# Bernard Patrick Wess, Jr.

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## PERSONAL SUMMARY:

40-years' experience in insurance, healthcare, information systems, commercial software product development, large-scale contract design and management and new enterprise business development—concentrating within the life sciences, healthcare and insurance; special expertise in the design of complex real-time healthcare information systems. Mr. Wess holds a United States patent in the design of complex data in healthcare and clinical medicine.

## EXPERIENCE:

*ProtonCare of Ohio, September2003 to present*

### ProtonCare Foundation, Co-Founder, (September 2003-present)

Mr. Wess is a Co-Founder and Managing Director. He co-founded ProtonCare Foundation with several industry leaders to develop a more scientific and engineering-oriented approach to the design of multi-room particle therapy centers. ProtonCare was formed by the Wess family and others as a response to the management, engineering, scientific and technology needs for safer advanced cancer treatments in highly industrialized countries with particle physics expertise interested in operating particle therapy centers. Mr. Wess led the design of the core team and developed all the technology for finance and operations, including complex corporate finance models required for capital markets funding and the operations of a center. In 2009, ProtonCare was re-designed to focus on non-profit research in particle therapy in response to the financial crises of 2008.

*Perseid Software Limited August, 2000 to present*

### Perseid Software Limited, Founder and President, (August 2000-present)

Mr. Wess is the Founder and President of Perseid Software. He formed Perseid Software at the request of PricewaterhouseCoopers to develop consulting services and Internet-based real-time solutions for healthcare and insurance. Perseid's core product is the Health Sciences Universe™ a series of Enterprise Resource Planning (ERP) insurance, clinical, care management, disease management, mobile healthcare and research applications for Internet-based healthcare and clinical medicine based on the concepts from the Department of Defense, VA, and UK NHS of a high performance "virtual" medical center. Perseid has been a consultant to a number of large healthcare, technology and services companies, including a U.S. DoD partner, EMC, Lilly, Northrop Grumman Healthcare, Xerox (ACS) Healthcare, The Procter and Gamble Corporation and Wellpoint Healthcare Networks. Perseid is designing a new generation of real-time globalized clinical, administrative and financial care and risk management solutions for fully integrated community and patient-centered care. Mr. Wess has also been a member of the Editorial Advisory Boards of Bio-IT World and Health-IT World, IDG publications in the Life Sciences and Healthcare.

**EXPERIENCE:**

## Syntiro Healthcare Systems, Senior Vice President, (2000-Jan. 2001)

Mr. Wess sold InfoMedtrics to Syntiro Healthcare Systems in June 2000 when it was Physician WebLink. He was responsible for designing the Internet Integration Center. Responsibilities included the development of strategic technology partnerships, maintenance of software for Ford Motor Company, design of the Healthcare Information Center (HCIC), computer systems and data center architecture, information access and reporting and Internet application security models. Mr. Wess actively designed the Clinical Data Repository and served as the senior architect of the Healthcare Information Center product, a 300-table/3,000 data element multi-line insurance database.

**EXPERIENCE:**

## InfoMedtrics, Inc., Chairman, CEO and Founder (1997-2000)

Converted Information Architects, Inc., to a commercial software product development enterprise in June, 1997, re-incorporated in DE. Obtained one of the largest Integrated Benefits information systems contracts to automate the global benefits and healthcare information of Ford Motor Company. Recruited new Board of Directors, senior management; developed new marketing and technology plans. Developed the Healthcare Information Center™ a computer-aided decision support and database management product and commercialized the solution with CSC. Physician WebLink purchased InfoMedtrics in June, 2000 to create the first complete clinical information solution extending from a wireless hand-held clinical workstation to a fully integrated risk management data warehouse.

## Information Architects, Inc., President and Founder, (1975-1997)

Consultant to Blue Cross/Blue Shields, EDS, Microsoft, the Commonwealth of Massachusetts, The Procter & Gamble Company, Ford Motor Company and other enterprises in the architectural design, development and project management of mission critical healthcare and clinical information systems.

Designed the professional liability, financial, statistical and physician credentialing information systems, using advanced CASE tools and technology, for the Grand Alliance Group, a professional liability re-insurer, Hamilton, Bermuda.

Systems architect & project management consultant to Tufts Associated Health Plans. Developed internal MIS architecture, healthcare decision support systems and the R&D strategic alliance. Executed software development in a joint venture that produced financial accounting, claims processing and data base software for the nine hospitals and 12 group practices which founded TAHP in only one year.

Product development consultant to Lotus Development Corporation. Evaluated data base products and acquisitions, including Revelation and Ansa (Paradox). With Mitch Kapor, Founder of Lotus, conceived *Agenda*, the first Personal Information Manager.

