

CURRICULUM VITAE

Timothy A. Thornton, Ph.D.

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1. Biographical Information

University of Washington
Department of Biostatistics
HSB F-644, Box 357232
Seattle, WA 98195-7232
E-mail: tathornt@u.washington.edu
Office Phone: 206-543-8004

2. Education

Hampton University, Hampton, VA, B.S., Mathematics, 1998
University of Chicago, Chicago, IL, Ph.D., Statistics, 2005

3. Licensure: Not Applicable

4. Professional Positions

Postdoc, Department of Statistics, University of California, Berkeley, 2006-2008
Postdoc, Institute for Human Genetics, University of California, San Francisco, 2008-2009
Assistant Professor, Department of Biostatistics, University of Washington, 2009-present
Faculty Member, Institute for Public Health Genetics, University of Washington 2009-present
Affiliate Investigator, Biostatistics and Biomathematics Program, FHCRC, 2010-present

5. Honors, Awards, Scholarships

Office of Naval Research Student Enhancement in Mathematics and Science Scholarship, 1994-1998
B.A. conferred Magna Cum Laude and with Honors in Mathematics, Salutatorian, Hampton University, 1998
Graduate Degrees for Minorities in Engineering and Science Fellowship, 1998
Office of Naval Research-Historically Black Colleges and Universities Graduate Fellowship, 1998-2002
David and Lucile Packard Foundation Graduate Fellowship, 1998-2004
University of Chicago Graduate Fellowship, 1998-2005
FASEB-MARC Travel Award, 2006
University of California President's Postdoctoral Fellowship, 2006-2008
University of California, San Francisco Lamond Family Postdoctoral Fellowship, 2008-2009

6. Professional Activities (outside of UW)

Professional Societies:

American Statistical Association
Institute of Mathematical Statistics
American Association for the Advancement of Science
American Society of Human Genetics

Professional Activities:

Review Editor for:

Frontiers in Genetics 2010-present

Referee for:

Annals of Human Genetics
Bioinformatics
Biometrics
BioMed Central Genetics
Biostatistics
Genetic Epidemiology
Genome Research
Human Heredity
International Journal of Health Geographics
Plos One
Statistical Applications in Genetics and Molecular Biology

7. Bibliography

a) Refereed research articles

1. Anderson-Cook CM and **Thornton T** (1998) "Measuring Hockey's Special Teams Efficiency." *Chance*, 11: 26-34
2. Anderson-Cook CM and **Thornton T** (1998) "Response to Letter to the Editor: Shorthanded." *Chance*, 12: 3-5.
3. **Thornton T** and McPeck MS (2007) "Case-Control Association Testing with Related Individuals: A More Powerful Quasi-Likelihood Score Test." *American Journal of Human Genetics* 81: 321-337.

4. FitzGerald LM, Patterson B, Thomson R, Polanowski A, Quinn S, Brohede J, **Thornton T**, Challis D, Mackey D, Dwyer T, Foote S, Hannan GN, Stankovich J, McKay JD, Dickinson JL (2009) "Identification of a prostate cancer susceptibility gene on chromosome 5p13q12 associated with risk of both familial and sporadic disease." *European Journal of Human Genetics* 17: 368-377.
5. **Thornton T** and McPeck MS (2010) "ROADTRIPS: Case-Control Association Testing with Partially or Completely Unknown Population and Pedigree Structure." *American Journal of Human Genetics* 86: 172-184.
6. Phasukijwattana N, Kunhapan B, Stankovich J, Chuenkongkaew WL, Thomson R, **Thornton T**, Bahlo M, Mushiroda T, Nakamura Y, Mahasirimongkol S, Tun AW, Srisawat C, Limwongse C, Peerapittayamongkol C, Sura T, Suthammarak W, Lertrit P (2010) "Genome-wide linkage scan and association study of PARL to the expression of LHON families in Thailand." *Human Genetics* 128: 39-49.
7. Tore S, Casula S, Casu G, Concas MP, Pistidda P, Persico I, Sassu A, Maestrale GM, Caterina Mele C, Caruso MR, Bonerba B, Usai P, Deiana I, **Thornton T**, Pirastu M, and Forabosco P (2011) "Application of a new method for GWAS in a related case/control sample with known pedigree structure: identification of new loci for nephrolithiasis." *PLoS Genetics* 7: e1001281.
8. **Thornton T**, Zhang Q, Cai X, Ober C, and McPeck MS (2012) "XM: Association Testing on the X-Chromosome in Case-Control Samples with Related Individuals." *Genetic Epidemiology* (In Press)
9. **Thornton T**, Tang H, Hoffman TJ, Ochs-Balcom HM, Baan BJ, and Risch N "Estimating Kinship in Admixed Populations." *American Journal of Human Genetics* (In Revision)

b) Other refereed scholarly publications (proceedings, policy papers and reviews, book chapters)

1. Anderson-Cook CM, **Thornton, T**, Robles, R (1997), "Measuring Hockey Powerplay and Penalty Killing Efficiency", *Proceedings of the American Statistical Association Section on Statistics in Sports*, Alexandria, VA: American Statistical Association, 11-14.

