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*Non-academic Work Experience:*

President and Principal Consultant, **HLN Consulting, LLC**, San Diego, CA, 1997 - present

Created HLN in 1997, responding to a need for technology specialists with content experience who are able to bring independent judgment to bear on technology projects. Focusing on the health care market, and public health in particular, we specialize in a wide variety of technology planning, consulting, and research.

HLN views a successful effort as one that can balance technology, organization/politics, and resource allocation; projects are approached with an eye to creating this balance. HLN Consulting, LLC utilizes a structured and document-driven development methodology that engages the client in thoughtful dialogue from requirements definition, to specification preparation, to ultimate execution. Clients include state and local government, and non-profit organizations.

Interim Vice President for Health Information Exchange Services, **Vermont Information Technology Leaders, Inc.**, Montpelier, VT, 2008 – 2009

Responsible for the design, development, delivery, and support of technical services for Vermont's statewide Regional Health Information Organization.

Consultant, **Center for Applied Research**, Philadelphia, PA, 1997 - 2002

Actively involved in research projects for the Center, mostly focusing on technology-assisted collaboration and organizational design.

**University of Pennsylvania**, Philadelphia, PA, 1983 - 2002

*Final Position:* Senior Fellow

Over fifteen years progressive experience in general university administration and management of technology. Seven years were spent with the Office of the Dean of the Wharton School (through August 1990); the remainder with the central Division of Information Systems and Computing where responsibilities included strategic planning for technology, management of network services for the campus (including electronic mail, world wide web, authentication systems), and technical architecture development. Final position was senior technology advisor to the Vice Provost for Computing (Penn's Chief Information Officer).

*Academic Work Experience:*

Instructor, **University of California San Diego (UCSD) Extension School**, 2011 - present

Course coordinator for *Concepts in Healthcare Information Technologies I and II* in HIT Certificate Program

Research Associate, **Kay Center for e-Health Research, Claremont Graduate University**, 2009 - 2011

Involved in the research agenda of the Center, including project proposal development and execution.

Senior Fellow, **Leonard Davis Institute for Health Economics**, 1994 - 2005

Research Associate, **Leonard Davis Institute for Health Economics**, 1994 - 1997

Principal investigator on New Jersey Comprehensive Immunization Program sub-contract from the University of Medicine and Dentistry of New Jersey on a Robert Wood Johnson Foundation grant. Technical advisor on other Institute projects.

Research Fellow, **Institute for Research on Higher Education**, 1988 - 1993

Perform financial modeling and policy analysis on a variety of student aid and finance projects. Actively involved in research agenda of the Institute.

Lecturer, **Department of Decision Sciences, The Wharton School**, 1984 - 1987

Teach introductory laboratory course in computer science for undergraduates using Apple Macintosh personal computer.

*Sponsored Research:*

Senior investigator and technical director on the Philadelphia Interactive Business Network, a \$600,000 matching grant program funded by the National Telecommunications and Information Administration (NTIA) to The Enterprise Center, Phila., PA.

Senior investigator on the Remote Dental Consultation Project, sponsored by the National Library of Medicine, to develop and prototype a remote clinical consultation system (School of Dental Medicine, University of Pennsylvania).

Principal investigator on New Jersey Comprehensive Immunization Program, a \$1.28 million sub-contract from the University of Medicine and Dentistry of New Jersey on a Robert Wood Johnson Foundation grant.

Principal investigator on Statewide Immunization Information System, a \$335,000 continuation of the above contract funded by the Jersey Department of Health and Senior Services and the Centers for Disease Control and Prevention.

*Award:*

**Commissioner's Award, New Jersey Department of Health and Senior Services**, "in recognition of creativity, perseverance, and foresight in the development of a Nationally Recognized Statewide Immunization Information System." Awarded at the Annual Conference of State and Local Health Officers of New Jersey, Princeton, NJ, October 9, 1996.

*Book:*

*The Business of Higher Education: The American University and Its Banking Function*. New York: Garland, (1995).

