

CURRICULUM VITAE

GONÇALO ROCHA ABECASIS

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EMPLOYMENT HISTORY

Associate Professor Design of methods for analysis of high density SNP data, with a special focus on human pedigrees and complex traits. Provide statistical genetics support for projects aiming to identify genes involved in psoriasis, macular degeneration, and aging related disorders.
From September '05

Assistant Professor September '02 – August '05

Ass. Research Scientist Teach graduate level courses on statistical genetics and statistical computing and supervise graduate students.
Adjunct Ass. Professor October '01 – August '02

ACADEMIC QUALIFICATIONS

**Queen's College,
University of Oxford** DPhil in Human Genetics (June 2001).

University of Leeds BSc (Honours) Genetics, July 1997
First Class
Graduated at the top of class.

Liceu de Macau Portuguese Higher Education (Maths, Biology and Chemistry)
Graduated at the top of class.

ACADEMIC AWARDS

**Pew Scholar in the
Biomedical Sciences, 2005** Awarded by the Pew Charitable Trusts to promising researchers in the Biomedical Sciences

Fulker Award, 2000 Outstanding scientific contribution to *Behavior Genetics*.

Crab Tree Award, 1995 For excellence among first year students at Leeds University.

**Macau Governor's Award,
1993, 1991, 1988** For the top two students in each Macau school, at the end Complementary, Secondary and Preparatory school

**Luis de Camões Award,
1991 and 1988** For best student of the Portuguese language.

SCIENTIFIC PUBLICATIONS (All Peer Reviewed)

- Abecasis GR**, Cardon LR and Cookson WOC (2000) A general test of association for quantitative traits in nuclear families. *Am J Hum Genet* **66**:279-292
- Abecasis GR** and Cookson WOC (2000) GOLD – Graphical overview of linkage disequilibrium. *Bioinformatics* **16**:182-183
- Moffatt MF, Traherne JT, **Abecasis GR** and Cookson WOC (2000) Single nucleotide polymorphism and linkage disequilibrium within the TCR alpha/delta locus. *Hum Mol Genet* **9**:1011-1019
- Abecasis GR**, Cookson WOC and Cardon LR (2000) Pedigree Tests of Transmission Disequilibrium. *Eur J Hum Genet* **8**:545-551
- Cardon LR and **Abecasis GR** (2000) Some properties of variance-components model for fine-mapping of quantitative trait loci. *Behav Genet* **30**:235-243
- Cardon LR and **Abecasis GR** (2000) Regression models for association studies of quantitative trait loci in humans. *GeneScreen* **1**:55-58.
- Abecasis GR**, Noguchi E, Heinzmann A, Traherne JA, Bhattacharya S, Leaves NI, Anderson GG, Zhang Y, Lench NJ, Carey A, Cardon LR, Moffatt MF and Cookson WOC (2001). Extent and distribution of linkage disequilibrium in three genomic regions. *Am J Hum Genet* **68**:191-198
