EDUCATIONAL BACKGROUND

- SM 1971 Sloan School of Management, Massachusetts Institute of Technology Concentration in System Dynamics and Public Sector Systems Analysis
- **SB** 1969 Sloan School of Management, Massachusetts Institute of Technology Concentration in System Dynamics

PROFESSIONAL EXPERIENCE

1980-INDEPENDENDENT MANAGEMENT CONSULTANT AND CREATOR OF LEARNING ENVIRONMENTS Specializing in Strategic Management and Planning for Organizations in Health Care Business and Education: Development of System Dynamics models for

Care, Business, and Education; Development of System Dynamics models for organizations and for public policy problems; Creation of Learning Environments that help people in these fields deal with change.

1969-1980 PUGH-ROBERTS ASSOCIATES, INC. DIRECTOR, HEALTH AND SOCIAL SYSTEMS AREA Managed all projects and professional activities for a six person staff concentrated on Strategic Planning and Management in Health Care and Human Services organizations.

BOOKS <u>The Persistent Poppy: A Computer-Aided Search for Heroin Policy</u>, with G. Levin and E. Roberts, Cambridge, Ballinger Publishing, 1975

<u>Dynamics of Human Service Delivery</u>, with G. Levin, E. Roberts, N. Roberts, D. Kligler, and J. Wilder, Cambridge, Ballinger Publishing, 1976

<u>Reorienting Health Services: Applications of a Systems Approach</u>, with C. O. Pannenborg, K. Barnard, and A. van der Werff, New York, Plenum Press, 1984

ARTICLES "Narcotics and the Community: A System Simulation", with G. Levin and E. Roberts, <u>American Journal of Public Health</u>, June, 1972

"Measuring and Improving the Productivity of Police Patrol", with L. Riccio, Journal of Police Science and Administration, June, 1974

"Evaluating HMO Policies with a Computer Simulation Model", with S. Miller, <u>Medical Care</u>, August, 1974

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"Strategic Modeling for Health Care Managers", with E. Roberts, <u>Health Care</u> <u>Management Review</u>, Winter, 1976

"Projecting a Teaching Hospital's Future Utilization" with B. Forsyth et al, Journal of Medical Education, October, 1976

"A Simulation Model for "What If?" Questions in Plan Development", with D. Henderson-James, <u>American Journal of Health Planning</u>, July1977

"System Dynamics Modeling in Health Care", Simuletter, Summer, 1977

"Prevention and Rehabilitation as a Means of Cost-Containment: The Example of Myocardial Infarction", with W. Luginbuhl et al, <u>Journal of Public Health Policy</u>, June, 1981

"A System Dynamic View of Substance Abuse" with G. Levin and E. Roberts in J. Lowinson and P. Ruiz (Editors) <u>Substance Abuse: Clinical Problems and</u> <u>Perspectives</u>, Baltimore, Williams and Wilkins, 1981

"Cardiovascular Disease in the Dutch Population: A Model-Based Approach to Scenarios", with W. Wils, <u>Conference on Health Care Scenarios</u>, The Hague, Netherlands, August, 1984.

"The Strategy Checkup: How Healthy is Your Strategic Plan?", with M. Klein and L. Butler, <u>Trustee</u>, January, 1990

"Mastering the Transition to Capitation", with J. Kemeny, <u>Healthcare Forum</u> Journal, May-June, 1994

"Responding to Managed Care: A Roadmap for the Therapist", with M. Dworkin, <u>Psychotherapy in Private Practice</u>, June, 1994

"Integrated Care: Fit to Be Tried", with R. Gregg, <u>Hospitals & Health Networks</u>, November, 5, 1997

"Innovation in Schools: A Model to Help Structure the Discussion and Guide the Search for Strategies", <u>Creative Learning Exchange</u>, (Acton, Ma.) 1998

"Design of Simulators to Enhance Learning: Examples from a Health Care Microworld", with C. S. Immediato, <u>International Conference of the System</u> <u>Dynamics Society</u>, Quebec City, July, 1998 "A Model of Educational Innovation", <u>International Conference of the System</u> <u>Dynamics Society</u>, Quebec City, July, 1998

"Microworlds and Generic Structures as Resources for Integrating Care and Improving Health", with C. S. Immediato, <u>System Dynamics Review</u>, Fall, 1999

"Can School Reform Get in the Way of Reforming Education? A Simulator for Exploring Reform Strategies", <u>Systems Thinking and Dynamic Modeling</u> <u>Conference</u>, Durham, NH, 2002

"Using Dynamic Simulation as a Real-World Laboratory to Better Understand Physics", <u>Systems Thinking and Dynamic Modeling Conference</u>, Durham, NH, 2002

"Using Dynamic Simulation to Teach Physics in a Real-World Context", International Conference of the System Dynamics Society, Palermo, July, 2002

"Teaching Physics with Dynamic Simulation", Science Teacher, December, 2002

"Teaching Economics to High School Students with a System Dynamics Simulator", <u>International Conference of the System Dynamics Society</u>, New York, July, 2003

"Models for Collaboration: How System Dynamics Helped a Community Organize Cost Effective Care for Chronic Illness" with J. Homer, M. Pierson, and M. Minniti, <u>International Conference of the System Dynamics Society</u>, New York, July, 2003

"A Strategy Simulator for Newspapers: Overcoming the "Silos" to Do Whole-Enterprise Planning", with V. Giuliano and M. Winnig, <u>International Conference</u> of the System Dynamics Society, New York, July, 2003

"How Do We Increase Port Security without Imperiling Maritime Commerce? Using Flight Simulators and Workshops to Begin the Discussion" with S. Conrad et al, <u>International Conference of the System Dynamics Society</u>, New York, July, 2003

"Modeling the Consequences of Major Incidents for Health Care Systems" <u>International Conference of the System Dynamics Society</u>, Oxford, England, July, 2004

"Modeling the Dynamics of Health Care Services for Improved Chronic Illness Management", with J. Homer, <u>International Conference of the System Dynamics</u> <u>Society</u>, Oxford, England, July, 2004 "Models for Collaboration: How System Dynamics Helped a Community Organize Cost Effective Care for Chronic Illness", with J. Homer, M. Pierson, and M. Minniti, <u>System Dynamics Review</u>, Fall, 2004

"SymBanc[™]: A Simulator for Microfinance Institutions", with J. Rosengard, G. Stuart, and D. Johnston, <u>International Conference of the System</u> <u>Dynamics Society</u>, Boston, Massachusetts, July, 2005

"Achieving Health Care Reform in the United States: Toward a Whole System Understanding" with J. Homer, G. McDonnell, and B. Milstein, <u>International Conference of the System Dynamics Society</u>, Boston, Massachusetts, July, 2005

"Designing Simulation-Based Learning Environments: Helping People Understand Complex Systems", <u>International Conference of the System</u> <u>Dynamics Society</u>, Boston, Massachusetts, July, 2005

"SymBanc[™]: A Simulator for Microfinance Institutions", with J. Rosengard, G. Stuart, and D. Johnston, <u>Finance for the Poor</u> (a publication of the Asian Development Bank), December, 2005

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