*Articles:*

with Christopher Shull and Daniel Updegrave, *Blood and Guts on the Trail to Distributed Computing*, CAUSE/EFFECT, 18(3), Fall 1995.

with Susan M. Salkowitz, *Technology Strategies for a State Immunization Information System*, American Journal of Preventive Medicine supplement on All Kids Count, 13(2), April, 1997.

with Daryl Chertcoff, *Web Security Solutions: Central Authentication for Locally Developed Applications*, CAUSE/EFFECT, 22(3), Fall 1999.

*Rising to the Challenge: Strategies for the New Healthcare Enterprise*, Journal of Healthcare Information Management, 17(3), Summer 2003.

*Information Security Strategies for Healthcare: Part 1*, Journal of Healthcare Information Management, 18(2), Spring 2004.

*Information Security Strategies for Healthcare: Part II*, Journal of Healthcare Information Management, 18(3), Summer 2004.

*Information Security Strategies for Healthcare – Defining the Roadmap: Part 3*, Journal of Healthcare Information Management, 18(4), Fall 2004.

with Vikki Papadouka, et al, *Integrating the New York Citywide Immunization Registry and the Childhood Blood Lead Registry*, Journal of Public Health Management and Practice, Nov 2004 Supplement.

*The New Alphabet Soup*, Journal of Healthcare Information Management, 19(3), Summer 2005.

*The New Alphabet Soup: Models of Data Integration, Part 1*, Journal of Healthcare Information Management, 20(1), Winter 2005.

*The New Alphabet Soup: Models of Data Integration, Part 2*, Journal of Healthcare Information Management, 20(2), Spring 2006.

*The New Alphabet Soup: Models of Application Integration*, Journal of Healthcare Information Management, 20(3), Summer 2006.

*Strategies for Person Data Matching and De-duplication*, Journal of Healthcare Information Management, 21(3), Summer 2007.

with Michael Berry, *Privacy Consents and HIE: How IHE's Basic Patient Privacy Consents Profile Helps Manage Privacy in HIE*, Journal of AHIMA, (79)4, April 2008.

*Service-Oriented Architecture in Public Health: Interoperability Case Studies*, Journal of Health Information Management, 24(2), Spring 2010.

*Clinical Summaries and Meaningful Use: A Primer*, Journal of Healthcare Information Management, 25(1), Winter 2011.

#### *Book Review:*

with Daniel Updegrave, *Five Books on Computer Security*, CAUSE/EFFECT, 14(4), Winter 1991.

#### *White Papers:*

with contributions by Susan M. Salkowitz, *Evolution of Public Health Information Systems: Enterprise-wide Approaches*, July 2007.

*Guide to Immunization-related Electronic Data Exchange*, May 2008.

*Effective On-line Collaboration*, May 2008.

#### *Conference Papers:*

with M. Katie McGee, *Desktop Technology Frontier: Deploying an Office of NeXT Workstations as the Administrator's Workstation of the Future*, **Proceedings of the 1992 CAUSE Annual Conference**, Dallas, Texas, December 1992.

with Robin Beck, Janet Gordon, and Linda May, *Architecture and Reengineering: A Partnership for Change at the University of Pennsylvania*, **Proceedings of the 1993 CAUSE Annual Conference**, San Diego, CA, December 1993.

with Ira Winston, *Designing and Implementing a Network Architecture Before it Becomes Obsolete*, **Proceedings of the 1994 CAUSE Annual Conference**, Orlando, FL, December 1994.

with Robin Beck, Janet Gordon, and Linda May, *Chasing the Boulder Down the Hill: Reengineering and Architecture at the University of Pennsylvania*, **Proceedings of the 1994 CAUSE Annual Conference**, Orlando, FL, December 1994.

with Dan Updegrave, *Looking to the Year 2000: Alternatives in Campus Data Networking*, **Proceedings of the 1995 CAUSE Annual Conference**, New Orleans, LA, November 1995.

with David Millar and Bill Ramirez, *Assessing Risk: Developing a Client/Server Security Architecture*, **Proceedings of the 1995 CAUSE Annual Conference**, New Orleans, LA, December 1995.

with Linda May, *Managing Collaborative Efforts on the Web*, **Proceedings of the 1996 CAUSE Annual Conference**, San Francisco, CA, December 1996.