- Abecasis GR**, Cherny SS and Cardon LR (2001) The impact of genotyping error on linkage and association analysis of quantitative traits. *Eur J Hum Genet* **9**:130-134
- Cookson WOC, Ubi B, Lawrence R, **Abecasis GR**, Walley AJ, Cox HE, Coleman R, Leaves NI, Trembath RC, Moffatt MF, Harper JI (2001) Genetic linkage of childhood atopic dermatitis to psoriasis susceptibility loci. *Nat Genet* **27**:372-373
- Moffatt MF, Schou C, Faux JA, **Abecasis GR**, James A, Musk AW and Cookson WOC (2001) Association between quantitative traits underlying asthma and the HLA-DRB1 locus in a family-based population sample. *Eur J Hum Genet* **9**:341-346
- McKenzie CA, **Abecasis GR**, Keavney B, et al (2001) Trans-ethnic fine mapping of a quantitative trait locus for circulating angiotensin I-converting enzyme (ACE) *Hum Mol Genet* **10**:1077-1084
- Abecasis GR**, Cookson WOC and Cardon LR (2001) The Power to Detect Linkage Disequilibrium with Quantitative Traits in Selected Samples. *Am J Hum Genet* **68**:1463-1474
- Abecasis GR**, Cherny SS, Cookson WOC and Cardon LR (2001) GRR – Graphical Relationship Representation. *Bioinformatics* **17**:742-743
- Walley AJ, Chavanas S, Moffatt MF, et al (including **Abecasis GR**) (2001) Gene polymorphism in Netherton and common atopic disease. *Nat Genet* **29**:175-8
- Abecasis GR**, Cardon LR, Cookson WOC, Sham PC and Cherny SS (2001) Association Analysis in a Variance Components Framework. *Genet Epi Suppl* **21**:S341-346
- Cherny SS, **Abecasis GR**, Cookson WOC, Sham PC and Cardon LR (2001) The effect of genotype and pedigree error on linkage analysis: Analysis of three asthma genome-scans. *Genet Epi Suppl* **21**:S117-S122
- Cookson WOC and **Abecasis GR** (2001) Oxford Genome Screen for Asthma-Associated Traits. *Genet Epi Suppl* **21**:S1-S3
- Abecasis GR**, Cherny SS, Cookson WO and Cardon LR (2002). Merlin-rapid analysis of dense genetic maps using sparse gene flow trees. *Nat Genet* **30**:97-101
- Anderson GG, Leaves NI, Bhattacharyya S, Zhang Y, Walshe V, Broxholme J, **Abecasis G**, Levy E, Zimmer M, Cox R, Cookson WO (2002) Positive association to IgE levels and a physical map of the 13q14 atopy locus. *Eur J Hum Genet* **10**:266-70
- Dawson E, **Abecasis GR**, Bumpstead S, et al (2002) A linkage disequilibrium map of chromosome 22. *Nature* **418**:544-548
- Sham PC, Purcell S, Cherny SS and **Abecasis GR** (2002) Efficient full pedigree regression-based linkage analysis for quantitative traits. *Am J Hum Genet* **71**:238-253
- Zhang W, Collins A, **Abecasis GR**, Cardon LR, Morton NE (2002) Mapping quantitative effects of oligogenes by allelic association *Ann Hum Genet* **66**:211-221
- Liu H, **Abecasis GR**, Heath SC, et al (2002) Genetic variation in the 22q11 locus and susceptibility to schizophrenia. *Proc Natl Acad Sci U S A*. **99**:16859-16864

