

CURRICUM VITAE

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Current Appointments

Instructor, Division of Allergy and Clinical Immunology, Johns Hopkins Asthma & Allergy Center, Johns Hopkins University School of Medicine.

Personal Data

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Education and Training (in chronological order)

07/83-07/89 B.S. in medicine, The Fourth Military Medical University (FMMU), Xi'an, P.R. China.
07/93-07/96 M.D. in Respiratory Medicine, The Fourth Military Medical University (FMMU), Xi'an, P.R. China
09/97- 01/99 Visiting Research Fellow, Osler Chest Unit, Churchill Hospital, Oxford University, UK
01/99-01/02 Ph.D. in Experimental Medicine, University of Wales Swansea, UK

Professional Experience (in chronological order)

09/90-09/91 Resident at the Department of Emergency Medicine, Xiyu Hospital, Urumuqi, P R China.
09/91-08/93 Resident at the Department of Respiratory Medicine, Xiyu Hospital, Urumuqi, P R China
09/94-08/95 Chief Resident at the Department of Respiratory Medicine, The Fourth Military Medical University, P R China.
07/95-09/97 Visiting Research Fellow at Osler Chest Unit, Oxford University, Oxford, UK
04/02-03/05 Postdoctoral Research Fellow at the Division of Allergy and Clinical Immunology, Johns Hopkins Asthma and Allergy Centre.
03/05-present Instructor, Division of Allergy and Clinical Immunology, Johns Hopkins Asthma & Allergy Center, Johns Hopkins University School of Medicine.

Doctoral research

Epidemiology of asthma and atopy: environmental and genetic factors. Supervisor: **Professor Julian M. Hopkin.**

Postdoctoral research

Molecular genetics of asthma. Supervisor: **Professor Shau-Ku Huang**

RESEARCH ACTIVITIES

Publications

Peer-reviewed original research articles

1. **Gao PS** Li HZ, Qi HW. Fos statement in airway and lung in an asthma model of guinea pig. Natl Med China, 1996; 76(9): 703-704.
2. Qi HW Liu ZQ, **Gao PS**. C-jun statement in epithelium in an asthma model of guinea pig. Chin J Med, 1997; 36 (7): 476-477.
3. **Gao PS**, Li HZ, Qi HW. The relationship between the attack of asthma and c-myc gene statement in airway and lung tissue from the asthmatic guinea pigs. J Fourth Milit Med Univ, 1997; 18(5): 401
4. Li HZ, **Gao PS**, Qi HW, L. Study on relationship between proto-oncogene statement of c-fos and c-myc in airway, lung tissue and asthma in guinea pigs. Chin J Appl Physiol, 1997 Nov; 13(4): 356-8

