David A. Bray, PhD, MSPH

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EXECUTIVE SUMMARY

- **15+ YEARS LEADING INNOVATIVE & TRANSFORMATIVE COLLABORATIONS**, fast-paced technology, national security, crisis response, and defense-related scientific endeavors, teams of 110+ technology professionals, $61M+ budget formulations, White House-level governance activities; consultant to Fortune 500 companies with a Microsoft Gold-Certified Partner, web 2.0 healthcare startup strategist; possess TS/SCI clearance with CI poly; awarded DOD's Joint Civilian Service Commendation Award, the highest-ranking joint civilian service award under authority of combatant commanders, in 2010; awarded CDC Director's Agency-Wide Honor Award for Service in 2004.

- **SENIOR EXECUTIVE for INNOVATION, INTEGRATION, & INTEROPERABILITY** with the Information Sharing Environment and the Office of the Director of National Intelligence; pioneered, directed, and led national efforts across defense, intelligence, law enforcement, homeland security, and diplomatic communities; Senior Nat'l Intelligence Service Executive, lifetime Senior Executive Assoc. member; received "Best Cyber Presentation" Award from the Gov't Technology Research Alliance in 2010.

- **POLICY STRATEGIST** with the Institute for Defense Analyses, served as a strategic advisor to POTUS, VPOTUS, DOD, ODNI, DOE, DOS, DOJ, DHS, DHHS representatives on policy issues including bioterrorism preparedness, government's continuity of operations, cyber-deterrence, crisis response, and national security information sharing; Post-Doctoral Associate with MIT's Center for Collective Intelligence and Harvard's Leadership for a Networked World in 2008.

- **DEPLOYED TO AFGHANISTAN** voluntarily in 2009 as a Special Advisor to a Brigadier General for 120 days overseeing STRAT EFFECTS for NATO's International Security Assistance Force and U.S. Forces Afghanistan; tasked to help Generals "think differently" on critical strategies to improve regional military and humanitarian stabilization operations; awarded NATO Service Medal in 2009.

- **ASSOCIATE DIRECTOR of INFORMATICS & IT CHIEF** at the Centers for Disease Control, led Bioterrorism Preparedness and Response Program's technology response to 9/11, anthrax, SARS, monkeypox, ricin, and other national emergencies; received DHHS Secretary's Award in 2002 for anthrax response the year prior; nominated as Federal Employee of the Year for NCID and shared another DHHS Secretary's Award in 2004.

- **PUBLIC SPEAKER & AUTHOR** on (1) improved national security strategies to emergent threats, (2) technological approaches for better crisis responses, government decision-making, and shared situational awareness, (3) advancing shared information services within gov't and with private industry; keynoter and panelist at several national conferences, author of 40+ papers, peer-reviewed research articles, and case studies; Visiting Associate faculty, parallel with full-time work, at the Nat'l Defense University's Information Resource Management College starting in 2009; received public commendation for innovative thought-leadership by the Intelligence and Nat'l Security Alliance's "Intelligence to Protect the Homeland: Taking Stock Ten Years Later and Looking Ahead" report in 2011.

- **PhD in INFORMATION SYSTEMS** focusing on improving national security and crisis response; Rotary Ambassadorial Scholar to the U.K.; Visiting Associate with the University of Oxford's Internet Institute; awarded "Best Paper, KM Track" at the International Conference on Information Systems in 2007; awarded an IBM Center for the Business of Government Grant in 2010.

- **BEST AS A LEADER** in ambiguous, uncertain situations requiring reasoned, intelligent, fast-paced analyses and forward-focused adaptive strategies to remedy issues of internal importance and develop evolutionary "semper gumby" solutions; authored papers on improving interagency situational awareness recognized publicly as part of McKinsey's Top Ten Business Trends to Watch in 2010.

