

BIOGRAPHICAL SKETCH

NAME Richard Judson	POSITION TITLE Bioinformatician		
eRA COMMONS USER NAME			
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Rice University, Houston TX	BA	1981	Chemistry / Physics
Princeton University, Princeton NJ	MA	1984	Chemistry
Princeton University, Princeton NJ	Ph.D.	1988	Chemistry
University of Houston	Post-Doc	1988-1989	Chemistry / Physics

A. POSITIONS and HONORS**Research and Professional Experience:**

2006-Present	Bioinformatician, National Center for Computational Toxicology, USEPA, RTP NC
2005-2006	President, GAMA BioConsulting, Guilford CT
2001-2005	Senior Vice President, Chief Scientific Officer, Genaissance Pharmaceuticals, New Haven CT
1999-2001	Senior Vice President, Informatics, Genaissance Pharmaceuticals, New Haven CT
1997-1999	Group Leader, Bioinformatics, CuraGen Corp., New Haven, CT
1990-1996	Senior Member Technical Staff, Sandia National Laboratories, Livermore, CA
1981-1983	CRT Process Engineer, Tektronix, Inc., Beaverton, OR

Selected Invitations at National & International Symposia:

CHI Integrated Bioinformatics (Zurich), 1/02 "Haplotype Analysis"

Indiana University-Perdue University Indianapolis, Wiley lecture in Computational Chemistry, 10/02, "Informatics From Chem to Bio: The Intersection of Science, Engineering, Medicine, and Computing"

Princeton University, 10/02 "Open Problems in Genomics, Bioinformatics and Medicine"

American Heart Association Scientific Sessions 6/03 "Apolipoprotein E Haplotypes are Associated with Baseline Levels and Statin-Induced Decreases in C-Reactive Protein"

BIOPHEX 2004 (Toronto), 9/04 "Regulatory Issues in Pharmacogenetics Testing"

Michigan State University Department of Radiology, 6th Annual Molecular Imaging Workshop, 7/05 "Pharmacogenomics of Statin Response"

IBC Diagnostic Biomarkers, 12/05 (Cambridge MA) "Technical, Business and Regulatory Challenges to The Development of Drug / Genetic Test Combinations"

Pfizer Conference on Long QT Issues in Drug Development (Philadelphia), 9/05 "Using Genetic Testing to Manage Risks in Thorough QT Trials"

Molecular Diagnostics and Personalized Medicine (Boston), 9/05 "Technical, Business and Regulatory Challenges to the Development of Drug / Genetic Test Combinations"

EPA Environmental Information Symposium (Savannah), 12/06 "Developing Computer Systems and Databases for High Throughput Toxicity Testing Prioritization"

TRAC 2007 (Cincinnati), 4/07 "ACToR: Aggregated Computational Toxicology Resource"

EPA Science Forum (RTP, NC), 5/07 "Computational Toxicology - Where is the Data?"

University of Louisville, Center for Bioinformatics (Louisville KY), 6/07 "Computational Toxicology and Chemical Prioritization"

International Society for Exposure Analysis Annual meeting (Durham NC), 10/07, "ACToR: Aggregated Computational Toxicology Resource"

Selected Assistance/Advisory Support to the Agency:

2007 – Present: Member of EPA/ORD Genomics Task Force, responsible for data management strategy
2007: Lecturer for Genomics Training Course developed for OPPTS
2007 – Present: PI for ACToR (Aggregated Computational Toxicology Resource) Project
2007: Session Co-Chair for 2007 EPA Science Forum