**EXPERIENCE:**
**Mentor Communications, Co-Founder and EVP, (1989-1991)**

Consultant and then co-founder of a venture-funded (MMV) systems and telecommunications company to develop healthcare information systems products supporting computer-aided software engineering and real-time clinical data acquisition. Company sold to EMC in 1998.

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*Information Architects, Inc. cont'd 1977-1989*

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**EXPERIENCE:**
Developed internal MIS architecture, computer center, vendor strategies and executed development of Xerox Praxa internal financial accounting and distribution systems for national electronics distributor, Citadel Industries. Pioneered the use of DEC VAX/VMS X.25 PSI packet network software.

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Royal Canadian Mounted Police, FBI, GTE Telenet, and client developed anti-viral "Trojan horse" software for DEC VAX/VMS. Used to track, "capture", and convict the first computer hacker "414" gang operating on Telenet.

Database administration consultant, Commonwealth of Massachusetts, Division of Employment Security. Data base administration of the $3 billion accounts receivable systems for the Univac 1100 complex at DES.

Turn-around consultant funded by the Justice Department and assigned to Commonwealth of Massachusetts Criminal Justice Computer Network. Completed computer center, developed multi-processor telecommunications network of 3,000 devices, managed development contractors and completed major MIS turn-around in 18 months of a $100+ million Justice Department funded contract.

Co-founder and consultant to Renaissance Computing, Inc. One of the first MIT software spin-offs. Company developed and supported MIT Multics mainframe decision support software for major national accounts. Sold business to co-founder in October, 1980.

While serving at the University of Maryland 1973-1979:

— Consultant in the development of secure relational database and decision support systems for BDM Corporation.
— Consultant to the Governor's Office on Crime and the Administration of Justice (geographical analysis, statistical database design and analysis),
— Crown Central Petroleum (corporate EDP auditing).
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*University of Maryland, 1971-1979*
*Director of Computation*
*Associate Director*
*Assistant Director, Academic & Research Computing*

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**EXPERIENCE:**

## University of Maryland (1971-1979)

Director of Computing responsible for administrative, financial, student, academic and research computing. Managed two computer centers and staff of 50 with annual budget in excess of $3 million.

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Evaluated vendors and systems and telecommunications technology for the University administrative computer network—13 HP3000 processors in a distributed computing network, one of the first of its kind in the US.

Participated in the design and installation of the Academic Computer network supporting 5 campuses, 5,000 faculty and more the 40,000 students. Developed internal packet network based on emerging X.25 and DOD Arpanet technology (early Internet.)

Tested commercial software products in cooperation with faculty and other computer centers and vendors. Products included CODASYL database manager DMS-1100 from Univac, SPSS, FORTRAN compilers, IBM Experimental System/R (soon to become SQL&DB2).

Developed one of the nation's first microcomputer and computer graphics laboratories for the social sciences; opened and staffed the Statistics Center of the University of Maryland.

Developed complex statistical and computer graphics software for Maryland Institute for Emergency Medicine (UOM Shock/Trauma Center), Johns Hopkins University Hospital, University of Maryland Hospital, NIMH Biotechnology Laboratories, and the Division of Clinical Investigation (UMAB Health Sciences), Baltimore City Police Department, Mayor's Office, Governor's Office on Crime and the Administration of Justice

**EXPERIENCE:**

## Anne Arundel County Board of Education, System Analyst, (1971-1972)

Pioneered in the application of database management to small IBM mainframes—evaluated IDMS from Cullinane and TOTAL from Cincom. Designed and led construction of the computer center, installed and tested IBM 360/30, IBM 370/135 under DOS and TCAM. One of the first users of TOTAL in the world—designed database software for financial and student accounting systems. Designed and installed remote batch computer network for 30 schools to central mainframe.

## EDUCATION:

Post-graduate Computer Science courses, Johns Hopkins University Applied Physics Lab.
Post-graduate Information Systems courses, University of Maryland Department of Information Systems
M.A., Statistics (Applied), University of Maryland College Park, December, 1976.
B.A., Psychology (Experimental), University of Maryland Baltimore County, June, 1971.