SCIENTIFIC PUBLICATIONS (Continued)

- Phillips MS, Lawrence R, Sachidanandam R, et al (including **Abecasis GR**) (2003) Chromosome-wide distribution of haplotype blocks and the role of recombination hot spots. *Nat Genet* **33**:382-387.
- Cardon LR and **Abecasis GR** (2003) Using haplotype blocks to map human complex trait loci. *Trends Genet* **19**:135-140
- Zeegers MP, Rice JP, Rijdsdijk FV, **Abecasis GR**, Sham PC (2003) Regression-based sib pair linkage analysis for binary traits. *Hum Hered* **55**:125-131
- Zhang Y, Leaves NI, Anderson GG, et al (including **Abecasis G**) (2003) Positional cloning of a quantitative trait locus on chromosome 13q14 that influences immunoglobulin E levels and asthma. *Nat Genet* **34**:181-186
- Allen M, Heinzmann A, Noguchi E, **Abecasis G**, et al. (2003) Positional cloning of a novel gene influencing asthma from Chromosome 2q14. *Nat Genet* **35**:258-263
- The International HapMap Consortium** (2003) The International HapMap Project. *Nature* **426**:789-795
- Karayorgou M, Torrington M, **Abecasis GR**, et al. (2004). Phenotypic characterization and genealogical tracing in an Afrikaner schizophrenia database. *Am J Med Genet* **124B**:20-8
- Abecasis GR**, Yashar BM, Zhao Y, et al. (2004). Age-related macular degeneration: a high-resolution genome scan for susceptibility Loci in a population enriched for late-stage disease. *Am J Hum Genet* **74**:482-94
- Fingerlin TE, Boehnke M and **Abecasis GR** (2004). Increasing the Power and Efficiency of Disease-Marker Case-Control Association Studies through Use of Allele-Sharing Information. *Am J Hum Genet* **74**:432-43
- Abecasis GR**, Burt RA, Hall D, et al. (2004). Genomewide scan in families with schizophrenia from the founder population of afrikaners reveals evidence for linkage and uniparental disomy on chromosome 1. *Am J Hum Genet* **74**:403-17
- The International HapMap Consortium** (2004). Integrating ethics and science in the International HapMap Project. *Nat Rev Genet* **5**:467-75
- Nash MW, Huezo-Diaz P, Williamson RJ, et al. (including **Abecasis GR**) (2004). Genome-wide linkage analysis of a composite index of neuroticism and mood-related scales in extreme selected sibships. *Hum Mol Genet* **13**:2173-82
- Abecasis G**, Cox N, Daly MJ, Kruglyak L, Laird N, Markianos K and Patterson N (2004). No bias in linkage analysis. *Am J Hum Genet* **75**:722-3
- Nistor I, Nair RP, Stuart P, et al. (including **Abecasis GR**) (2005). Protein tyrosine phosphatase gene PTPN22 polymorphism in psoriasis: lack of evidence for association. *J Invest Dermatol* **125**:395-6
- Li M, Boehnke M and **Abecasis GR** (2005) Joint Modeling of Linkage and Association: Identifying SNPs Responsible for a Linkage Signal. *Am J Hum Genet*. **76**:934-49.
- Abecasis GR**, Ghosh D and Nichols TE. (2005) Linkage Disequilibrium: Ancient History Drives the New Genetics. *Hum Hered*. **59**:118-124
- Zareparsy S, Buraczynska M, Branham KE, et al. (with **Abecasis GR**) (2005) Toll-like receptor 4 variant D299G is associated with susceptibility to age-related macular degeneration. *Hum Mol Genet* **14**:1449-55
- Wigginton JE, Cutler DJ and **Abecasis GR** (2005) A note on exact tests of hardy-weinberg equilibrium. *Am J Hum Genet* **76**:887-3.
- Cluster 17 Collaboration (including **Abecasis GR**) (2005) Fine Mapping of the Psoriasis Susceptibility Gene PSORS1: A Reassessment of Risk Associated with a Putative Risk Haplotype Lacking HLA-Cw6. *J Invest Dermatol* **124**:921-930.
- Zareparsy S, Branham KEH, Li M, et al. (including **Abecasis GR**) (2005) Strong Association of the Y402H Variant in Complement Factor H at 1q32 with Susceptibility to Age-Related Macular Degeneration. *Am J Hum Genet* **77**:149-153
- Fisher SA, **Abecasis GR**, Yashar BM et al. (2005) Meta-Analysis of Genome Scans of Age-Related Macular Degeneration. *Hum Mol Genet* **14**:2257-2264

SCIENTIFIC PUBLICATIONS (Continued)

- Wigginton JE and **Abecasis GR** (2005) PEDSTATS: descriptive statistics, graphics and quality assessment for gene mapping data. *Bioinformatics* **21**:3445-3447
- Abecasis GR** and Wigginton GR (2005) Handling Marker-Marker Linkage Disequilibrium: Pedigree Analysis with Clustered Markers. *Am J Hum Genet* **77**:754-67
- The International HapMap Consortium** (2005). A haplotype map of the human genome. *Nature* **437**:1299-320
- Smith AV, Thomas DJ, Munro HM and **Abecasis GR** (2005). Sequence features in regions of weak and strong linkage disequilibrium. *Genome Res* **15**:1519-34
- Skol AD, Scott LJ, **Abecasis GR** and Boehnke M (2006). Joint analysis is more efficient than replication-based analysis for two-stage genome-wide association studies. *Nat Genet* **38**:209-13
- Qin ZS, Gopalakrishnan S and **Abecasis GR** (2006). An efficient comprehensive search algorithm for tagSNP selection using linkage disequilibrium criteria. *Bioinformatics* **22**:220-5

