# Chad A. Shaw Rice University Department of Statistics 6100 Main Street, MS 138 Houston, Texas 77005-1892 cashaw@stat.rice.edu

#### Education

Ph.D. Candidate, Statistics Dept., Rice University, September 1999. Proposal Title: *Genealogical Methods for Multitype Branching Processes with Applications in Molecular Biology* 

B.S. Duke University, Mathematics, May 1995. Cumulative GPA 3.63

#### **Fellowships and Awards**

Selected as the W.M. Keck Center presenter for the NLM Annual Informatics Trainee Conference held at Columbia University July 8-10, 1999.

Travel award to attend the NSF workshop on pedigree analysis given by E. Thompson at Michigan Technical University, July 20-27 1999.

Travel award to attend the Program in Mathematics and Molecular Biology VI Annual Conference, Santa Fe, NM, January 1999.

Pre-doctoral fellow, W.M. Keck Center for Computational Biology, Houston, Texas 1997present. Funded through NLM bioinformatics grant.

NSF Research Experiences for Undergraduates participant, Mountain Lake Biological Station, University of Virginia, summer 1993.

National Merit Scholar, 1991.

#### Presentations

"A Genealogical Approach to The Polymerase Chain Reaction." **Contributed Talk.** NLM Annual Conference for Informatics Trainees. Columbia University, July 8-9, 1999.

"A Genealogical Approach to The Polymerase Chain Reaction." **Poster**. Program in Mathematics and Molecular Biology, Annual Conference VI. Santa Fe, NM, January 1999.

"Coalescent Methods for The PCR." **Poster.** Annual Research Conference of the W.M. Keck Center for Computational Biology. Galveston, Texas, November 20, 1998.

"A Statistical Approach to RNA Secondary Structure Calculations." **Contributed Talk.** Fifth International Conference on Mathematical Population Dynamics. Zakopane, Poland, June 21-26 1998.

"Entropy Methods for Analyzing DNA Sequence Data." **Contributed Talk**. Conference on Mathematical Population Biology. Chalmers Technical University, Goteborg, Sweden, May 1998.

"Information Methods for DNA Sequence Data." **Contributed Talk.** Conference on Mathematical Biology. Vanderbilt University, Nashville, TN., May 1997.

## Selected Conferences and Workshops

American Society for Human Genetics Annual Conference, San Fransisco, October 1999.
NSF Workshop on Pedigree Analysis, Houghton, Michigan, July 1999.
NLM Annual Conference for Bioinformatics Trainees, New York, July 1999.
Summer School on Mathematics in Cell Biology and Proliferation, Termoli, Italy, Summer 1999.
Program in Mathematics and Molecular Biology VI Santa Fe, NM January 1999.
Annual Research Conference of the W.M. Keck Center for Computational Biology, Oct.1998.
Annual Meeting of the American Statistical Association, Dallas, Tx. August 1998.
Fifth International Conference on Mathematical Population Dynamics. Poland, June, 1998.
Conference on Mathematical Population Biology. Gothenberg, Sweden, May 1998.
Nucleic Acid and Protein Sequence Analysis Workshop. University of Houston, April 1997.
Annual Meeting of the American Society of Human Genetics , Baltimore, October 1997.

## Selected Coursework: Biology

**Duke University**: Genetics, Evolution **Rice University**: Cell Biology, Animal Developmental Biology, Plant Molecular Biology.

## Selected Coursework: Statistics and Computer Science

**Duke University**: Programming in C++, Algorithims and Data Structures in C++. **Rice University**: Multivariate Statistics, Cluster Analysis, Statistical Genetics, Stochastic Processes, Linear models.

## **Other Experience**

Statistical consulting, 1995-present. Projects include analysis of survival and surgical outcome data for physiscians, analysis f survey data for social scientists, and computational assistance for molecular biologists.

Research assistant in tropical forestry, San Juan, Puerto Rico. Assisted with molecular data aquisition and analysis (allozyme and RFLP). University of Puerto Rico, Rio Piedras Campus.

NSF REU participant, Mountain Lake Biological Station, Blacksburg, Virginia, Summer, 1993. Assisted with molecular biology lab work and conducted an independent research project.

## **Personal Accomplishments**

Coach of the Rice University Rowing club, 1995-present. Head Coach 1999. 2 time finisher of the Houston Marathon (1998 and 1999)