## PROFESSIONAL CERTIFICATIONS:

CDP, Certified Data Processor, Institute for the Certification of Computer Professionals, April 1978; #761608
CSP, Certified Systems Professional, Institute for the Certification of Computer Professionals, August 1985, #06020

## PROFESSIONAL AFFILIATIONS:

Former Reviewer, MIS Quarterly
Member, Institute of Electronic and Electrical Engineers, Computer Society
Member, Association for Computing Machinery
Member, Society for Management Information Systems

## DIRECTORSHIPS/ADVISOR:

**Member, Editorial Advisory Board, Bio-IT World, 2002-**
Managing Director, ProtonCare of Ohio, LLC 2003-
Director, InfoMedtrics, 1997-2000
Director, Mentor Communications, 1991-1993
Director, Information Architects, 1975-1997
Director, Orbis, Incorporated, NASDAQ, 1988
Director, Grand Alliance Insurance Limited, 1986-1988

## PATENTS:

Bernard P. Wess, Jr., **"**Object to Relational Data Converter Mapping Attributes to Object Instance into Relational Tables", U.S. Patent #6,163,781, December 19, 2000, United States Patent and Trademark Office.

## INDUSTRY AND FUNCTIONAL EXPERIENCE:

Industry Advanced Technology - Information Technology Consulting and
Services(Current)
Advanced Technology - Computer Software(Current)
Advanced Technology - Outsourcing(Current)
Business Services - Partnerships(Current)
Financial Services - Insurance
Financial Services - Mezzanine Finance(Current)
Private Equity/Venture Capital - Private Equity(Current)
Healthcare - Medical Facilities & Planning(Current)
Healthcare - Bioinformatics(Current)
Healthcare - Drug Delivery Sciences(Current)
Healthcare - Biotechnology & Genetic Engineering(Current)

Healthcare - Healthcare Provider Outsourcing(Current)
Healthcare - EHealth(Current)
Healthcare - Hospitals/Hospital Systems/Specialty Hospitals(Current)
Healthcare - Managed Care Contracting Organizations
Healthcare - Pharmaceuticals(Current)
Internet/e-Business - e-Commerce(Current)
Science, Research & Development - Research and Development(Current)

Function  Consultancy - Information Systems Consulting(Current)
Consultancy - Self-employed consultant(Current)
Consultancy - Marketing & Sales Consultancy(Current)
Corporate Development - Mergers/Acquisitions/Divestitures(Current)
Corporate Development - Strategic Planning & Business
Development(Current)
Finance and Control - Budgeting & Planning(Current)
General Management - Board Membership(Current)
General Management - Chief Executive Officer/CEO(Current)
General Management - Start-Up/New Venture Management(Current)
Healthcare - Healthcare Consulting(Current)
Information Technology Management - Emerging Technologies(Current)
Information Technology Management - Information System Architecture &
Planning(Current)
Research, Development & Engineering - Technology Industry
Consulting(Current)
Venture Capital/Private Equity - Venture Capital - Life Sciences(Current)

## PUBLICATIONS & PRESENTATIONS:

Bernard P. Wess, Jr., **"**Building High Performance Healthcare and Life Sciences Enterprises. Volume One: Strategic and Information Technology Planning," a software and book series under development

Bernard P, Wess, Jr. "Data Integration in the Life Sciences," Bio-IT World, San Diego, CA, November 12, 2002

Bernard P. Wess, Jr. & David Hoffer, "The Health Industry", an RCW Research Report, September, 2002

Bernard P. Wess, Jr., "Breaking the Life Sciences Storage Bottleneck", Hewlett Packard White Paper, Bio-IT World, Vol. 1, No. 2, April 2002

Bernard P. Wess, Jr., "Developing Real-Time Life Sciences Repositories", Drug Information Association, 15th Annual Document Management Conference, February 14, 2002, Philadelphia, PA

Bernard P. Wess, Jr., "Enabling the Real-Time Life Sciences Enterprise with an IT Infrastructure," EMC White Paper, Perseid Software, February 2002.

Bernard P. Wess, Jr., "Clinical Trials Are Going Global," EMC White Paper, Perseid Software, October 2001.

Bernard P. Wess, Jr., "Preparing Your Life Sciences Organization for Bioinformatics," EMC White Paper, Perseid Software, July 2001.

Bernard P. Wess, Jr., "Building Mission Critical Document Management Solutions for Global Pharmaceutical Companies, EMC White Paper, Perseid Software, June, 2001

Bernard P. Wess, Jr., "Next Generation Integrated Benefits and Healthcare Delivery", Massachusetts Health Data Consortium, November 16, 2000

Bernard P. Wess, Jr., "Ford Health Data Central: The Next Generation Technology for Healthcare Management at the Ford Motor Company", American Medical Informatics Association Spring Congress, Boston, May 24, 2000

Bernard P. Wess, Jr., "Ford Health Data Central: The Next Generation Technology for Healthcare Management for the Self-Insured", National Council for the Self Insured, Hot Springs, AK, May 22, 2000

Bernard P. Wess, Jr., "Moving Forward into the Millennium", Managed Care Executive Forum, Walt Disney World, March 29-31, 2000

Bernard P. Wess, Jr., "Using Information Systems Technology to Manage Integrated Health & Benefit Programs", Pension and Benefits, June, 1999

Bernard P. Wess, Jr., "Right Here, Right Now: Technology Tools for Managed Care Organizations and HMOs", National Managed Health Care Congress, Los Angeles, October 17-20, 1999

Bernard P. Wess, Jr., "Forward-Thinking Companies Increase Productivity And Cut Costs by Integrating Benefits", Compensation and Benefits Management, Vol. 16, Number 2, Spring 2000, pp.46-50.