PEER REVIEWED BOOK CHAPTERS

- Abecasis GR** and Y Zhao (2005) Algorithmic Improvements in Gene Mapping. *Encyclopedia Of Genetics, Genomics, Proteomics And Bioinformatics* (Wiley, UK)

PROFESSIONAL ACTIVITIES

- Editorial Boards** American Journal of Human Genetics (Associate Editor, 2005-) PLoS Genetics (Associate Editor, 2005-)
- Manuscript reviews for** Nature, Nature Genetics, American Journal of Human Genetics, European Journal of Human Genetics, Human Molecular Genetics, Genomics, Genome Research, Human Heredity, Genetic Epidemiology, Behaviour Genetics, Annals of Human Genetics, Bioinformatics, Annals of Ophthalmology, Pacific Symposium on Biocomputing, Human Genetics, Archives of General Psychiatry, Genetic Analysis Workshop, Journal of Clinical Investigation.
- Study Sections** Department of Energy, Low Dose Radiation Health Effects Program (2002); National Institutes of Health, Epidemiology of Clinical Disorders and Aging (June 2004; October 2004; February 2005); Genomics, Computational Biology and Technology Study Section (June 2005, regular member starting Fall 2006)
- Additional Grant reviews for** National Human Genome Research Institute (2002); National Eye Institute, Visual Sciences Study Section C (2002); Arthritis and Rheumatism Research Council (UK, 2003); Katholieke Universiteit Leuven (Netherlands, 2004); Ontario Mental Health Foundation (Canada, 2004)
- Other Positions** Steering Committee, National Center for Genotyping and Analysis (MIT / Broad Institute, 2005-)
- Genotyping Service Access Panel, CIDR (Johns Hopkins / NIH, 2005-)

METHODOLOGICAL GRANTS

- 09/2002 – 08/2007 Variance Components Models for Mapping QTLs** (PI: Hewitt)
Variance component models for linkage and association analysis of human pedigrees, with an emphasis on multivariate phenotypes and haplotype data.
Funder: National Institutes of Health (NEI, R01) through University of Colorado.
- 05/2003 – 04/2008 Computational and Statistical Models for Human Pedigrees**
Models for the efficient analysis of human pedigrees, with an emphasis on SNP data.
Funder: National Institutes of Health (NHGRI, R01).
- 05/2003 – 04/2004 Linkage Analysis with SNP Markers**
To develop with efficient algorithms for marker maps that include clustered SNPs.
Funder: GSK (contract).

COLLABORATIVE GRANTS

- 05/2004 – 04/2005 Supplement to Computational Models for Human Pedigrees**
This supplement supports analysis and software design related to the International Haplotype Map project.
Funder: National Institutes of Health (NHGRI, R01 Supplement)
- 06/2004 – 07/2007 Genetic Analysis of Study of Aging in Sardinia**
To carry out statistical genetic analyses for aging related quantitative traits in a sample of 6,000 individuals. The focus is on cardiovascular and psychological traits. Overall project directed by Drs. Schlessinger (NIA) and Pillia (Sardinia).
Funder: National Institutes of Health (NIA, Intramural).
- 04/2004 – 03/2009 Linkage Analysis of Familial Psoriasis** (PI: Elder)
To direct statistical analysis aiming to identify the PSOR1 and PSOR2 genetic defects, test selected polymorphisms within candidate genes and perform a genome-wide linkage scan.
Funder: National Institutes of Health (NIAMSD, R01), through Department of Dermatology.
- 10/2006 – 07/2011 Molecular Genetics of Macular Degeneration** (PI: Swaroop)
(pending, ranked at 1.7 percentile) Direct statistical analysis of gene mapping data with the objective of dissecting susceptibility loci for age-related macular degeneration.
Funder: National Institutes of Health (NEI, R01 pending).
- 12/2004 – 11/2008 Mapping Genes for Schizophrenia in Founder Populations** (PI: Karayiorgou)
Conduct genetic linkage and association analysis for gene mapping data in founder populations.
Funder: National Institutes of Health (NIMH), through Rockefeller University.