EXECUTIVE & WORK EXPERIENCES

2010-Present. **SENIOR EXECUTIVE for INNOVATION, INTEGRATION, & INTEROPERABILITY**
Information Sharing Environment (ISE, www.ise.gov), Office of Director of National Intelligence (ODNI)

Pioneered, directed, and led national efforts across defense, intelligence, law enforcement, homeland security, and diplomatic communities focused on the technical standards frameworks, interagency enterprise architecture guidance, network interoperability policies, and government-wide data aggregation efforts for the purposes of information sharing and safeguarding regarding terrorism, WMDs, and national security concerns. Senior National Intelligence Service (SNIS) Executive; possess TS/SCI clearance with CI poly clearance and lifetime Senior Executive Assoc. member. Led senior-level interagency technical outreach to inform needed changes and socialize innovative ideas in support of a White House requested refresh of the Presidential National Strategy for Information Sharing issued in 2007. Keynoted and presented before 30+ different federal agencies and local governments as well as 100+ vendor reps at international industry conferences. Brokered successful interagency dialogues between DHS/DOJ/DHHS's National Information Exchange Model (NIEM) and DOD/IC's UCore standard councils, resulting in a new, transformative commitment from the DOD and IC to pilot adopting NIEM for information exchanges across gov't, enabling a foundation for reusable Model Driven Architecture components across interagency enterprise architectures. Chaired and hosted first-ever White House-level discussions aimed at automating privacy, civil liberties, and civil rights protections associated with the ISE, enabling faster and consistent government-wide information sharing with the transformative focus of getting the right information to the right people at the right time.

Became Chair and assembled a wholly new interagency governance group for the White House's newly formed Information Integration Sub-Committee (IISC), consisting of senior representatives from all departments involved with counter-terrorism and WMD information sharing in support of the Intelligence Reform and Terrorism Prevention Act (IRTPA). Chaired the deliverable of the IISC's consensus-built 3/6/12-month national goals shaped by broad interagency participation, to include leading efforts to host the first-ever White House-level discussions and interagency-produced report involving federal and state/local/tribal representatives working together to identify both a process and needed infrastructure to support consistent implementation of information standards across all of gov't. Led efforts to hold the first classified White House-level Summit on Data Aggregation with 160+ senior counter-terrorism experts, including three-star equivalents, from 23+ agencies to include the IC, DOD, DHS, DOJ, DOS, Treasury, DHHS, and local governments, to both inform the Executive Office of the President (EOP) and improve counter-terrorism information sharing. Led interagency discussions resulting in a new, productive relationship among the CIO Council's FICAM efforts, representatives from the Committee for National Security Standards, and the ISE's own governance activities; completed the first, whole of SECRET Network Gap Analysis examining the gaps in identity management across all SECRET Networks. Led team responsible for producing the first set of documented Fusion Center requirements for data on SECRET Networks, which informed the new EOP Executive Order for Classified Information Sharing and Safeguarding released in October 2011; encouraged international standards adoption with Royal Canadian Mounted Policy and Public Safety Canada.

Led at the request of a Presidential-appointee accepted a new assignment focused on turning around a historically stalled Sensitive But Unclassified (SBU) Interoperability effort. Achieved requested transformative results by convincing interagency partners to achieve technical solutions necessary for Simplified Sign On in Pennsylvania where now local cops via their existing accounts can search multiple networks, systems, and databases without the need to switch user accounts. Drove interagency SBU Interoperability efforts to benefit 200,000+ counter-terrorism personnel across the nation and provide more timely alerts of homeland security threats. Chaired and hosted first White House-level discussions and interagency-produced recommendations to identify a resolution to align existing fragmented identity management and access controls involving OMB, DOD, the IC, DHS, DOJ, DOS, and state/local/tribal representatives working together; summit received significant praise from agencies and the EOP. Provided executive-level technology expertise supporting similar goals among DHHS and VA with electronic medical records and the information sharing efforts of the ISE, also provided expertise to NARA on IT-enabled records management and the Domestic Nuclear Detection Office to achieve a real-time situational awareness of nuclear screening across the nation. Received, based on both industry and gov't audience member votes, the "Best Cyber Presentation" Award jointly with Acting DHHS CIO from the Government Technology Research Alliance in 2010.

Led successful industry outreach effort to marry the government's best work with NIEM and industry's best work with the Universal Modeling Language (UML) through a Standards Development Organization usually requiring upwards of 7 to 9 months to draft and issue proposals for a new standard. Achieved results in less than 1/5th the usual amount of time and motivated 50+ gov't and industry participants working in parallel to produce a proposal in less than 6 weeks. Led innovation activities of the ISE that resulted in a commitment of major Fortune 500 technology companies to incorporate NIEM UML information sharing and security into their products; thus enabling departments to buy government-wide interoperability commercially off the shelf. Invited keynote speaker at AFEI, worked with industry consortiums and SDOs (e.g., OMG, OASIS, ACT-IAC, AFCEA) to invite industry feedback on the efforts of the ISE to include an IdAM gap analysis with AFEI, a planned interagency Shared Services discussion, and a nationwide Standards and Interoperability framework in support of the ISE. Oversaw multi-million dollar interagency ISE technology implementation fund endeavors aimed at standard approaches to information sharing, security, and enterprise services across departmental enterprise architectures; brokered dialogue with GSA on developing a national business case for a national Backend Attribute Exchange service.