Bernard P. Wess, Jr., "DSS: The Next Generation Technology for Healthcare Organizations", Massachusetts HFMA, Westborough, MA, April 14, 2000

Bernard P. Wess, Jr., "Defining 'Centers of Excellence' for Your Managed Care Organization", Managed Care Technical Review, August, 1999

Bernard P. Wess, Jr., "The Requirements for and Future Effects of Integrating Clinical, Financial and Administrative Data in the Next Generation IDS, Healthcare Financial Management, December, 1999

Bernard P. Wess, Jr., "Next Generation Managed Care Information Systems," ADVANCE Healthcare, January, 1999.

Bernard P. Wess, Jr., "Healthcare Quality Information Systems", Conference on Integrated Healthcare Data, Orlando, FL, October 25, 1997

Bernard P. Wess, Jr., "Eclipse = NASA CLIPS + Presentation Management + SQL", *Proceedings of the First CLIPS User's Conference,* NASA, Johnson Space Flight Center, Houston, Texas, August 13-15, 1990, Volume II, pp.443-446.

Bernard P. Wess, Jr., "Commentary on Commercialization of Knowledge Engineering: Enterprise and product development," *Knowledge Engineering Review*, Cambridge University Press, London, England, February, 1988, Vol. 2, No. 3, pp. 169-173.

Bernard P. Wess, Gary Jacobson, MD, "Responding to the Medical Malpractice Insurance Crises:A National Risk Management Information System," *Symposium on Computer Applications in Medical Care*, IEEE Computer Society, Washington, D.C., November 1-4, 1987, pp. 640-645.

Bernard P. Wess, Jr., "Distributed Computer Networks in Support of Complex Group Practices," *Proceedings of the Second Symposium on Computer Applications in Medical Care*, IEEE Computer Society, Washington  D.C., November 5-9, 1978, pp. 4699-477.

Bernard P. Wess, Jr., "Data Analysis in the 1980's", Invited Paper, *Maryland Psychological Association*, May 19, 1979.

Bernard P. Wess, Jr., "Data Base Management Systems and the Auditor," Invited Paper and Lecture, EDP Auditing Seminar, Pittsburgh, PA, February 20, 1979.

Bernard P. Wess, Jr., "Security, Control, and Architectural Considerations for Distributed and Decentralized

Processing", *Computer, Security, Auditing, and Control*, Wellesley, MA, Vol. 6, No. 1, Jan. , 1979.

Bernard P. Wess, Jr., "Virtual Transaction Testing —An Auditing Technique for On-line Data Bases and Computer Networks", *Computer, Security, Auditing and Control*, Wellesley, MA, Vol. 5, No. 2, July, 1978, pp. A3-A7.

Bernard P. Wess, Jr., "Telecommunications: Security and Control", Invited Paper, *EDP Auditor's Society of Central Maryland,* April 12, 1978.

Bernard P. Wess, Jr., "Data Base Management Systems and Auditability", Invited Paper, *EDP Auditor's Society of Central Maryland*, December 14, 1978.

Bernard P. Wess, Jr., "Administrative Systems Design", *Statistics Center*, University of Maryland Baltimore County, Technical Note SCN 6.76.2, October, 1976.

Bernard P. Wess, Jr., "IGRASP/M — Interactive Graphics and Statistical System—Multivariate", *Statistics Center*, University of Maryland Baltimore County, Technical Note SCN 7.76.1, December, 1976.

Bernard P. Wess, Jr., "IGRASP—Interactive Graphics and Statistical System", *Statistics Center,* University of Maryland Baltimore County, Technical Note SCN 76-01, July, 1976.

Bernard P. Wess, Jr., "Introduction to the University of Maryland Computer Systems", *Statistics Center*, University of Maryland Baltimore County, Technical Report 75-00, May, 1974.

Lowell D. Groninger, Bruce Bell, William Cymer and Bernard P. Wess, Jr.**, "**Storage aspects of nouns presented under imagery and acoustic coding instructions"**, Journal of Experimental Psychology Volume 95, Issue 1**, September 1972, Pages 195-201