INVITED TALKS AND ORAL PRESENTATIONS

- American Association for Cancer Research** (Anaheim, CA) International HapMap Project: A resource for association studies of the future (April 2005)
- Queensland Institute for Medical Research** (Brisbane, Australia) Linkage analysis with markers in linkage disequilibrium (April 2005)
- University of Alabama** (Birmingham, AL) Analysis of Genetic Data With Merlin, QTDT and GOLD (December 2004)
- Emory University** (Atlanta, GA) Linkage Disequilibrium in the Human Genome (November 2004)
- American Society of Human Genetics** (Toronto, CA) Linkage Analysis with Markers that Are in Linkage Disequilibrium.
- University of California, Los Angeles** (Los Angeles, CA) Linkage Disequilibrium in the Human Genome (October 2004)
- University of Hong Kong** (Hong Kong, China) The International HapMap Project (May 2004)
- RECOMB Workshop on SNP and Haplotype Analysis** (Pittsburgh, PA) Haplotyping in Pedigrees (February 2004)
- University of Pennsylvania** (Philadelphia, PA) Modelling Errors in Genetic Data (December 2003)
- Wellcome Trust Center for Human Genetics** (Oxford, UK) Challenges in Human Gene Mapping (July 2003)
- National Institutes of Aging** (Bethesda, MD) Association Analysis in Human Pedigrees. (May 2003)
- Statistical Genetics Symposium** (Newcastle, UK). Linkage disequilibrium in the Human Genome (May 2003)
- Single Nucleotide Polymorphism and Complex Genome Analysis.** (Reykjavik, Iceland). Linkage disequilibrium in the human genome. (October 2002)
- Joint Statistical Meetings.** (New York, NY) Mixed Model Approaches to Mapping Complex Traits in Human Pedigrees (August 2002)
- Borderline Personality Research Foundation Meeting** (Basel, Switzerland) Methods for mapping complex traits (July 2002)
- Biocentrum Symposium** (Helsinki, Finland) Linkage disequilibrium and complex trait mapping (June 2002)
- INSERM Workshop on Complex Trait Analysis** (Paris, France) Pedigree tests of linkage disequilibrium (May 2002)
- Third International Meeting On The Genetic Epidemiology Of Complex Traits** (Cambridge, UK) Patterns of Disequilibrium and Haplotype Conservation in the Genome (April 2002)
- Instituto Gulbenkian de Ciência** (Lisbon, Portugal) Association analyses in human pedigrees (April 2002)
- American Society of Human Genetics** (San Diego, CA) A Linkage Disequilibrium Map Of Chromosome 22 (October 2001)
- American Society of Human Genetics** (San Diego, CA) Estimation of haplotype frequencies from diploid data. (October 2001)
- Twin Research Unit, University of London** (London, England) Linkage disequilibrium in the human genome (May 2001)
- Starr Centre Lecture, Rockefeller University** (New York, NY) Pedigree tests of linkage disequilibrium (November 2000)
- Behaviour Genetics Association** (Burlington, VT) Linkage disequilibrium analysis of pedigree data (June 2000)
- Harvard School of Public Health** (Boston, MA) Pedigree tests of linkage disequilibrium (June 2000)
- South of England Genetic Epidemiology Group** (London, England) Pedigree tests of linkage disequilibrium (May 2000)
- Wellcome Trust Centre Seminar Series** (Oxford, England) TDT tests for quantitative traits. (November 1999)
- 23rd Wellcome Summer School** (Cambridge, England) The QTDT computer program. (June 1999)
- Ontario Biology Day** (Guelph, ON) Assessment of the efficacy of non-autologous gene therapy using micro-encapsulated cells in canine model of the Hurler syndrome (March 1996)

TEACHING

University of Michigan

BIOSTAT 615 – Statistical Computing **BIOSTAT 815 – Advanced Topics in Computational Statistics**

These courses survey fundamental techniques in computational statistics, in two parts. The first part focuses on basic algorithms for graph processing, sorting, searching and indexing. The second part covers more numerical algorithms, including random generation, Monte Carlo methods, optimization techniques, and quadrature. BIOSTAT 815 also includes a group research project.