Asked following a senior-level National Security Staff meeting to handle a sudden, urgent priority from the White House to adapt to new information technology (IT) requirements post-Wikileaks and build an interagency coalition to support a "centralized correlation, decentralized data" pilot between DHS and the National Counter-Terrorism Center (NCTC). Built interagency agreement for the pilot, with the recognition that the effort required overcoming previously insurmountable concerns unique to different departments; proposed a more sophisticated method for data aggregation that would strengthen privacy and civil liberties protections and reduce risk of another Wikileaks event. Built interagency consensus, exercising active listing and on-going dialogues, that resulted in a successful coalition among DHS, NCTC, and supporting agencies to include USD(I), CIA, FBI, Treasury, and Bureau of Consular Affairs; all partners agreed to share collected insights regarding non-obvious relationship analysis/data aggregation across communities.. Invited keynoter at FOSE KM Expo in 2011l; invited keynoter at DOD's UCDMO conference with Ms. Cheryl Roby OSD NII/DOD CIO. Built coalitions for sharing technology expertise among other national counter-terrorism efforts, to include NSA, IARPA, the Nationwide SAR Initiative, and DOD's Maritime Domain Awareness; received public commendation for innovative thought-leadership by the Intelligence and National Security Alliance's "Intelligence to Protect the Homeland: Taking Stock Ten Years Later and Looking Ahead" report in 2011.

2008-2010. **POLICY STRATEGIST**
Science and Technology Policy Institute (STPI), Institute for Defense Analyses (IDA)

Served as a strategist to POTUS, VPOTUS, DOD, ODNI, DOE, DOS, DOJ, DHS, DHHS, VA, and USDA representatives on policy issues including bioterrorism/public health, electronic medical reporting, crisis and disaster response, and national security/defense/intelligence information sharing and safeguarding. Led multi-team efforts spanning multiple scientific subjects and often under tight timelines; authored PhD-level strategic assessments, policy analyses, and recommendation briefings for the EOP with the promise the Administration could claim authorship of the reports if desired; awarded DOD's Joint Civilian Service Commendation Award, the highest-ranking joint civilian service award under authority of combatant commanders, in 2010.

Produced analytic recommendations on government-wide endeavors for the President's Council of Advisors on Science and Technology (PCAST) including: HHS/DOD/VA electronic medical reporting, high-priority efforts for the President's Network and IT R&D $3+ billion dollar annual budget, innovative NIH IT endeavors, and H1N1 response counter-measures. Presented successful findings to White House science and national security representatives, the Federal CTO, two- and three-star military generals, and U.N. representatives on policy recommendations regarding cybersecurity and US-CERT, cyber deterrence, the Nationwide Health Information Network, IT standards to stimulate industry innovation, counter-narcotics/counter-insurgency, and the National Communications System and gov't continuity of operations following a national crisis. Invited expert speaker on collective intelligence at the Institute for Human-Machine Cognition and invited expert to join the Global Futures Forum in 2009; also invited expert with IARPA's Aggregative Contingent Estimation in 2010. Authored papers on improving interagency situational awareness recognized publicly as part of McKinsey's "Top Ten Business Trends to Watch" awarded an IBM Center for the Business of Gov't Grant in 2010.

Deployed to Afghanistan voluntarily in 2009 as a Special Advisor to a Brigadier General for 120 days overseeing STRAT EFFECTS for NATO's International Security Assistance Force and U.S. Forces Afghanistan; tasked by new Presidential Administration to help Generals "think differently" on critical strategies to improve regional military and humanitarian stabilization operations; awarded NATO Service Medal in 2009. Invited expert with NSF, NSA, and IARPA's "Science of Security" endeavor in 2008; also invited panelist at U.K.-U.S. closed discussions on "Measuring and Mapping Cybercrime" in 2010. Invited speaker and panelist at the "Enterprise 2.0" conference in late 2008, sponsored by CIA's World Intelligence Review and ODNI's Intelligence Community Enterprise Services. Served as Visiting Associate faculty, parallel with full-time work, at the National Defense University's Information Resource Management College following return from Afghanistan deployment starting in 2009.