5. **Gao PS**, Mao XQ, Kawai M, Enomoto T, Sasaki S, Tanabe O, Yoshimura K, Shaldon SR, Dake Y, Kitano H, Coull P, Shirakawa T, Hopkin JM. Negative association between asthma and variants of CC16 (CC10) on chromosome 11q13 in British and Japanese populations. *Hum Genet.* 1998 Jul; 103(1):57-9.
6. Mitsuyasu H, Yanagihara Y, Mao XQ, **Gao PS**, Arinobu Y, Ihara K, Takabayashi A, Hara T, Enomoto T, Sasaki S, Kawai M, Hamasaki N, Shirakawa T, Hopkin JM, Izuhara K. Cutting edge: dominant effect of Ile50Val variant of the human IL-4 receptor alpha-chain in IgE synthesis. *J Immunol.* 1999 Feb 1; 162(3):1227-31.
7. Mao XQ, **Gao PS**, Roberts MH, Enomoto T, Kawai M, Sasaki S, Shaldon SR, Coull P, Dake Y, Adra CN, Hagihara A, Shirakawa T, Hopkin JM. Variants of endothelin-1 and its receptors in atopic asthma. *Biochem Biophys Res Commun.* 1999; 262(1):259-62.
8. Adra CN, Mao XQ, Kawada H, **Gao PS**, Korzycka B, Donate JL, Shaldon SR, Coull P, Dubowitz M, Enomoto T, Ozawa A, Syed SA, Horiuchi T, Khaeraja R, Khan R, Lin SR, Flinter F, Beales P, Hagihara A, Inoko H, Shirakawa T, Hopkin JM. Chromosome 11q13 and atopic asthma. *Clin Genet.* 1999; 55(6):431-7.
9. **Gao PS**, Mao XQ, Jouanguy E, Pallier A, Doffinger R, Tanaka Y, Nakashima H, Otsuka T, Roberts MH, Enomoto T, Dake Y, Kawai M, Sasaki S, Shaldon SR, Coull P, Adra CN, Niho Y, Casanova JL, Shirakawa T, Hopkin JM. Nonpathogenic common variants of IFNGR1 and IFNGR2 in association with total serum IgE levels. *Biochem Biophys Res Commun.* 1999; 263(2):425-9.
10. **Gao PS**, Kawada H, Kasamatsu T, Mao XQ, Roberts MH, Miyamoto Y, Yoshimura M, Saitoh Y, Yasue H, Nakao K, Adra CN, Kun JF, Moro-oka S, Inoko H, Ho LP, Shirakawa T, Hopkin JM. Variants of NOS1, NOS2, and NOS3 genes in asthmatics. *Biochem Biophys Res Commun.* 2000 Jan 27; 267(3):761-3.
11. Heinzmann A, Mao XQ, Akaiwa M, Kreomer RT, **Gao PS**, Ohshima K, Umeshita R, Abe Y, Braun S, Yamashita T, Roberts MH, Sugimoto R, Arima K, Arinobu Y, Yu B, Kruse S, Enomoto T, Dake Y, Kawai M, Shimazu S, Sasaki S, Adra CN, Kitaichi M, Inoue H, Yamauchi K, Tomichi N, Kurimoto F, Hamasaki N, Hopkin JM, Izuhara K, Shirakawa T, Deichmann KA. Genetic variants of IL-13 signalling and human asthma and atopy. *Hum Mol Genet.* 2000 Mar 1; 9(4):549-59.
12. Kruse S, Mao XQ, Heinzmann A, Blattmann S, Roberts MH, Braun S, **Gao PS**, Forster J, Kuehr J, Hopkin JM, Shirakawa T, Deichmann KA. The Ile198Thr and Ala379Val variants of plasmatic PAF-acetylhydrolase impair catalytical activities and are associated with atopy and asthma. *Am J Hum Genet.* 2000 May; 66(5):1522-30.
13. Fukunaga K, Asano K, Mao XQ, **Gao PS**, Roberts MH, Oguma T, Shiomi T, Kanazawa M, Adra CN, Shirakawa T, Hopkin JM, Yamaguchi K. Genetic polymorphisms of CC chemokine receptor 3 in Japanese and British asthmatics. *Eur Respir J.* 2001 Jan; 17(1):59-63.
14. Seah GT, **Gao PS**, Hopkin JM, Rook GA. Interleukin-4 and its alternatively spliced variant (IL-4delta2) in patients with atopic asthma. *Am J Respir Crit Care Med.* 2001 Sep 15; 164(6):1016-8.
15. **Gao PS**, Mao XQ, Enomoto T, Feng Z, Gloria-Bottini F, Bottini E, Shirakawa T, Sun D, Hopkin JM. An asthma-associated genetic variant of STAT6 predicts low burden of ascaris worm infestation. *Genes Immun.* 2004 Jan; 5(1):58-62
16. **Gao PS**, Heller NM, Walker W, Chen CH, Plunkett B, Roberts MH, Schleimer RP, Hopkin JM, Huang SK. Variation in dinucleotide (GT) repeat sequence in the first exon of the STAT6 gene is associated with atopic asthma and differentially regulates the promoter activity in vitro. *J Med Genet* 2004; 41(7):535-9.
17. **Gao PS**, Mathias RA, Hsu SC, Plunkett B, Togias A, Barnes KC, Stellato C, Beaty TH and Huang SK. Sequence variants of the gene encoding chemoattractant receptor expressed on Th2 cells (CRTH2) is associated with asthma and differentially influences the mRNA stability. *Hum Mol Genet* 2004; 13(21):2691-7.
18. **Gao PS**, Mathias RA, Plunkett B, Togias A, Barnes KC, Beaty TH, Huang SK. Genetic variants of the T-cell immunoglobulin mucin (TIM-1), but not TIM-3, genes are associated with asthma in an African American population. *J Allergy Clin Immunol* 2005; 115(5): 892-8.
19. **Gao PS**, Mao XQ, Enomoto T, Feng Z, Gloria-Bottini F, Bottini E, Shirakawa T, Sun D, Hopkin JM. An asthma-associated genetic variant of STAT6 predicts low burden of ascaris worm infestation. *Genes Immun.* 2004 Feb; 6(1):70.
20. Mathias RA, **Gao PS**, Goldstein J, Barnes KC, Beaty TH, Pugh EW, Wilson AF, Huang SK. Sliding window haplotype tests of association to identify asthma susceptibility loci on chromosome 11q: A graphical assessment of sliding p-values. *Genome Research* 2005 (in press).
21. Chen LC, **Gao PS**, Tseng HM, Kuo ML, Huang SK, Huang JL. Sequence variants of the genes encoding two members of the uteroglobin gene family are associated with asthma in a Chinese children population. *JACI* 2005 (in press).

