

CURRICULUM VITAE

Mahyar Sabripour, Ph.D.

- CONTACT INFORMATION** University of Alabama-Birmingham
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- RESEARCH INTERESTS** My research interests are in bioinformatics and computational biology. I am particularly interested in developing computational techniques applied towards the analysis of microarray data. I also have a strong interest in structural computational biology. My other interests include DNA sequence analysis, structural and functional genomics, proteomics, biomedical image processing and systems biology.
- EDUCATION** **University of Texas M. D. Anderson Cancer Center**
University of Texas - Houston Graduate School of Biomedical Sciences
Houston, Texas USA
Ph.D. (April, 2005)
 - Program Affiliation: Biomathematics and Biostatistics
 - Dissertation Topic: “Application of Stellar Photometry to the Analysis of Microarray Images”
 - Advisor: Christopher I. Amos, Ph.D.**University of Houston**
Houston, Texas USA
B.S., Biochemistry, Cum Laude, 1995
- HONORS AND AWARDS** Predoctoral Fellowship in Cancer Prevention
U.T.M.D. Anderson Cancer Center, 2002-2005
W. M. Keck Undergraduate Fellow in Computational Biology
University of Houston, 1994-1996

ACADEMIC
EXPERIENCE

University of Texas - Houston, Graduate School of Biomedical Sciences
University of Texas M. D. Anderson Cancer Center
Houston, Texas USA

Predoctoral Fellow/GRA - Dept. of Epidemiology **Aug. 1999 - May 2005**

Working towards graduate education in bioinformatics and cancer prevention. Developing microarray simulation engine to test the robustness of image and statistical analyses under various levels of experimental noise. Applying stellar photometric model towards microarray image analysis. Developed Java imaging software for microarray image analysis. Analyze DNA sequences for the detection of mutations in Peutz-Jeghers syndrome and infer impact of mutations through homology-based protein modeling.

University of Houston
Institute for Molecular Design
Houston, Texas USA

Research Assistant - Chemistry Dept. **June 1991-June 1996**

Studied the impact of long-range electrostatic effects of solvents and ions on protein structure through large-scale molecular dynamics simulations of myoglobin. Worked on developing topology and force-field parameters for ESP (Extended Systems Program), an in-house molecular dynamics package.

PROFESSIONAL
EXPERIENCE

University of Alabama-Birmingham
Department of Biostatistics
Section on Statistical Genetics
Birmingham, Al. USA

Postdoctoral Scholar **May 2005 - present**

Research will involve developing and investigating mathematical and statistical methods for proteomic and genomic data.

University of Texas M. D. Anderson Cancer Center
Dept. of Epidemiology
Houston, Tx. USA

Programmer Analyst II **Oct. 1998 - Aug. 1999**

Developed client-server Java applications focused on integrating epidemiological and microarray data. As part of the informatics group, I also developed and maintained databases for a variety of research projects.

Visual Numerics, Inc.
Houston, Tx. USA

Consulting Engineer **Jan. 1998 - July 1998**

Responsibilities involved building applications for specific consulting projects. Applications involved distribution of graphics on the internet. Majority of work

revolved around developing applications using PV-WAVE in conjunction with Java.

Associate Software Engineer - Web Products Division **June 1997 - Dec. 1997**

Worked on developing Java based applications. Majority of development focused on SmartTable, an application which converts Excel spreadsheets into Java applets.

Associate Consulting Engineer

June 1996 - June 1997

Responsibilities included developing prototypical/consulting applications for customers using PV-WAVE, a 4GL visualization and data analysis package and IMSL Numerical Libraries.

PUBLICATIONS

Chen, L.L., **Sabripour, M.**, Andtbacka, R.H., Patel, S.R., Feig, B.W., Macapinlac, H.A., Choi, H., Wu, E.F., Frazier, M.L., Benjamin, R.S. (2005) Imatinib resistance in gastrointestinal stromal tumors.

Curr Oncol Rep., **7**, 293-299.

Chen, L.L., **Sabripour, M.**, Wu, E., Corley, L.J., Prieto, V.G., Fuller, G.N., Frazier, M.L. (2005) A mutation-created novel intra-exonic pre-mRNA splicing site causes constitutive activation of KIT in human gastrointestinal stromal tumors

Oncogene, **24**, 4271-4280.

Amos, C.I., Keitheri-Cheteri, M.B., **Sabripour, M.**, Wei, C., McGarrity, T., Seldin, M.F., Nations, L., Lynch, P.M., Fidler, H.H., Friedman, E., and Frazier, M.L. (2004) Genotype-Phenotype Correlations in Peutz-Jeghers Syndrome.

Journal of Medical Genetics, **41**, 327-333.

Costello, T.J., Swartz, M.D., **Sabripour, M.**, Gu, X., Sharma, R., Etzel, C.J. (2003) Use of tree-based models to identify subgroups and increase power to detect linkage to cardiovascular disease traits.

BMC Genet., **24** Suppl 1:S66.

Wei, C., Amos, C.I., Rashid, A., **Sabripour, M.**, Nations, L., McGarrity, T.J., Frazier, M.L. (2003) Correlation of staining for LKB1 and COX-2 in hamartomatous polyps and carcinomas from patients with Peutz-Jeghers syndrome.

J Histochem Cytochem. **51**, 1665-72.

ABSTRACTS

Sabripour, M., Amos, C. I., Coombes, K. R. (June 2003) Application of Stellar Photometry to the Analysis of Microarray Images

Intelligent Systems for Molecular Biology

Brisbane, Australia

Costello, T.J., Swartz, M.D., **Sabripour, M.**, Gu, X., Sharma, R., Etzel, C.J. (Nov. 2002)

Use of tree-based models to identify subgroups and increase power to detect linkage to cardiovascular disease traits.

International Genetic Epidemiology Society/Genetic Analysis Workshop 13
New Orleans, Louisiana USA

PRESENTATIONS *Microarray Image Analysis on a Java Platform*
Microarray Research Coordination Retreat
Mohonk Mountain House, New York USA
Sept. 2001

SOCIETY International Society for Computational Biology

MEMBERSHIPS

COMPUTER SKILLS

- Statistical Packages: R, S-Plus, SAS, Stata
- Mathematical Packages: Matlab, PV-WAVE, MuPAD, GSL, IMSL
- Languages: Java, C++, C, Perl, Fortran, Pascal
- Applications: Consed/Phred/Phrap/Polyphred, CHARMM, GROMACS, Swiss-PDB Viewer
- Operating Systems: Unix/Linux, Windows

REFERENCES Available upon request.