

Robert Christopher Lacher: Florida State University

Personal: Born October 14, 1940, in Atlanta, Georgia; parents Sarah R. and the late Hermann J. Lacher of Athens, Georgia; married to the former Kathleen Teagle of North Palm Beach, Florida; three children (none living at home).

Education: B.S., University of Georgia, 1962; M.A., University of Georgia, 1964; Ph.D. (Mathematics), University of Georgia, 1966; Major Professor: James C. Cantrell; Dissertation: Some Conditions for Manifolds to be Tame. NDEA Fellow, 1962-65; NSF Graduate Fellow, 1965-66; Institute for Advanced Study Fellow, 1967-68; Alfred P. Sloan Fellow, 1970-72.

Memberships: Phi Beta Kappa, Phi Kappa Phi, Sigma Xi, American Mathematical Society, Association of Members of the Institute for Advanced Study, Association for Computing Machinery, Institute of Electrical and Electronic Engineers, IEEE Computer Society, American Chemical Society (inactive), International Neural Networks Society, Florida State University President's Club.

R.C. Lacher (Chris Lacher) is Professor of Computer Science at Florida State University. His research interests include geometric topology, macromolecular modeling, neural computation, advanced technology engineering, and trustworthy systems engineering. He has authored over 100 refereed articles and 3 books, given over 70 invited talks, and is a principal holder of two patents. He served as Chair the Department of Computer Science for the seven year period ending in August, 1998. Dr. Lacher has served on the Editorial Boards of IEEE Transactions on Neural Networks (1992-96), Neurocomputing - An International Journal (1994-97), and International Journal of Computational Intelligence and Organizations (1995-97). He is a founding member of the Board of Directors of Tallahassee Freenet, the first public Internet service provider in Florida, and still free.

Dr. Lacher has taught virtually every undergraduate mathematics and computer science course at FSU and specialty graduate courses in both departments. He has directed 8 Dissertations in both Computer Science (7) and Mathematics (1), along with numerous Masters theses and projects. He has judged science fairs and been a Partner in Excellence with local schools. He has served on numerous departmental, university, and extramural committees.

Dr. Lacher regularly serves as a reviewer for national funding agencies, most recently on the NIH Human Brain Project Review Panel (April 1996) and on the NSF Review Panel for Instrumentation Grants for Research in Computer and Information Science and Engineering and Office of Cross-Disciplinary Activities (CISE/CDA) (October 1996).

Dr. Lacher has been a Principal Investigator on 24 research grants the National Science Foundation, US Office of Naval Research, Alfred P. Sloan Foundation, Florida High Technology and Industry Council, US Department of Energy, and Florida Department of Education.

Dr. Lacher has been a principal in the production of several major software packages under extramural support, including CROSSWALK (ONR, 1987), PolyStruct (ONR, 1990), and ENBP (FHTIC, copyright 1992).

Dr. Lacher holds US Patent 5,524,176 [issued June 1996] for the invention FEN Learning Architecture (co-holder K. Narita) and US Patent 5,649,066 [issued July 1997] for the invention ExNet Machine Learning process (co-holders S.I. Hruska and D.C. Kuncicky).

Dr. Lacher is currently the Director of the FSU Office for Distributed and Distance Learning.

Publications

R.C. Lacher, Loop entanglement in a constrained liquid region: simulation data, simplified models, and general measurement heuristics, *Macromolecules* **20** (1987) 3054-3059.

R.C. Lacher, S.I. Hruska, and D.C. Kuncicky, Backpropagation learning in expert networks, *IEEE Transactions on Neural Networks* **3** (1) (1992) 62-71.

R.C. Lacher, Expert networks: Paradigmatic conflict, technological rapprochement, *Minds and Machines* **3** (1993) 53-71.

K.D. McCroan and R.C. Lacher, Region coloring, edge coloring, and scan-conversion of maps, *Journal of Computational Geometry and Applications* **4** (4) (1994) 423-455.

Allan Egbert, Jr, and R.C. Lacher, Building EMYCIN expert systems from raw data sources, *Proceedings International Conference on Artificial Intelligence*, CREA Press, Las Vegas, 1999, pp 571-573.