2007-2008. **WEB 2.0 HEALTHCARE & INNOVATION STRATEGIST**
Sermo (sermo.com) & U.S. Dept. of Energy

Developed innovative organizational and web 2.0 technology strategies for the DOE's Energy and Environmental Security Directorate to test and implement improved: (1) collaborations and business transformation within the Directorate; (2) transnational situational awareness and intelligence assessments; (3) crisis response leveraging scientific expertise; (4) enhanced global security coordination efforts with national and international partners. Spoke as an invited expert at conferences in D.C. and internationally, to include meetings with the Italian Embassy and Scottish Enterprise in 2008 while a pursuing PhD and later as Post-Doctoral Associate at MIT and Harvard. Advised startup organization on short and long-term strategies for their online, knowledge ecosystem of 70,000+ physicians for improved: (1) medical situational awareness leveraging web 2.0 advances; (2) engineering better inter-state and national information sharing related to U.S. healthcare; (3) peer-to-peer healthcare innovations; (4) enhanced decision making across U.S. hospitals and primary care providers. Authored case studies regarding the startup company's approach to knowledge brokering and information arbitrage among a community of U.S. physicians as a Post-Doctoral Associate at MIT and Harvard.

2005-2008. **PhD & POST-DOCTORAL ASSOCIATE**
Emory University, CDC, MIT, & Harvard University

Moderated panels at Harvard's Kennedy School of Government, including "Leadership and Strategic Management for Chief Information Officers" symposium in 2008; presented and led panel discussions involving policy and organizational implementation aspects of IT-enabled situational awareness. Authored research with Dr. Jerry Mechling; presented on "Collective Intelligence Applied to Public Health" at the Harvard Berkman Center for Internet and Society. Researched structural elements of IT-enabled distributed problem-solving networks at MIT with the Center for Collective Intelligence; authored research with Dr. Thomas Malone.

Developed innovative organizational and technology strategies for BioPHusion pilot at the U.S. Centers for Disease Control and Prevention (CDC). to test and implement improved: (1) inter-organizational IT-enabled collaborations and business transformation within the agency; (2) biothreat situational awareness, intelligence assessments, and decision-making; (3) crisis response leveraging scientific expertise; (4) enhanced global public health coordination efforts with national and international partners. Led, while pursuing a PhD at Emory and later as a Post-Doctoral Associate at MIT and Harvard, a comprehensive agency-wide assessment of the technological, social, and business processes influencing the performance outcomes of knowledge exchanges across the agency and with the CDC's partners; invited to give multiple senior staff presentations on findings and possible go-forward strategies.

2000-2005. **ASSOCIATE DIRECTOR of INFORMATICS & IT CHIEF**
Centers for Disease Control and Prevention (CDC)

Directed informatics strategy across 10 different branches and 650+ personnel focused on HIV/AIDS prevention at the CDC when promoted in 2004; led national informatics initiatives, international outreach, and enterprise change strategies; directed senior staff on knowledge management, organizational transformation, business integration, and innovative technology efforts. Oversaw the division's capital planning and OMB submissions for multi-million dollar efforts; brokered new collaborations aided by technology with DHHS and the 50 states; monitored the progress of 200+ different enterprise application efforts. Led teams developing (1) risk mitigation plans for keeping 400+

projects within budget, on time, and on target; (2) overarching IT , knowledge management (KM) vision, organizational transformation, and business processes; (3) enterprise architecture plans for the division and the prototyping of new .NET, Java/SOAP, SQL, and XML solutions with other agency partners; (4) accelerated accreditation of security protocols.

Stabilized within 6 months upon arrival several failing or borderline critical systems across division to "on course and within budget", saving about $3.5M in annual expenses; proposed, implemented, and mentored a tiger team of business analysts to link programmatic needs with technical systems and connect a team of 110+ technology professionals. Oversaw long-term enterprise objectives important to the division, teams of interdisciplinary contractors and gov't employees, enterprise architecture alignment, FY budget plans, and project milestones supporting the agency's mission; coordinated with DHHS, CMMS, VA, NIH, and other health organizations on electronic health monitoring, genomic sequencing, and epidemiological reporting services. Liaised with state/local/tribal and internat'l health departments to build consensus on health IT efforts; awarded CDC Director's Agency-Wide Honor Award for Service in 2004.

