
BIOGRAPHICAL SKETCH

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NAME Richard H. Lathrop	POSITION TITLE Professor		
eRA COMMONS USER NAME rlathrop	Department of Computer Science		
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Reed College, Portland, OR	B.A.	1978	Mathematics
MIT, Cambridge, MA	S.M.	1983	Computer Science
MIT, Cambridge, MA	E.E.	1983	Electrical Engineering
MIT, Cambridge, MA	Ph.D.	1990	Artificial Intelligence
MIT, Cambridge, MA	Post-doc	1990-2	Computational Biology

Professional Experience:

4/1974-5/1975 Production Control Specialist/Programmer. U.S. Postal Service (Anchorage, AK)
5-10/1975, 5-9/1976 Business Programmer/Analyst. Alaskan Data Systems (Anchorage, AK)
8/1978-4/1979 Data Telecommunications Programmer. Progress Electronics (Portland, OR)
1/1980-5/1980 Business Software Consultant. Solid State Equipment, Ltd. (Lower Hutt, New Zealand)
6-9/1982, 6-9/1983 Summer Staff. Hewlett-Packard Engineering Productivity Division (Cupertino, CA)
6/1984-8/1991 (summers) Software Engineer/Consultant. A.M.I. VLSI CAD Research Laboratory (S. SF, CA)
5/1989-12/1993 Co-founder, Senior Scientist, then Consultant. Arris Pharmaceutical Corp. (SF, CA)
10/1992-6/1995 Research Scientist. Massachusetts Institute of Technology (Cambridge, MA)
7/1995-present Assistant, Associate, Full Professor. University of California, Irvine (Irvine, CA)
11/2001-present Member, NIH Study Section ZRG1/SSS-H, BDMA, and BCMB-Q; Chair of BDMA, 2003-4.
Distinguished Editorial Panel for 2nd-level review of Challenge Grants, 2009.

Honors and Accomplishments:

Licensed as a Nuclear Reactor Operator by the U.S. Nuclear Regulatory Commission (4/1977).
Elected to Phi Beta Kappa (the national academic honor society) (6/1978);
National Science Foundation Graduate Fellowship (8/1980);
Best Paper Award, International Design Automation Conference, first author (7/1987);
Cover article, *Communications of the ACM* (first author) (11/1987);
Co-founding scientist of Arris Pharmaceutical Corp. Co-inventor of US Patent No. 5,526,281 (9/1989);
MIT EE&CS George M. Sprowl Departmental award for excellence in Ph.D. thesis (\$1,250).
Thesis was nominated by MIT for the ACM Distinguished Doctoral Dissertation Award (5/1990);
Cover article, *J. Molecular Biology*, first author (2/1996);
Founding Board of Directors, founding Treasurer, of Intl Society for Computational Biology (6/1996);
UCI/ICS Outstanding Faculty Award for teaching and research (2/1997);
Scientific Advisory Board of CombiChem, Inc., a drug discovery company (7/1997);
UCI Excellence in Teaching Award for undergraduate teaching (6/1998);
Innovative Application Award, AAAI/IAAI Conference, first author (7/1998);
Cover article, *AI Magazine*, first author (4/1999);
Biography listed in *Who's Who in America'2001* (11/1999);
Scientific Advisory Board of GeneFormatics, Inc., a genomics bioinformatics company (5/2001);
Scientific Advisory Board of Univ. of Colorado, Denver, Center for Computational Biology (6/2001);
Editorial Board, *J. Molecular and Cellular Proteomics*. (10/2001);
Best Paper Award, International Genome Informatics Conference, first author (12/2001);
Biography listed in *Who's Who in the World'2002* (1/2002);
Editorial Board, *IEEE Intelligent Systems*(3/2002);
UCI Chancellor's Award for Excellence in Fostering Undergraduate Research (5/2003);

Finalist, U.S. National Science Foundation Distinguished Teaching Scholar award (1/2004);
Co-founding scientist of CODA Genomics, Inc. Co-inventor of US Patent No. 7,262,031 (4/2004);
UCI Innovation Award (11/2005);
Appreciation Award, Equity Advisor, UCI Advance Program (1/2006);
Dean's Award for Undergraduate Teaching (2/2009);
UCI Professor of the Year, Celebration of Teaching awards (5/2009);
Elected to Board of Directors, International Society for Computational Biology (ISCB) (7/2009);
Distinguished Editorial Panel member for second-level review of NIH Challenge Grants (7/2009).

Selected Bibliography (from more than 80 items in the computer science and biomedical literatures):

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- Baxter, K., Steeg, E., Lathrop, R.H., Glasgow, J. and Fortier, S. (1996) From Electron Density and Sequence to Structure: Integrating Protein Image Analysis and Threading for Structure Determination. *Proc. International Conference on Intelligent Systems for Molecular Biology*. pp. 25-33
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- Smith, T.F., Lathrop, R.H. and Cohen, F.E. (1996) The Identification of Protein Functional Patterns. *Integrative Approaches to Molecular Biology*. eds. Collado-Vides, J., Magasanick, B., and Smith, T.F., MIT Press.
- Smith, T.F., Lo Conte, L., Bienkowska, J., Rogers, B., Gaitatzes, C., and Lathrop, R.H. (1997) The Threading Approach to the Inverse Protein Folding Problem. *Proc. International Conference on Computational Molecular Biology*. pp. 287-292.
- Dietterich, T.G., Lathrop, R.H. Lozano-Perez, T. (1997) Solving the Multiple-Instance Problem With Axis-Parallel Rectangles. *Artificial Intelligence* **89**:31-71.
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- Lathrop, R.H., Rogers, R.G. Jr., Bienkowska, J., Bryant, B.K.M., Buturovic, L.J., Gaitatzes, C., Nambudripad, R., White, J.V., and Smith, T.F. (1998) Analysis and Algorithms for Protein Sequence-Structure Alignment, in *Computational Methods in Molecular Biology*, eds. Salzberg, S., Searls, D., Kasif, S., Elsevier Science, Amsterdam, 1998.
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- Glasgow, J., Littlejohn, T., Major, F., Lathrop, R., Sankoff, D., Sensen, C.. (Eds.) (1998) *Proceedings, Sixth International Conference on Intelligent Systems for Molecular Biology*, AAAI Press, Menlo Park.
- Lathrop, R.H., Casale, M., Tobias, D.J., Marsh, J.L., and Thompson, L.M. (1998) Modeling Protein Homopolymeric Repeats: Possible Poly Glutamine Structural Motifs For Huntington's Disease. *Proc. Intl. Conf. on Intelligent Systems and Molecular Biology*, Montreal, Quebec, Canada, June 28 – July 1, pp. 105-114.
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