With Linda May, Mario Moussa, and Lynn Oppenheim, *Tasting as You Cook: Penn Restructures Computing Services*, **Proceedings of the 1996 CAUSE Annual Conference**, San Francisco, CA, December 1996.

*Web Security Solutions: Implementing a Web Security Module to Support Secure, Authenticated Applications*, **Proceedings of the 1998 CAUSE Annual Conference**, Seattle, Washington, December 1998.

*Other Presentations:*

*Penn's Project Cornerstone: Building a Principles-based Systems Architecture in Conjunction with Business Reengineering*, IngresWorld 93, Santa Clara, CA, May 1993.

with Chris Shull and Dan Updegrave, *Distributed Computing at Penn: Observations from the Not-so-bleeding Edge*, CAUSE Northeast Regional Conference, Philadelphia, PA, June 1995.

*State Immunization Information System (SIIS) Developer's Workshop: System Security Functions Presentation*, Centers for Disease Control and Prevention, Atlanta, GA, August, 1995.

*Electronic Laboratory Surveillance: System Security Functions Presentation*, Centers for Disease Control and Prevention, Atlanta, GA, February, 1996.

*Internet 101: An Overview of Internet Resources and Functionality*, Delaware Valley Healthcare Information and Management Systems Society (DVHIMSS), Philadelphia, PA, April, 1996.

*Campus Data Networking Architecture: A Process As Well as a Product*, QUESTnet 96, Townsville, Australia, July 1996.

*ResNet: Student Residence Networking at the University of Pennsylvania*, QUESTnet 96, Townsville, Australia, July 1996.

*INPHO On the Internet: A Wide-area Network Solution?*, 2<sup>nd</sup> National CDC INPHO Conference, Atlanta, GA, September, 1996.

with Susan M. Salkowitz, *Promoting the Internet in Public Health: New Jersey's Experience*, American Public Health Association (APHA) 124<sup>th</sup> Annual Meeting, New York City, November 18, 1996.

*Security and Deployment Challenges of Hospital Access to Registries Through the Internet*, "All Kids Count" Annual Meeting, San Diego, California, April 3, 1997.

with Susan M. Salkowitz, Poster Session entitled *Lessons Learned About Data Standards and Quality Assurance From Pilot Immunization Registry*, 31<sup>st</sup> National Immunization Conference, Detroit, MI, May 21, 1997.

with Susan M. Salkowitz, Participation in *Developer's Demonstrations of Advances in Registry Technology*, 31<sup>st</sup> National Immunization Conference, Detroit, MI, May 21, 1997.

*The Current State of Web Privacy, Confidentiality, and Security*, American Public Health Association (APHA) 125<sup>th</sup> Annual Meeting, Indianapolis, IN, November 12, 1997.

*Standards for Web Browser Security*, "All Kids Count" Annual Meeting, New Orleans, LA, April 8, 1998.

with Susan M. Salkowitz, *The Final Chapter: Managing the Technical, Financial and Political Complexities of Immunization Registry Deployment and Sustainability*, 32<sup>nd</sup> National Immunization Conference, Atlanta, GA, July 21, 1998.

with Susan M. Salkowitz and Ruth Gubernick, *A Collaborative Approach to Systems Design for a Community-based Maternal/Child Agency Operating in a Managed Care Environment*, American Public Health Association (APHA) 126<sup>th</sup> Annual Meeting, Washington, DC, November 17, 1998.

with Susan M. Salkowitz, *Reassessing Your Registry Direction: Strategies for Moving Forward with Registry Projects*, "All Kids Count" Annual Meeting, St. Paul, MN, April 28, 1999.