Led CDC's Bioterrorism Preparedness and Response Program's technology response to 9/11, anthrax, West Nile, SARS, monkeypox, and other emergencies; received DHHS Secretary's Award in 2002 for anthrax response the year prior; nominated as Federal Employee of the Year for NCID and shared another DHHS Secretary's Award for SARS and monkeypox response in 2004. Pioneered the U.S.'s electronic mechanisms for lab reporting via the international Laboratory Response Network (LRN) for Bioterrorism in partnership with DHHS, DOD, VA, and USDA from 2000-2005; recognized as an Innovations in American Government finalist in 2005.

Directed a team of 21+ technology professionals focused on technology efforts for bioterrorism response starting in 2000. Received promotion a GS-14 Associate Director in 2004; oversaw long-term objectives, FY budget plans, and project milestones associated with 80+ different technology projects; directed multiple project managers, contractors, and developers working on bioterrorism response technology solutions nationally and internationally, to include electronic reporting, monitoring, health surveillance, and emergency operations efforts. Led pioneering technology strategy for the BT program, including: (1) web-based laboratory reporting of biothreat agents and portable epidemiology tracking for emergencies; (2) overarching IT, KM vision, and team collaborations for bioterrorism response. Elevated from technology strategist for the Special Pathogens Branch in late 2000, to ORISE fellow and LRN project manager in 2001 overseeing transition of the network, consisting of 1,500+ users internationally, to a more secure administrative environment; transition proved successful, on-time, within budget, and with minimal downtime. Provided interdisciplinary leadership and business oversight for the design, configuration, administration, and implementation of system-wide technology policies regarding the LRN's national and international architecture across labs, field deployment hardware, web (ASP, PHP, Java/SOAP) technologies, and database platforms (.NET, SQL, and XML), and security policies; promoted a GS-13 in 2002 and to Senior Advisor to the Director in late 2003.

Built consensus within the CDC and with federal and state/local/tribal interagency partners regarding the BT program's needed IT and KM solutions; briefed senior staff including the Director on mission-critical systems, business transformation initiatives, and capital plans; co-authored papers reviewing solutions available for bioterrorism response and provided technology policy recommendations for the CDC Emergency Operation Center. Coordinated and gave IT briefings to multiple agencies, to include the CIA, FBI, DOD, DHS, DARPA, DTRA, GAO, EPA, FDA, USDA in addition to organizations such as APHL, CSTE, NASCIO, MITRE, the Carter Center, and NDU; invited speaker at PHIN conference in 2003; subject-matter expert with the Interagency Intelligence Committee on Terrorism.

1998-2000. **PROJECT MANAGER & SENIOR DEVELOPER**
Microsoft Gold-Certified Partner (IntelliNet) & Yahoo!

Advised, as an invited Yahoo! Web Corps consultant for non-profits, the Boys & Girls Clubs of America Internet presence, technology strategy, and future direction; provided technical leadership in designing and coordinating IT project goals for public and internal sites. Scoped a web-based outreach and integration effort for their 20,000+ facilities; identified inter-organizational collaboration gaps; developed two combined intranet/extranet solutions (running IIS or Apache, sitting on NT4/W2K or

Linux) to resolve these challenges. Served as adjunct IT consultant for similar Doctors Without Borders effort; presented project plans at Yahoo! HQ.

Produced and deployed enterprise solutions in support of collaboration and knowledge management needs of Fortune 500 companies; served as a consultant with a Microsoft Gold-Certified Partner (IntelliNet) and Solution Provider. Developed, analyzed, and implemented customized enterprise-level solutions, most notably: (1) KM and business transformation solutions saving combined $500K/year; (2) awarding-winning team solutions for organizations comprising 15,000+ employees; (3) pioneering internal R&D solutions to best leverage both specialized and interdisciplinary expertise; (4) enterprise restructuring efforts completed within-budget, on-time, and achieving 99.95% uptime. Advised inter-office teams as pioneering expert on strategic solutions for real-time reporting and business intelligence; later promoted to Project Manager supporting IntelliNet's internal prototyping and application development initiatives (explored emerging technologies and frameworks to include SOAP, agile development, and early .NET technologies).

