

Heather Piowar

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Updated August 2008

Research Passions *Improving biomedical research progress by leveraging the full value of data resources.*
Current focus: evaluating data sharing and reuse policies and behaviors
Related interests: natural language processing, machine learning, data mining, bibliometrics, simulation, genomics, personalized cancer therapy, open science, ...

Education **University of Pittsburgh** **Pittsburgh, PA**
Doctoral student anticipating graduation in 2010
Masters of Science in 2006
Department of Biomedical Informatics, concentration in Bioinformatics, GPA 3.9/4.0

Massachusetts Institute of Technology **Cambridge, MA**
Bachelors of Science in 1995, Masters of Engineering in 1996
Majored in Electrical Engineering and Computer Science, GPA 4.9/5.0
Concentration in Digital Signal Processing (DSP)
Humanities and mathematics each comprised 20% of curriculum

Research History & Accomplishments
Journal articles Piowar, Michael J Becich, Howard Bilofsky, Rebecca S Crowley (2008) Towards a data sharing culture: Incentives for leadership from Academic Health Centers PLoS Medicine [in press]
Piowar, Roger S Day, Douglas B Fridsma (2007) Sharing Detailed Research Data Is Associated with Increased Citation Rate PLoS ONE 2: 3. e308

Conference papers Piowar, Wendy W Chapman (2008) Linking database submissions to primary citations with PubMed Central In: BioLINK 2008.
Piowar, Wendy W Chapman (2008) Identifying Data Sharing in Biomedical Literature In: AMIA 2008 Annual Symposium [to appear]
Piowar (2008) Prevalence and Patterns of Biomedical Research Data Reuse In: JCDL 2008 Doctoral Consortium.
Piowar, Wendy W Chapman (2008) A review of journal policies for sharing research data In: ELPUB 2008.

Posters Piowar, Wendy W Chapman (2008) Envisioning a Biomedical Data Reuse Registry AMIA 2008 Annual Symposium [to appear]
Piowar, Wendy W Chapman (2008) Prevalence and Patterns of Microarray Data Sharing PSB 2008
Piowar, Douglas B Fridsma (2007) Examining the uses of shared data ISMB 2007

Invited Presentations (2008) Why study Data Sharing? (+ why share your data) DBMI Colloquium, University of Pittsburgh
(2007) Sharing Detailed Research Data is Associated with Increased Citation Rate NLM Trainee Conference, Stanford University

Recent Awards & Grants (2008) DBMI ELPUB travel grant
(2007) Doctoral Comprehensive Exam passed with High Honors
(2007) NSF ISMB travel grant
(2007) Best Trainee Paper Award, Department of Biomedical Informatics, University of Pittsburgh
(2005) NLM Biomedical Informatics training fellowship

Teaching Experience (2007) Series of informal Brown Bag Skill Seminars on various topics (RSS, Entrez tools, Excel tricks)
(2006, 2007) DBMI Intro to Biomedical Informatics course lecture on Informatics in Industry

Service (2006-2008) DBMI Student Representative to Admissions and Training Program Core Committees

Online Presence Self-archived research papers and data: <http://www.dbmi.pitt.edu/piowar>
Research blog: <http://researchremix.wordpress.com>

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Industrial Experience & Accomplishments 2001 – 2005

Precision Therapeutics, Inc.

Pittsburgh, PA

35 (now >60) people, provides personalized cancer therapy information to oncologists
Consultant, 2004-2005

- Contributed to a new, strategically critical bioinformatics algorithm
- Director of Clinical Informatics, 2003-2004
- Co-led the design and implementation of all clinical trials analysis
- Senior Systems Developer, 2001-2003
- Designed, implemented, and supported HIPAA-compliant intranet web applications for corporate data viewing and editing, using Java/J2EE and Oracle
 - Contributed ideas, analyses, and tools for use throughout the organization

1998 – 2001

Vocollect, Inc.

Pittsburgh, PA

30 (now >350) people, develops portable voice interface computers

Senior Software Developer, 1998–2001

- Ported an embedded system to Windows CE and continued to develop and maintain C and assembly code, as a member of a small team
- Improved the speech recognition accuracy of our product using C++, as a member of a small team
- Co-led a skunk works project which envisioned and prototyped our real-time enterprise management product as a web application
- Contributed to department learning lunches and company vision statement

Manager of Customer Service, 1999

- Managed a 12-person Customer Service team for 6 months

1996 – 1998

Ascend Communications, Inc. (now Lucent)

Alameda, CA

200 people, develops internet remote access concentrators

Software Engineer, 1996–1998

- Responsible for implementation of Japanese mobile phone data service software, working directly with NTT. Deployed with no known bugs
- Worked to develop, as a member of a small team, a competitor to Rockwell's 56K embedded concentrator modem chips

1995 (6 months)

Schlumberger Austin Research Center

Austin, TX

1994 (3 months)

300 people, refined tools used for oil exploration and extraction

1993 (3 months)

Student Intern, 1 year

- Developed an adjustable mathematical model of the Schlumberger Digital Telemetry system (Master's thesis)

Computational Experience

Programming languages and statistical packages:

- Active: Python, R, Weka
- Previous: Java, Lisp, C, Analog Devices DSP assembly code, StrongARM assembly code, Matlab, Perl, PHP, Visual BASIC, SQL,...

Operating systems: Mostly Windows. A little Unix, OS/X, VMS, embedded realtime OSs.

Professional Development & Memberships

International Society for Computational Biology, 2004 – present

American Medical Informatics Association, 2004 – present

Attended multiple seminars on grant writing, public speaking, publishing, and teaching.

Personal Interests

Spending time with my husband and young daughter, traveling, long-distance cycling, walking, reading, brainstorming solutions, learning new things
Canadian Citizen, USA Permanent Resident.