*Web Security Solutions*, CUMREC99, San Antonio, TX, May 11, 1999.

with Susan M. Salkowitz, *Registry Project Assessment Cookbook*, 33<sup>rd</sup> National Immunization Conference, Atlanta, GA, June 23, 1999.

with Ruth Gubernick and Amy Wishner, *Web-based Immunization Education*, 33<sup>rd</sup> National Immunization Conference, Atlanta, GA, June 23, 1999.

with Ruth Gubernick, Susan M. Salkowitz, and JoAnne Fischer, *Successfully Using Technology to Help Community Health Advocates Ensure Quality Care in a Changing Health Care Environment*, Healthy Mothers/Health Babies National Conference, Seattle, WA, August 3, 1999.

with Ruth Gubernick, Susan M. Salkowitz, and JoAnne Fischer, *A Case Study in Addressing Maternal and Child Health Data Quality Assurance, Reporting, and Research Requirements in a Changing Health Care Environment*, American Public Health Association (APHA) 127<sup>th</sup> Annual Meeting, Chicago, IL, November 9, 1999.

*Web Architectures and Security*, All Kids Count World Wide Web and Immunization Registries Conference, Ontario, CA, February 24, 2000.

with Susan M. Salkowitz, *Registry Crystal Ball: Challenges for the Future*, 2000 Immunization Registry Conference, Newport, RI, March 28, 2000.

with Denice Stewart and M. Katie McGee, *Remote Dental Consultation System*, American Association of Dental Schools Annual Meeting "TechniFair 2000," Washington, DC, April 2, 2000.

*Bridging the Digital Divide: Building Organizational Capacity*, Bridging the Digital Divide Conference, The Enterprise Center, Philadelphia, PA, April 19, 2000.

with Amy Metroka and Susan Salkowitz, *The New York City CIR: A Registry in the Process of Re-inventing Itself*, 34<sup>th</sup> National Immunization Conference, Washington, DC, July 7, 2000.

with Vikki Papadouka and Deborah Walker, *The Development of a New Tool for Data Quality Improvement and Use of an Immunization Registry in the 21st Century*, 34<sup>th</sup> National Immunization Conference, Washington, DC, July 7, 2000.

with Susan Salkowitz, *To Web or Not to Web: Technical and Policy Considerations for the Web as an Application Deployment Environment*, Public Health Informatics and Distance Learning Conference, New Orleans, LA, August 10, 2000.

with Martha Rome and Ruth Gubernick, *New Software Tools for Recall in an Immunization Registry*, Public Health Informatics and Distance Learning Conference, New Orleans, LA, August 10, 2000.

with Susan Salkowitz, *Internet Technology in Public Health: Enhancing Practice, Enabling Achievement*, Pennsylvania Public Health Association Annual Meeting, Harrisburg, PA, October 10, 2000.

with Ruth Gubernick, Susan M. Salkowitz, and JoAnne Fischer, *Use of an Information System at a Community-based Maternal Care Agency to Help Pregnant Women Successfully Manage the Impacts of Social Policy Change*, American Public Health Association (APHA) 128<sup>th</sup> Annual Meeting, Boston, MA, November 13, 2000.

with Ayesha Gill and Susan M. Salkowitz, *Challenges and Responses in Immunization Programs: California Strategies to Extend Registries to All Communities in the State*, American Public Health Association (APHA) 128<sup>th</sup> Annual Meeting, Boston, MA, November 13, 2000.

with Martha Rome, *Using Immunization Registry Data to Support Medicaid Managed Care Services*, The 5th Annual Congress on Managed Medicaid and Medicare (NMHCC), Washington, DC, January 22, 2001.

with Diane Fraiter, *Extending the Life of a Registry: Connecticut's ICES Reporting System*, 35th National Immunization Conference, Atlanta, GA, June 1, 2001.