Developed, constructed, and tested: enterprise intranet and extranet front-ends (XML, ASP/JSP) for dynamically driven SQL applications, Visual Studio platform solutions for integrating business operations and communications, and distributed cross-platform database queries (various SQL flavors, some Oracle). Developed, analyzed, and implemented technology policies re: web, database, and network access controls, LAN hardware and software deployments, and enterprise-wide security plans (NT4/W2K and Novell) for managing group permissions associated with company networked applications and internet-based solutions. Pioneered strategy for integrating LDAP and web server technologies to support multiple databases, personalization, and knowledge management solutions; Microsoft Certified Professional, Solution Developer, and Trainer; liaised with Microsoft HQ on new XML and Active Directory tech. Received "Extensibility Award" and shared in Microsoft Worldwide KM Solution Award in 1999.

1995-1998. **LEAD APPLICATION DEVELOPER & PROJECT MANAGER**
IDA, National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC)

Developed, constructed, and tested prototype CDC collaboration system (WinAPI, Visual Studio, Cold Fusion), including web-based laboratory identification protocols for viral lab isolates, inventory control software, and security policies regarding lab database access, user rights, authentication, and connectivity in 1998. Developed, constructed, and tested an optimized NIH computer model of the 3-D folding of protein lattice conformations mapped to Hamiltonian circuits; programmed parallel routines in FORTRAN and C/C++. Designed, debugged, and performed minimization on clustered SGI machines on hybridized protein-folding algorithms in 1997.

Designed a prototype enterprise-level solution using COTS products (WinAPI, VB, C/C++) using satellite imagery of a forest fire to detect and model a real-time event; 18 month partially classified research endeavor. Authored paper on applying computers and satellite imagery to disaster response efforts; received First prize in Environmental Science at the Virginia Junior Academy of Science and Westinghouse semifinalist, though unable to declassify fully given data sources. Developed, analyzed, and implemented algorithms in C/C++ to calculate the trajectory, intensity, and future of a fire and interfaces to provide 3-D views of fire event; liaised as subject-matter expert with DOD and USDA on IT developments, simulations, and space-based digital imagery from 1995-1996.

1993-1995. **APPLICATION DEVELOPER & PROJECT MANAGER**
U.S. Department of Energy, USDA, and Walter Reed Army Medical Center

Designed prototype GUI for Walter Reed Army Medical Center's large hospital system facilitating transfer of pre-op medical imagery from remote patients located in the Balkans; presented project to DOD officials. Supported installation of 10K+ network seats; gained heavy exposure to network migration and repairs in 1994. Served as computer programmer and aided implementation of a web-based (pre-Netscape IPO) national USDA database for land usage; provided LAN and PC troubleshooting as part of the Soil Conservation Movement's efforts in 1994. Served as a computer programmer and network engineer assisting modeling of and initial testing of circuit board designs for the DOE's Continuous Electron Beam Accelerator Facility safety measures, should the 4-GeV beam escape containment; gained heavy exposure to networks and electrical engineering in 1993.

REFERENCES & EDUCATION

2000-present. **CAREER REFERENCES** For Current Employer Requests Please First Call 202.331.4068

1. Dr. Margaret Myers, Director of Information Technology and Systems Division at IDA
703.845.2000 ¤ mmyers@ida.org

2. RADM Ali Khan, MD, MPH, Assistant Surgeon General & Director PH Preparedness & Response
404.639.7377 ¤ ask0@cdc.gov

3. Dr. Benn Konsynski, George S. Craft Distinguished Professor of Information Systems & OM
404.727.6698 ¤ benn_konsynski@bus.emory.edu

2001-present. **LEADERSHIP TRAINING & SOCIETY MEMBERSHIPS** Federal Gov't Service

Harvard Kennedy School of Government's "21st Century Leadership: Chaos, Conflict, and Courage" executive course completed in 2011. Anti-Terrorism, Initial First Aid in Battlefield Environments, and other courses with U.S. Joint Forces Command completed in 2009. Completed Transformational Leadership, Emergency Management, Enterprise Planning, IT Security, Program Stewardship, certified Project Management, and certified Project Lifecycle Development courses successfully as a full-time federal gov't employee 2001-2005.

Memberships include lifetime-member with the Senior Executive Association; FBI's InfraGard; Object Management Group; Org. for the Adv. of Structured Information Standards; Mensa International; Habitat for Humanity International.