BIOSTAT 666 – Numerical Methods in Human Genetics

This course surveys fundamental techniques in modern human genetics. Topics covered included maximum likelihood theory, coalescent genealogies, parametric and non-parametric linkage analysis, haplotype estimation, and association analysis for discrete and quantitative traits.

These 3 courses are intensive and require students to apply and extend techniques discussed in class to several weekly problems.

Outside Courses I Organize

Annual Twin and Family Advanced Studies Workshop

I have been a faculty member for the Annual Twin and Family Advanced Studies Workshop (since March 2001). The last three editions of the course (March 2002, 2003 and 2004) had >80 participants.

Other Courses

I taught 4-8 hours in each of these courses.

Welcome Trust Advanced Genetic Analysis Summer School (Cambridge, UK, June 1999, June 2003)

INSERM Workshop in Statistical Genetics (Paris, France, May 2002)

Rockefeller University Advanced Linkage Course (New York, NY, November 2003, December 2004, December 2005; Munich, November 2005)

Gulbenkian Institute Genetics Course (Lisbon, Portugal, February 2004)

Jackson Laboratory Summer Course on Medical and Experimental Mammalian Genetics (Bar Harbor, ME, June 2004, June 2005)

Free University of Amsterdam Workshop on the Analysis of Twin Studies (Egmond Van Zee, The Netherlands, October 2004)

Paris Workshop on Molecular and Statistical Genomic Epidemiology (Paris, France, May 2005)

POSTDOCTORAL STUDENTS (* current)**Weimin Chen ***

Johns Hopkins PhD (2004)
Supervisor: Kun-Yee Liang

We are developing methods for the linkage analysis of quantitative traits. Dr. Chen also oversees statistical analysis of quantitative traits for the Sardinia project, which includes data on over 6000 individuals. Dr. Chen is first author in two manuscripts under review.

William Stewart

University of Washington (2005)
Supervisor: Ellen Wijsman

Dr. Stewart will be starting a post-doc in my group in November of 2005. His current research focus on the estimation and use of genetic maps in the presence of genotyping error.

DOCTORAL STUDENTS (* current)**Tasha E. Fingerlin**

Graduated in 2003.

I was a member of Tasha's doctoral committee. Together, we developed a method that identifies valuable individuals for genotyping in fine-mapping studies of complex traits. We published our method in the *American Journal of Human Genetics*. She is now an Assistant Professor at the University of Colorado Health Sciences Center.

Mingyao Li

Graduated in 2005.

I was co-chair of Mingyao's doctoral committee. Together, we have developed a method for joint linkage and association analysis that accommodates both sibships and unrelated individuals. We expect our method will facilitate genetic association studies of complex diseases. Our results were published in the *American Journal of Human Genetics* and resulted in Mingyao being awarded the Cotterman award by the American Society of Human Genetics (for the best paper published by a doctoral student in 2005). Mingyao is now an Assistant Professor at the University of Pennsylvania.

Andrew Skol *

Expected Graduation in 2006.

I am a member of Andrew's doctoral committee. I have advised Andrew on the analysis of gene-mapping data for schizophrenia and in the development of efficient methods for the calculation of empirical p-values. Together with Michael Boehnke and Laura Scott, we have examined cost-effective designs for genome-wide association studies and recently published our results in *Nature Genetics*.

Liming Liang *

Admitted in 2004.

Mr. Liang is exploring the utility of repeated measures in genetic studies of complex traits. So far, his results indicate that, in the presence of modest measurement error (>20%), repeated measurements can greatly increase power for linkage analysis.

Ji Zheng *

Admitted in 2005.

Ms. Zheng is developing flexible methods for variance component analysis that allow genetic effects to vary as a function of a measured covariate.

MASTERS STUDENTS (* current)**Theresa Scott
(né Daigneault)**

Graduated in 2003.

Ms. Daigneault worked with me on the analysis of gene mapping data for glaucoma and explored the effect of genotyping error on linkage analysis. She is now a Research Associate in the Department of Human Genetics at the University of Pittsburgh.