*Web Enablement: Considerations and Issues for Immunization Registries*, Pre-conference Workshop, 2001 Immunization Registry Conference, Little Rock, AK, July 8, 2001.

with Diane Fraiter, *Connecticut's Immunization Registry Reporting System*, 2001 Immunization Registry Conference, Little Rock, AK, July 9, 2001.

with Deborah Walker, *Challenges in System Integration in Public Health*, American Public Health Association (APHA) 129<sup>th</sup> Annual Meeting, Atlanta, GA, October 24, 2001.

with Deborah Walker, *Disaster Recovery of the New York Citywide Immunization Registry After the World Trade Center Tragedy*, 36th National Immunization Conference, Denver, CO, April 30, 2002.

*Low-bandwidth Registry Communications*, 16<sup>th</sup> CA SIIS Statewide Meeting, San Diego, CA, October 15, 2002.

with Amy Zimmerman, *Technology Assessment: Moving Rhode Island's KIDSNET Forward*, 2002 Immunization Registry Conference, Philadelphia, PA, October 28, 2002.

with John Schaaf, et al, *Developing Regional Registry Software: Lessons from California*, 2002 Immunization Registry Conference, Philadelphia, PA, October 28, 2002.

with Robyn Davis, *Immunization Registry Support for Bio-terrorism Preparedness: Los Angeles*, American Immunization Registry Association Annual Meeting, Philadelphia, PA, October 28, 2002.

with Amy Metroka, *Implementing a HIPAA Compliant Electronic File Transfer Application for Reporting to the NY Citywide Immunization Registry*, 2002 Immunization Registry Conference, Philadelphia, PA, October 29, 2002.

with Angel Aponte, *Internet Interfaces: Provider Access to Confidential Patient Information - A Survey of 11 Jurisdictions*, 2002 Immunization Registry Conference, Philadelphia, PA, October 29, 2002.

with Amy Zimmerman, *Planning for Change: Technology Assessment of Rhode Island's KIDSNET*, 37<sup>th</sup> National Immunization Conference, Chicago, IL, March 17, 2003.

with Susan Salkowitz, *Registry Assessment Methodologies: Experience Across Three Projects*, 37<sup>th</sup> National Immunization Conference, Chicago, IL, March 17, 2003.

*Role of Alternative Networks in Registry Telecommunications*, 37<sup>th</sup> National Immunization Conference, Chicago, IL, March 17, 2003.

with Susan Salkowitz, *Electronic Medical Records and Registries: Challenges and Opportunities*, 18th CA SIIS Statewide Meeting, Oakland, CA, October 15, 2003.

*Conceptual Data Flow Model Between PHIN Systems*, 38<sup>th</sup> National Immunization Conference, Nashville, TN, May 13, 2004.

with Susan Salkowitz, *Registry Integration with Electronic Medical Records*, 38<sup>th</sup> National Immunization Conference, Nashville, TN, May 13, 2004.

with Michael Berry, *Expanding the Options for Immunization Data Collection with Personal Digital Assistants*, 38<sup>th</sup> National Immunization Conference, Nashville, TN, May 13, 2004.

with Susan Salkowitz, *EHR Update: Integrating Immunization Registries with Electronic Medical Records*, 2004 Immunization Registry Conference, Atlanta, GA, October 18, 2004.

*Positioning IIS Within EHR: Ask Not What EHR Can Do for You, Ask What You can Do for EHR*, 2004 Immunization Registry Conference, Atlanta, GA, October 19, 2004.

with Susan Salkowitz, *Public Health Systems Integration in Support of Emergency Preparedness*, American Public Health Association (APHA) 132nd Annual Meeting, Washington, DC, November 8, 2004.

with Angel Aponte, et al, *Evolution of Data Exchange with New York Citywide Immunization Registry: From Paper to Electronic Messaging*, 39th National Immunization Conference, Washington, DC, March 24, 2005.

*Using Electronic Medical Records: National and Local Perspectives*, 3rd Annual Awards of Excellence in Immunization Practices & Conference, Pasadena, CA, May 12, 2005.

*Frameworks and Models for Integration, Connecting Communities for Better Health* Conference, Washington, DC, May 26, 2005.

with Michael Berry, *Models for Regional Health Information Organization (RHIO) Systems: Ensuring Public Health's Role*, American Public Health Association (APHA) 133rd Annual Meeting, Philadelphia, PA, December 13, 2005.

with Michael Berry, *RHIO Models and Public Health: How Do You Determine the Best Approach?*, American Public Health Association (APHA) 134th Annual Meeting, Boston, MA, November 8, 2006.

