genetics of Asthma”
 1st Paediatric Respiratory & Allergy Meeting, SP-EAACI & ERS-PA Joint
 Meeting
 Valencia, Spain
- 2003 “Genetic Background of Allergic Disorders”
 International Allergy Symposium, Sanjyo Kaikan, Tokyo, Japan
- 2003 “Genetic Susceptibility to Allergy & Asthma in People of African Origin”
 Symposium on ‘Evolution of Immune Responses in Modern Man-Relations
 to Current & Future Patterns of Atopy & Asthma
 Annual Meeting, American Thoracic Society, Seattle WA
- 2003 “The T Cell Proliferative Response to Cockroach Tropomyosin (Per a 7)
 Predicts a Proliferative Response to Helminthic Tropomyosin”
 9th International Symposium on Schistosomiasis, Salvador, Brazil
- 2004 “Genetic Epidemiology of Acute & Chronic Lung Disease”
 Pulmonary Grand Rounds Conference, Montefiore Hospital, University of
 Pittsburgh
 Pittsburgh, PA
- 2004 “An Update on Asthma Genetics”
 Pediatric Research Conference, Behavioral Sciences Research Institute,
 University of Puerto Rico, San Juan, P.R.
- 2004 “The Immunogenetics of Innate Immunity: Implications for Asthma &
 Allergic Disease”
 German National Genome Research Network “Environmental Diseases”
 Annual Meeting “Genetic & Environmental Determinants of Allergy &
 Inflammation”, Berlin, Germany
- 2004 “Allergic Asthma in Island Populations: Once & Future Trends”
 Pediatric Grand Rounds, Department of Pediatrics, University of Hawaii
 Honolulu, Hawaii
- 2004 “Genetic Determinants & Ethnic Disparities in Sepsis-associated Acute

- Lung Injury”
3rd Annual Pittsburgh International Lung Conference, University of
Pittsburgh
Laurel Highlands, PA
- 2004 “The Immunogenetics of Innate Immunity: Implications for Asthma &
Allergic Disease”
Environmental Health Seminar Series, University of Cincinnati Cincinnati,
Ohio
- 2004 “The Immunogenetics of Innate Immunity in Acute and Chronic Lung
Disease”
Visiting Scientist Lecture
Bulgarian Society of Immunology
Sofia, Bulgaria
- 2004 “The Genetic Epidemiology of Health Disparities”
9th RCMi International Symposium on Health Disparities
Baltimore, MD
- 2005 “Health Disparities in Acute and Chronic Lung Disease”
Department of Microbiology Spring 2005 Research Seminar Series,
Howard University
Washington, DC
- 2005 “The Immunogenetics of Innate Immunity in Acute and Chronic Lung
Disease: AOA, A Candidate Gene”
UT Southwestern Medical Center at Dallas, Special Seminar
Dallas, TX
- 2005 XXX Meeting of the Brazilian Society of Immunology / VIII International
Symposium on Allergy and Clinical Immunology,
Salvador, Brazil
- 2006 Food Allergy Expert Panel
NIH
Bethesda, MD
- 2006 Memorial Maurizio Vignola Update on Asthma 2006
Universita degli Studi di Palermo
Palermo, Italy

- 2006 National Respiratory Experts Forum
Merck & Co., Inc.
Chicago, IL
- 2007 “Genetic Epidemiology of Acute and Chronic Lung Disease”
Friday Grand Rounds, A Series of Lectures Related to Allergy,
Immunology and Infectious Diseases
NIAID
Bethesda, MD
- 2007 “Health Disparities in Common, Complex Diseases: A Role for Genetics?”
Evolutionary Medicine Symposium
NIH-funded COBRE Ctr for Evolutionary & Theoretical Immunology,
COBRE Integrative Prog in Central Nervous System Pathophysiology
Research & Ctr for Human Evolutionary Science
Albuquerque, NM
- 2007 “Genetic Resources & New Initiative to Use Genome-wide SNP Analysis
to Identify Candidate Genes for Lung Diseases”
Novartis Institutes for Biomedical Research Seminar
Cambridge, MA
- 2007 “The Atopic State: Genes & Environment”
13th International Congress of Immunology
Rio de Janeiro, Brazil
- 2007 “The Genome and Rhinology. What’s the Future?”
XII International Rhinologic Society World Congress
Venice, Italy
- 2008 “The Gene Encoding SMYD3, a Histone Methyltransferase, is Associated
with Asthma in Ethnically Different Populations”
Collegium Internationale Allergologicum (CIA) 27th Symposium
Curacao
- 2008 “The Genetic Epidemiology of Pulmonary Hypertension and
Schistosomiasis”
11th International Symposium on Schistosomiasis
Salvador-Bahia, Brazil
- 2008 “A Genetic Basis for Health Disparities in Common, Complex Lung
Diseases”
American College of Epidemiology Annual Meeting

Tucson, AZ

- 2008 “Common Variant/Multiple Disease Hypothesis: Co-Associations between Candidate Genes Identified in Diverse Complex Lung Diseases”
Department of Medicine Grand Rounds, Johns Hopkins University
Baltimore, MD
- 2008 “Common Variant/Multiple Disease Hypothesis: Co-Associations between Candidate Genes Identified in Diverse Complex Lung Diseases”
2nd Al-Ain International Genetics Conference
Al-Ain, United Arab Emirates
- 2009 “Common Variant/Multiple Disease Hypothesis: Co-Associations between Candidate Genes Identified in Diverse Complex Lung Phenotypes”
Noon Conference
Vanderbilt University School of Medicine
Nashville, TN
- 2009 “Co-evolution of Parasites and Immunity”
Evolution in Health and Medicine
Arthur M. Sackler Colloquia of the National Academy of Sciences
Washington, DC
- 2009 “The Genetics of African Americans and Asthma”
Breaking Down Barriers to Gain Control
2nd Annual New Mexico Asthma Symposium
Albuquerque, NM

OTHER PROFESSIONAL ACCOMPLISHMENTS

International Consortia

Consortium on Asthma Genetics (COAG), Newton Morton, PI. Supported by a three-year grant from the National Asthma Campaign, U.K. & the Medical Research Council, U.K. Dr. Barnes was Chair of Year 2 of the Consortium, focused on linkage to chromosome 12 (COAG12).
1999-2002

GlaxoSmithKline sponsored Genetics of Asthma International Network (GAIN)
1999-present