MASTERS STUDENTS, CONTINUED (* current)

- Anita Yu Zhao** Ms. Zhao worked with me on the analysis of gene mapping data for glaucoma. We uncovered evidence for susceptibility loci on chromosomes 1, 2, 5, 9 and 22 and published a paper in the *American Journal of Human Genetics*. She is now working a Statistical Analyst at Genaisance Pharmaceuticals.
Graduated in 2004.
- Zaojun Ye *** Mr. Ye completed his MS in 2004. We worked together to investigate the performance of different strategies and sampling designs for estimating haplotype frequencies.
Graduated in 2004.
- J. Abigail Woodroffe** Ms. Woodroffe has been responsible for the analysis of gene-mapping data for glaucoma and schizophrenia projects. In the schizophrenia project, we are attempting to refine the location of susceptibility alleles on chromosomes 1 and 13. She presented her results at the *American Society of Human Genetics Annual Meeting* in 2005.
Graduated in 2005.
- Heather Munro** Ms. Munro worked with me on the analysis of linkage disequilibrium patterns in data generated by the International HapMap project. She helped compare LD patterns across the genome, generate displays of genomic LD, and compare different methods for measuring disequilibrium in simulated data. Her work resulted in 3 published papers.
Graduated in 2005.
- Matt Zawitowski** Mr. Zawitowski is currently evaluating the quality of data generated by the International HapMap Consortium.
Expected Graduation in 2006.

SELECTED CONFERENCE ABSTRACTS

- He C, **Abecasis G**, Kong X, Concannon P, Xu X, Buyske S, Weeks DE, Matise T (2004) Enhanced linkage maps from family-based genetics studies. *Am Soc Hum Genet Annual Meeting* (Toronto, CA)
- Abecasis GR**, Wigginton JE (2004) Linkage Analysis with Markers that Are in Linkage Disequilibrium. *Am Soc Hum Genet Annual Meeting* (Toronto, CA)
- Li M, Boehnke M, **Abecasis GR** (2004) Efficient Study Designs for Test of Association using Sibship Data and Unrelated Controls. *Am Soc Hum Genet Annual Meeting* (Toronto, CA)
- Wigginton JE, **Abecasis GR** (2004) Pseudo: A program for fast calculation of empirical p-values for genomewide non-parametric tests of linkage. *Am Soc Hum Genet Annual Meeting* (Toronto, CA)
- Woodroffe A, **Abecasis GR**, Lichter PR, Ntim-Amponsah C, Moroi S, Bromley W, Obeng-Nyarkoh E, Downs CA, Kijack T, Scott K, Jaramillo-Babb VL, Vollrath D, Richards JE (2004) Association between LMX1B haplotypes and primary open-angle glaucoma in individuals of African descent. *Am Soc Hum Genet Annual Meeting* (Toronto, CA)
- Ye Z, Wigginton J, **Abecasis GR** (2004) Accuracy of haplotype frequency estimates in samples of families and unrelated individuals. *Am Soc Hum Genet Annual Meeting* (Toronto, CA)
- Fingerlin TE, **Abecasis GR**, Boehnke M (2004) Assessment of the impact of using sex-averaged genetic maps in multipoint linkage analysis when IBD status is incompletely known. *Am Soc Hum Genet Annual Meeting* (Toronto, CA)
- Li M, **Abecasis GR**, Boehnke M (2003) Identifying SNPs responsible for a linkage signal. *Am Soc Hum Genet Annual Meeting* (Los Angeles, CA)
- Wigginton JE, **Abecasis GR** (2003) PedStats: A utility for summarizing the contents of pedigree files with the ability to produce graphical output in PDF format. *Am Soc Hum Genet Annual Meeting* (Los Angeles, CA)
- Abecasis GR**. (2002) Fast Evaluation Of Parametric Models In Pedigree Analysis. *Am Soc Hum Genet Annual Meeting* (Baltimore, MD)