22. Shimizu M, Matsuda A, Yanagisawa K, Hirota T, **Gao PS**, Huang SK, Shirakawa T. Functional SNPs in the distal promoter of the ST2 gene are associated with atopic dermatitis. *Hum Mol Genet* 2005; 14(19):2919-27.

Letters, correspondence

23. Mitsuyasu H, Izuhara K, Mao XQ, **Gao PS**, Arinobu Y, Enomoto T, Kawai M, Sasaki S, Dake Y, Hamasaki N, Shirakawa T, Hopkin JM. Ile50Val variant of IL4R alpha upregulates IgE synthesis and associates with atopic asthma. *Nat Genet.* 1998 Jun; 19(2):119-20.
24. **Gao PS**, Mao XQ, Kawai M, Enomoto T, Sasaki S, Shaldon SR, Dake Y, Kitano H, Coull P, Hagihara A, Shirakawa T, Hopkin JM. Lack of association between ACE gene polymorphisms and atopy and asthma in British and Japanese populations. *Clin Genet.* 1998 Sep; 54(3):245
25. Adra CN, **Gao PS**, Mao XQ, Baron BW, Pauker S, Miki T, Shirakawa T, Hopkin JM. Variants of B cell lymphoma 6 (BCL6) and marked atopy. *Clin Genet.* 1998 Oct; 54(4):362-4.
26. **Gao PS**, Mao XQ, Baldini M, Roberts MH, Adra CN, Shirakawa T, Holt PG, Martinez FD, Hopkin JM. Serum total IgE levels and CD14 on chromosome 5q31. *Clin Genet.* 1999 Aug; 56(2):164-5.
27. **Gao PS**, Mao XQ, Roberts MH, Arinobu Y, Akaiwa M, Enomoto T, Dake Y, Kawai M, Sasaki S, Hamasaki N, Izuhara K, Shirakawa T, Hopkin JM. Variants of STAT6 (signal transducer and activator of transcription 6) in atopic asthma. *J Med Genet.* 2000 May;37(5):380-2.
28. **Gao PS**, Fujishima S, Mao XQ, Remus N, Kanda M, Enomoto T, Dake Y, Bottini N, Tabuchi M, Hasegawa N, Yamaguchi K, Tiemessen C, Hopkin JM, Shirakawa T, Kishi F. Genetic variants of NRAMP1 and active tuberculosis in Japanese populations. International Tuberculosis Genetics Team. *Clin Genet.* 2000 Jul;58(1):74-6

Editorials

29. **Gao PS**, Mao XQ, Hopkin JM, Adra CN, Yang X, Shirakawa T. Functional significance of polymorphisms of the interleukin-4 and interleukin-13 receptors in allergic disease. *Clin Exp Allergy.* 2000 Dec; 30(12):1672-5.

Review articles

30. **Gao PS**, Li HZ, Qi HW. The genetics of asthma. *Guo Wai Yi Xue Wen Zhai* 1994; 37 (5); 112-116.
31. **Gao PS**, Huang SK. Genetic aspects of asthma. *Panminerva Medica* 2004; 46(2):121-34.
32. Barnes KC, Grant CV, **Gao PS**. A review of the genetic epidemiology of resistance to parasitic disease and atopic asthma: common variants for common phenotypes? *Curr Opin Allergy Clin Immunol.* 2005 Oct;5(5):379-85

Thesis

33. **Gao PS**. Expression of the oncogenes (c-myc, c-fos and ras) in airway and lung tissues of asthma model of guinea pigs. MD thesis. Fourth Military Medical University 1997.
34. **Gao PS**. Epidemiology of asthma and atopy: environmental and genetic studies. PhD thesis, University of Wales Swansea 2002.

RECOGNITION

Awards, Honors (title, date, description, sponsor)

- 01/99-12/01 Studentship from **GlaxoSmithKline, UK**. Ref: S1577.
- 01/00-01/02 Studentship from **Henry Lester Trust**, UK Ref: 313892.
- 22/03/2004 2004**AAAAI/Sepracor** Research Excellent Awards.
- 06/10/2005 Annual Respiratory Disease Young Investigator Award