*How Can IIS Remain Relevant in the New World of Health Information Exchange?* 41st National Immunization Conference, Kansas City, Mo, March 6, 2007.

*Revitalizing Public Health Data Systems in the New World of Health Information Exchange*, Fourth Health Information Technology Summit, Washington, DC, March 30, 2007.

*Immunization Information System Interoperability*, 42<sup>nd</sup> National Immunization Conference, American Immunization Registry Association Pre-conference Workshop, Atlanta, GA, March 16, 2008.

*Public Health Systems Interoperability*, 2008 American Medical Informatics Association Spring Congress, Phoenix, AZ, May 29, 2008.

with Michael Berry, *Planning for PHIN Certification: A Small State's Experience*, 2008 Public Health Information Network (PHIN) Conference, Atlanta, GA, August 26, 2008.

*From Integration to Interoperability: The Role of Public Health Systems in the Emerging World of Health Information Exchange*, American Public Health Association (APHA) 136th Annual Meeting, San Diego, CA, October 27, 2008.

*Architecture for Person Matching and De-duplication*, American Public Health Association (APHA) 136th Annual Meeting, San Diego, CA, October 29, 2008.

*HITSP Real World Sites: Health Information Exchanges - Vermont Information Technology Leaders*, Health Information Technology Standards Panel Webinar Series, July 9, 2009.

with Anna Orlova et al, *Business Case for Public Health Participation in Health Information Technology (HIT) Standardization*. 2009 Public Health Information Network (PHIN) Conference, Atlanta, GA, September 2, 2009.

*Service-oriented Architecture: Immunization Information System Case Studies*. 44<sup>th</sup> National Immunization Conference, Atlanta, GA, April 21, 2010.

*Public Health and Support for Meaningful Use in Health Information Exchange*, HIMSS Virtual Conference and Expo, June 10, 2010.

*Service-Oriented Architecture: Enabling Data Sharing Between Immunization Information Systems and Clinical Care*, American Public Health Association (APHA) 138th Annual Meeting, Denver, CO, November 10, 2010.

with Amy Metroka, et al, *Meaningful Use and Immunization Information Systems: A Case Study*, 45<sup>th</sup> National Immunization Conference, Washington, DC, March 30, 2011.

with Amy Zimmerman and Laura Rappleye, *Public Health Meaningful Use: Views from the Field*, Healthcare Information and Management Systems Society (HIMSS) Chapter Health Information Exchange (HIE) Liaison Roundtable Education Webinar, May 19, 2011.

with Kristen Forney, et al, *Case Study on Meaningful Use and Public Health: Immunization Information Systems in New York City*, 2011 Public Health Informatics Conference, Atlanta, GA, August 24, 2011.

*Health Information Exchange and Directory Services: Public Health's Role*, American Public Health Association (APHA) 138<sup>th</sup> Annual Meeting, Washington, DC, October 31, 2011.

with Anna Orlova, et al, *Towards Health IT Standards Adoption: A Web-based Resource of Health IT Applications and Projects in Public Health*, American Public Health Association (APHA) 138<sup>th</sup> Annual Meeting, Washington, DC, October 31, 2011.

#### *Government Testimony:*

Expert Testimony, National Vaccine Advisory Committee and National Immunization Program, Centers for Disease Control and Prevention *Initiative on Immunization Registries*, Public Meeting on Resource Issues Related to State and Community-based Immunization Registries, Washington, D.C., May 13, 1998.

Response to Request for Information, "Development and Adoption of a National Health Information Network," Department of Health and Human Services, Office of the National Coordinator for Health Information Technology, January 18, 2005.

#### *Advisory/Professional Committees:*

Computer Technology Advisory Committee, Ben Franklin Technology Partners of Southeastern Pennsylvania, Fall 1996 – Fall 2001.