- Fingerlin TE, Boehnke M, **Abecasis GR**. (2002) Case Selection Strategies For Association Studies In Linkage Candidate Regions. *Am Soc Hum Genet Annual Meeting* (Baltimore, MD)
- Conneely KN, **Abecasis GR**, Boehnke M. (2002) Sampling Bias In The D' Statistic And A Bootstrap Correction. *Am Soc Hum Genet Annual Meeting* (Baltimore, MD)
- Phillips MS, Sachidanandam R, Donaldson MA, **Abecasis GR**, Lawrence R, Studebaker JF, Ankener WM, Kuo FS, Alfisi SV, Gelfand GA, Boyce-Jacino MT, Cardon LR. (2002) A First Generation Haplotype Map Of Chromosome 19. *Am Soc Hum Genet Annual Meeting* (Baltimore, MD)
- Cardon LR, **Abecasis GR**, Dawson E, Bumpstead S, Chen Y, Hunt S, Pabiol J, Dibling T, Tinsley E, Curby S, Carter D, Papaspyridonos M, Livingstone S, Ganske R, Rice K, Deloukas P, Dunham I, Bentley D. (2001) A Linkage Disequilibrium Map Of Chromosome 22. *Am Soc Hum Genet Annual Meeting* (San Diego, CA)
- Abecasis GR**, Martin R, Lewitzky S (2001) Estimation of haplotype frequencies from diploid data. *Am Soc Hum Genet Annual Meeting* (San Diego, CA) Mott R, **Abecasis GR**, Cardon LR (2001) Identifying extreme regions of linkage disequilibrium with dense maps. *Am Soc Hum Genet Annual Meeting* (San Diego, CA)
- Cookson WO, Ubhi B, Walley A, Lawrence R, Cox H, Coleman R, **Abecasis GR**, Moffatt MF, Harper JJ (2000) A genome-wide search for linkage to atopic dermatitis and underlying quantitative traits. *Am Soc of Hum Genet Annual Meeting* (Philadelphia, PA)
- Cardon LR, **Abecasis GR**, Cherny SS (2000) The effect of genotype error on the power to detect linkage and association with quantitative traits. *Am Soc of Hum Genet Annual Meeting* (Philadelphia, PA)
- Noguchi E, Heinzmann A, **Abecasis GR**, Broxholme SJ, Jones H, Lench N, Carey A, Moffatt MF, Cookson WO (2000) Linkage disequilibrium mapping of an asthma locus near the Interleukin 1 complex on chromosome 2. *Am Soc of Hum Genet Annual Meeting* (Philadelphia, PA)
- Abecasis GR**, Cherny SS, Cookson WOC and Cardon LR. (2000) MERLIN - Multipoint engine for rapid likelihood inference. *Am Soc of Hum Genet Annual Meeting* (Philadelphia, PA)
- Abecasis**, Moffatt, Heinzman, Traherne, Noguchi, Leaves, Bhattacharrya, Cardon and Cookson (2000) Patterns of linkage disequilibrium in asthma candidate loci. *VIII CEPH Annual Conference* (Paris, France)
- Cardon LR, **Abecasis GR**, Cookson WOC (1999) Testing linkage and linkage disequilibrium with quantitative trait loci in nuclear families: A DF regression model and variance components extensions. *Behav Genet Assoc Annual Meeting* (Vancouver, BC)
- Abecasis**, Cardon and Cookson (1999) A general family test of linkage disequilibrium for quantitative traits. *Am Soc of Hum Genet Annual Meeting* (San Francisco, CA)
- Cardon, Cookson and **Abecasis** (1999) Selection strategies for disequilibrium mapping of complex traits in nuclear families. *Am Soc of Hum Genet Annual Meeting* (San Francisco, CA)
- Cookson, **Abecasis** and Cardon (1999) Parent of origin effects in the disequilibrium mapping of complex traits. *Am Soc of Hum Genet Annual Meeting* (San Francisco, CA)
- Abecasis**, Cardon and Cookson (1999) Linkage disequilibrium mapping of quantitative trait loci. *VII CEPH Annual Conference* (Paris, France)
- Bhattacharrya, Leaves, **Abecasis**, Moffatt, Daniels, Musk, Lathrop and Cookson (1998) Linkage of asthma and associated phenotypes to the IL1 cluster on chromosome 2q13. *Human Genome Meeting* (Turin, Italy)