c) Books and book chapters

None Indicated

d) Other non-refereed published scholarly publications

None Indicated

8. Patents and Other Intellectual Property

Publically Available Software

1. **MQLS**, a C program for case-control genetic association testing in samples that contain related individuals with known pedigrees, available at <http://galton.uchicago.edu/~mcpeek/software/MQLS/index.html>

2. **ROADTRIPS**, a C program for case-control genetic association testing in samples with partially or completely unknown population and pedigree structure, available at <http://galton.uchicago.edu/~mcpeek/software/ROADTRIPS/index.html>

9. Funding History

Current

9/01/2010 – 8/31/2015: NIH/NCI K01 Grant (K01 CA 148958-01), “Statistical Methods for Cancer Genetic Association Studies with Hidden Population Structure and Related Individuals”, 75% FTE, Total Direct Costs: \$686,755, **PI Timothy Thornton**,

7/1/09-12/30/12: NIH/NCI Subcontract from FHRC (CA 15704), Cancer Center Support Grant, Total Direct Costs: \$100,000, **PI Timothy Thornton**

Pending

NHGRI R01 Grant, Submitted October 2011, “Statistical Methods for X Chromosome Genetic Data”, **PI Timothy Thornton**, Co-Investigators: Bruce Weir, Sharon Browning, Brian Browning, Cathy Laurie, Cecelia Laurie

Completed

8/1/2009-3/31/2011: NIH/NHLBI Subcontract from UCSF (N01 WH-2-2110), "Women's Health Initiative SNP Health Association Resource Analytic Center (SHARe Analytic Centers)", 20% FTE, Total Direct Costs: \$45,131, **PI Timothy Thornton**

10. Public Health Practice Activities

None Indicated

11. Conferences and Symposiums

Invited Presentations

Department of Preventive Medicine & Epidemiology, Loyola University, Sep 2005

Division of Biostatistics, Mayo Clinic, Dec 2005
Department of Statistics, University of Chicago, Dec 2005
Department of Statistics, North Carolina State University, Apr 2006
Walter and Eliza Hall Institute of Medicine, Melbourne, Australia, Nov 2006
Department of Statistics, University of California, Irvine, Jan 2007
Department of Mathematics, Tulane University, Sep 2007
Walter and Eliza Hall Institute of Medicine, Melbourne, Australia, Oct 2007
Joint Mathematics Meetings, Jan 2008
Department of Statistics, University of California, Riverside, Feb 2008
Department of Statistics, University of California, Berkeley, Feb 2008
Department of Biostatistics, University of Washington, Apr 2008
Menzies Research Institute, Hobart, Tasmania, Australia, Jun 2008
Walter and Eliza Hall Institute of Medicine, Melbourne, Australia, Jun 2008
Blackwell-Tapia Conference, Statistical and Applied Mathematical Sciences Institute, Nov 2008
School of Industrial & Systems Engineering, Georgia Institute of Technology, Dec 2008
Fred Hutchinson Cancer Research Center, Oct 2009
Northwest Institute of Genetic Medicine, University of Washington, Jun 2010
Institute for Public Health Genetics, University of Washington, Nov 2010
Joint Statistical Meetings, Aug 2011
Northwest/Alaska Pharmacogenomics Research Network Conference, Aug 2011

12. University Service

Departmental Service & Faculty Committees

Alumni Relations Committee, 2009-2010, 2011-2012
Seminar Committee, 2009-2010
Applied Exam Grader, 2009-2010
Applied Exam Committee, 2010-2011, 2011-2012
Emergency Preparedness Committee, Chair 2010-2011
Affiliate/Adjunct Appointments Committee, 2011-2012

University of Washington Royalty Research Fund

Research Proposal Reviewer, 2011

13. Professionally-Related Community Service

None Indicated

14. Other Pertinent Information As Needed

None Indicated

15. Teaching History

a) Formal Teaching

University of Chicago:	Statistics 200, "Introductory Statistics", 100% Responsibility, Fall 1999, Spring 2000
University of California, Berkeley:	Statistics 20, "Introduction to Probability and Statistics", 100% Responsibility, Summer 2006, Summer 2007
University of Washington:	Biostatistics 516, "Statistical Methods in Genetic Epidemiology", 100% Responsibility, Fall 2009, Fall 2010, Fall 2011

b) Other Teaching

None Indicated

c) Independent Study

Matthew Conomos, University of Washington, Department of Biostatistics, Fall 2011-present

16. Advising and Formal Mentoring**a) PhD Dissertations, Chair**

None Indicated

b) Masters Theses, Chair

Laurel Steinmetz, University of Washington, Genetic Epidemiology, 2011-present

c) Postdoctoral Fellows (Mentor)

Shizhen Wang, University of Washington, Department of Biostatistics, 2010-2011

d) MS and PhD Committees in Non Chair Role**MS**

Saeed Hamine, University of Washington, Genetic Epidemiology, 2009
Nora Kozloff, University of Washington, Genetic Epidemiology, 2010
Nicholas Mosely, University of Washington, Genetic Epidemiology, 2011

PhD

Rora Rohlf, University of Washington, Genome Sciences, 2010

f) Academic Advising

Lisa Brown, University of Washington, Department of Biostatistics, 2010-present

Jean Morrison, University of Washington, Department of Biostatistics, 2011-present