B. SELECTED PUBLICATIONS (selected from 60 total).

- R. Judson, J.C. Stephens, A. Windemuth, "Tracking the Causative Genetic Variant: A Gene-based Haplotype Approach", Conference Proceedings "Genome Targets to Drug Candidates", London November 29 (1999).
- P. Uetz, L. Giot, G. Cagney, T. A. Mansfield, R. S. Judson, J. R. Knight, D. Lockshon, V. Narayan, M. Srinivasan, P. Pochart, A. Qureshi-Emili, Y. Li, B. Godwin, D. Conover, T. Kalbfleisch, G. Vijayadamodar, M. Yang, M. Johnston, S. Fields, J. Rothberg, "A Comprehensive Analysis of Protein-protein Interactions in *Saccharomyces Cerevisiae*", *Nature*, Vol. 403 623 (2000).
- R. Judson, J. C. Stephens, A. Windemuth, "The Predictive Power of Haplotypes in Clinical Response", *Pharmacogenomics*, Vol. 1 15 (2000).
- C. M. Drysdale, D. McGraw, C. B. Stack, J. C. Stephens, R. S. Judson, K. Nandabalan, K. Arnold, G. Ruano, S. Liggett, "Complex Promoter and Coding Region, Beta(2)-Adrenergic Receptor Haplotypes Alter Receptor Expression and Predict *In Vivo* Responsiveness", *Proc. Nat. Acad. Science, USA*, Vol. 97 10483-10488 (2000).
- J. C. Stephens, J. A. Schneider, D. A. Tanguay, J. Choi, T. Acharya, S. E. Stanley, R. Jiang, C. J. Messer, A. Chew, J.-H. Han, J. Duan, J. L. Carr, M. S. Lee, B. Koshy, . M. Kumar, G. Zhang, W. R. Newell, A. Windemuth, C. Xu, T. S. Kalbfleisch, S. Shaner, K. Arnold, V. Schulz, C. M. Drysdale, K. Nandabalan, R. S. Judson, G. Ruano, G. F. Vovis "Haplotype Variation and Linkage Disequilibrium in 313 Human Genes", *Science*, Vol. 293, 489-493 (2001).
- R. Judson, B. Salisbury, J. Schneider, A. Windemuth and J. C. Stephens, "How many SNPs does a genome-wide haplotype map require?", *Pharmacogenomics*, Vol. 3 1-13 (2002).
- R. Judson, "Using multiple drug exposure levels to optimize power in pharmacogenetic trials", *Journal of Clinical Pharmacology*, Vol. 44 816-824 (2003).
- Z. Shen, R. Judson, R. Tracy, T. Kalbfleisch, "Performance Tuning of Java-based application development for clinical pharmacogenomics associations", *PharmaSUG Proceedings*, Miami Florida May 4-7 (2003).
- R. Jiang, J. Duan, A. Windemuth and J. C. Stephens, R. Judson, C. Xu, "Genome-wide evaluation of public SNP databases", *Pharmacogenomics*, Vol. 4 779-789 (2003).
- B. Winkelmann, M. Hoffman, M. Nauck, A. Kumar, K. Nandabalan, R. Judson, B. Boehm, A. Tall, G. Ruano, W. Marz, "Haplotypes of the cholesterol ester transfer protein gene predict lipid-modifying response to statin therapy", *The Pharmacogenomics Journal*, Vol. 3 284-296 (2003).
- A. Windemuth, M. Kumar, K. Nandabalan, B. Koshy, C. Xu, M. Pungliya, R. Judson "Genome-wide Association of Haplotype Markers to Gene Expression Levels", in "The Genome of Homo sapiens" (Cold Spring Harbor Symposia on Quantitative Biology LVIII) (2004).
- R. Judson, C.D. Brain, B. Dain, A. Windemuth, G. Ruano, C. Reed, "New and confirmatory evidence of an association between APOE genotype and baseline C-reactive protein in dyslipidemic individuals", *Atherosclerosis*, Vol. 177, 345-351 (2004).
- R. Judson, A. Moss, "Pharmacogenomics in drug development: when and how to apply", in *Cardiac Safety in clinical research and drug development, practical guidelines*, J. Morgenroth & I. Gussak, Eds. (Humana Press 2005).
- M.J. Ackerman. I. Splawski, J.C. Makielski, D.J. Jester, M.L. Will, K.W. Timothy, M.T. Keating, G. Jones, M. Chadha, C.R. Burrow, J.C. Stephens, C.X. Xu, R. Judson, M.E. Curran "Spectrum and prevalence of cardiac sodium channel variants among Black, White, Asian and Hispanic individuals: Implications for arrhythmogenic susceptibility and Brugada/Long QT syndrome genetic testing", *Heart Rhythm*, Vol. 1, 600-607 (2005).
- C. Reed, M. Kalnik, K. Rakin, M. Athanasiou, R. Judson, "Restoring Value to Stalled Phase II Compounds: The Case for Developing a Novel Compound for Depression Using Pharmacogenetics", *Pharmacogenomics*, Vol. 6, 95-100 (2005).

Principal Investigator/Program Director (Last, First, Middle): Judson, Richard S.

- R. Judson, B. Salisbury, "Technologies for Nutrigenomic Association Studies", in Nutrigenomics: The Future of Integrative Metabolism, Eds: B. German, S. Watkins, M. Roberts, (In Press, Elsevier Press, 2006).
- R. Judson, B. Salisbury, C. Reed, M. Ackerman, "Pharmacogenetics in Thorough QT Trials", Molecular Diagnosis & Therapy, Vol. 10, 153-162 (2006).
- R. Judson, "Pharmacogenetics in Drug Development and Research" in Electrical Diseases of the Heart: Genetics, Mechanisms, Treatment, Prevention edited by Gussak, Antzelevitch, Wilde, Friedman, Ackerman and Shen (2007).

ISSUED PATENTS

- U.S. Patent 6,586,183 – Association of Beta 2-Adrenergic Receptor Haplotypes with Drug Response
- U.S. Patent 6,931,326 – Methods for Obtaining and Using Haplotype Data
- U.S. Patent 6,944,767 – Methods and Apparatus for Ensuring the Privacy of Personal Medical Information
- U.S. Patent 7,058,517 – Methods for Obtaining and Using Haplotype Data (2)
- U.S. Patent 7,250,258 – CDK Genetic Markers Associated with Galantamine Response