American Immunization Registry Association (AIRA) Technical Committee, Spring 2002 - Spring 2003

American Immunization Registry Association (AIRA) Emergency Preparedness and Response Committee, Fall 2002 – Summer 2005

American Immunization Registry Association (AIRA) Urban/Cities Committee, Winter 2004 – Fall 2005

Electronic Health Record (EHR) Deployment Task Force, Healthcare Information and Management Systems Society (HIMSS), Summer 2004 - Spring 2005

Healthcare Information Technology Standards Panel (HITSP) Use Case Committee, Fall 2005.

Healthcare Information Technology Standards Panel (HITSP) Technical Committees, Winter 2006 – Winter 2010

Healthcare Information Technology Standards Panel (HITSP), March 2007 – Winter 2010

California Health and Human Services (CHHS) Health IT Research and New Technologies Workgroup, May 2009 – August 2009

*Connections* Community of Practice, Winter 2001 – March 2010.

California Health and Human Services (CHHS) Health Information Exchange Finance Workgroup, December 2009 – April 2010

Committee on Immunization Registry Standards for Electronic Transactions (CIRSET), now the American Immunization Registry Association (AIRA) Messaging Work Group, Spring 2000 – Summer 2010

American Immunization Registry Association (AIRA) Transport Layer Work Group, Spring 2005 – Summer 2010

American Immunization Registry Association (AIRA) Data Definitions Work Group, Spring 2005 – Summer 2010

Healthcare Information Exchange Portfolio Task Force (formerly HIE Guide Workgroup), Health Care Information and Management Systems Society (HIMSS), Spring 2009 – Spring 2010.

American Immunization Registry Association (AIRA) Data Exchange Steering Committee, Spring 2005 – Fall 2010

Centers for Disease Control and Prevention, Immunization Information System Minimum Functional Standards Update Project, January 2011 – May 2011

Healthcare Information Exchange Committee, Health Care Information and Management Systems Society (HIMSS), July 2009 – June 2011

Child Health Work Group (formerly Pediatric Data Standards Special Interest Group), Health Level 7 (HL7), Spring 2005 - present

Electronic Health Record Technical Committee (EHR TC) Subcommittee on Interoperability, Health Level 7 (HL7), Spring 2005 - present

Co-Chairperson, Public Health Data Standards Consortium Communication and Outreach Committee, Fall 2006 – present

Pediatric Health Informatics & Technology Special Interest Group, Health Care Information and Management Systems Society (HIMSS), Spring 2007 - present

Small & Independent Consultant Special Interest Group, Health Care Information and Management Systems Society (HIMSS), Spring 2007 – present

Treasurer, Public Health Data Standards Consortium (PHDSC), Fall 2007 – present

Direct Project Implementation Group, April 2010 – present

American Medical Informatics Association (AMIA) Public Health Informatics Executive Committee, November 2010 – present

American Immunization Registry Association (AIRA) Standards and Interoperability Steering Committee, February 2011 – present

HIE Toolkit Taskforce, Health Care Information and Management Systems Society (HIMSS), Summer 2011 – present

*Professional Affiliations:*

Member, American Public Health Association

Member, American Medical Informatics Association

Member, Health Record Banking Alliance

Fellow, Healthcare Information and Management Systems Society

Member, International Society for Disease Surveillance

Member, National Association for Public Health Information Technology

Member, Southern California Public Health Association

Pioneer Member, The Internet Society

Peer Reviewer and Contributing Author, *Journal of Healthcare Information Management*

*Education:*

**UNIVERSITY OF PENNSYLVANIA**, Ph.D. in Higher Education Administration, August 1993.

Course work includes study in higher education at the Graduate School of Education, and organization and strategy at the Wharton School.

Dissertation title: *Financial Frontier: The American University and its Banking Function*

**GRADUATE SCHOOL OF EDUCATION**, University of Pennsylvania, Master of Science in Education, August 1987.

Course work Includes: Strategic Planning in Higher Education, Methods of Institutional Research, Introduction to American Higher Education, Academic Information Systems, Managing People, Instructional Processes in Higher Education, Power and the Educational Process

**THE WHARTON SCHOOL**, University of Pennsylvania, Bachelor of Science in Economics,  
May 1983.

Concentrations in Management Information Systems, and Personnel Administration and  
Labor Relations. Record of high academic achievement. Dean's List 1982-83.

Course work Includes: Management Information Systems, Advanced Seminar in Personal  
Computing, Management Systems; Personnel Management, Labor History, Labor Law,  
Labor-Management Relations

## Summary of Consulting Engagements

### *Ongoing Consulting Engagements (month begun)*

**City and County of San Francisco Department of Public Health** (6/10): Project director for documentation and development of client-centered data warehouse.

**International Society for Disease Surveillance** (10/11): Short and long-term strategy for Meaningful Use and syndromic surveillance for inpatient and ambulatory clinical care EHR data.

**New York City Department of Health and Mental Hygiene** (9/98): Project director for ongoing development and support of Citywide Immunization Registry and related systems.

**NORC at the University of Chicago** (7/10): Subject matter expert on Meaningful Use in Public Health project.

**Office of the National Coordinator for Health Information Technology** (10/09): Subject matter expert on State-level Health Information Exchange Cooperative Agreement Program. Worked with many states on HIE technical planning, including AL, HI, IA, LA, MN, RI, American Samoa and consortium of Southern states.

**University of Illinois** (10/10): Provide technical expertise and knowledge of important technical standards and tools to Strategic Healthcare IT Advanced Research Projects on Security (SHARPS); general industry advice on the project.

**Public Health Informatics Institute** (11/11): Serve as senior advisor on project to align immunization information systems with national health information technology directions and priorities.

**Rhode Island Department of Health** (3/02): Project director for ongoing development and support of KIDSNET integrated child health information system.

**RTI International** (11/10): Subject matter expert on ONC-funded project to facilitate cross-border health information exchange for disaster preparedness in the Southeast and Gulf states representing Alabama and Louisiana.

**University of California, San Diego, Beacon Community Project** (12/10): Acting as independent reviewer of project technical direction and plans, and assisting in procurement and technical evaluation.

### *Selected Consulting Engagements Now Completed*

**International Society for Disease Surveillance** (9/10 – 1/11): Project director for development of short and long-term strategy for Meaningful Use and syndromic surveillance for emergency department and urgent care settings.

**Minnesota Department of Health, Office of Health Information Technology** (10/10 – 4/11): Review state HIE plan and advise on technical architecture.

**Public Health Informatics Institute** (1/10): Review and comment on article related to immunization information systems and HIE published by PHII.

**RTI International** (3/11 – 7/11): Subject matter expert on ONC-funded project to facilitate cross-border health information exchange in the Northern Midwest. Working with Minnesota.

**San Mateo County (CA) Information Services Division** (1/08 – 4/09): Directed Applicable Client Records Search (ACRS) project focused on creating a comprehensive plan for client data consolidation and reporting.

**University of Hawai'i, Beacon Community Project** (10/10 – 12/10): Acting as independent reviewer of project technical direction and plans.

**University of Illinois** (10/10 – 4/11): Provide technical expertise and knowledge of important technical standards and tools to Strategic Healthcare IT Advanced Research Projects on Security (SHARPS); general industry advice on the project.

**University of Pennsylvania** (11/07): Conducted an information technology organizational review for the Division of Facilities and Real Estate Services.

**Utah Department of Health** (11/06 – 12/06): Led a detailed assessment of the Utah State Immunization Information System (USIIS).

**Vermont Department of Health** (4/08): Conducted information technology organizational review.

**Vermont Information Technology Leaders, Inc.** (11/05 – 7/09): Variety of projects related to State chronic disease management systems and health information exchange planning and management, including organizational review (4/08).

**Washington State Department of Health** (6/06 – 7/06): Led project to train staff on person matching system concepts, and to develop plan to integrate matching software into existing systems.