2008. **PhD in INFORMATION SYSTEMS** Goizueta Business School, Emory University

Researched innovative organizational, knowledge, and technology strategies for turbulent environments, focused on improving national security and crisis response; defended doctoral dissertation successfully on "Knowledge Ecosystems: Technology, Motivations, Processes, Performance" in early 2008. Invited by Microsoft in 2005 and again by official panel in 2007 to speak at the International Conference on Information Systems (ICIS) re: improved, bottom-up organizational collaborations; awarded "Best Paper, KM Track" and nominated for best paper overall at ICIS in 2007. Graduated in early 2008, accepted invited Post-Doctoral Associateship with MIT and Harvard that year. Invited to speak on research at Gov 2.0 Expo and Open Gov't Innovations Conference in 2010; author of 40+ research papers, peer-reviewed research articles, and technology case studies online at http://works.bepress.com/dbray/

Researched and provided strategies to the Federal Reserve Bank, U.S. DOE, Turner Broadcasting System Inc., and Swan Island Networks. Lectured to MBA, BBA, and other executive-level Masters students on transformational information systems and IT endeavors; class evaluations include Presentation Style: 4.5 / 5; Discussion and Class Management: 4.6 / 5; Explanation of Concepts and Ideas: 4.4 / 5. Awarded a National Defense Science and Engineering Grant and later recognized as a Sheth Fellow and Halle Institute Distinguished Scholar. Served on disruptive technologies discussion panel at the Americas Conference on Information Systems in 2006; invited to speak on IT and emergency response at the World Disaster Response Summit in 2007. Invited to serve as Editor-in-Chief for the International Journal of Cyber-Risks and Disruptive Technologies; invited to join Beta Gamma Sigma Honor Society in 2008.

2007. **VISITING ASSOCIATE** Oxford Internet Institute & Lecturer Series, British Computing Society

Awarded a Rotary Ambassadorial Scholarship to the U.K; invited speaker at University of Oxford Colleges, British Computing Society's Sociotechnical Lecturer Series, London Business School, London School of Economics, and several other universities on new paradigms for bottom-up approaches to organizational transformation and knowledge management in 2007; invited speaker to Rotary International members on how to improve global collaborations. Invited by Oxford Internet Institute to return and give additional presentations in 2007 and 2008 on the subjects of large-scale knowledge cultivation, distributed problem solving networks, networked situational awareness, and improved group decision-making; sponsored as part of McKinsey research series. Invited also to serve as strategic adviser to a U.S. DOE-sponsored meeting in Glasgow in 2008; invited again as a panelist at closed U.K.-U.S. discussion on "Measuring and Mapping Cybercrime" in 2010 and on "Achieving Appropriate Information Sharing and Information Protection" in 2011.

2004. **MSPH in PUBLIC HEALTH INFORMATICS** Rollins School of Public Health, Emory Univ.

Completed Master's thesis on IT, terrorism preparedness, health informatics, and emergency response, studied service-oriented architectures, enterprise project management, software lifecycles, biostatistics, geographical information systems, and epidemiology. Awarded a DHHS Public Health Grant; pursued the degree part-time while working full-time in the CDC's Bioterrorism Program. Graduated with honors and invited to join the Delta Omega Honor Society. Recognized by the School's Dean with alumni award for "making significant contributions toward improving the lives and health of others" in 2005.

2001. **BSCI in COMPUTER SCIENCE & BIOLOGY** Emory College, Emory Univ.

Completed Bachelor of Science for dual-majors in Computer Science and Biology; CS GPA: 4.0; awarded a full Emory Woodruff Scholarship; on Dean's List twice with an average of 19-20 credit hours/semester. Recognized with the Emory Humanitarian Award by the University President in 2001; later received the Emory Distinguished Arts and Science Alumni Award from the Trustees in 2007 and recognized Emory Alumni Luminary to speak on "Gov't Information Sharing and Safeguarding Post-9/11" in 2011.

Invited to join Phi Sigma, Creative Scholars Honor Societies, and Emory's Ethics and Servanthood Leadership program (also advisory alum) 1997-2001; Special Projects Chair for Habitat for Humanity Emory, Outdoor Emory Organization Trip Leader. Authored "A Willful Volunteer: Examining Conscience in an Unconscious World" (ISBN 059521620X) on philanthropy and globalization; developed computer models of Taxol anti-cancer research, Purkinje cells, heart oscillator cells, and HIV/AIDS transmission in South Africa; adept with C/C++ and Java, skilled with Perl, LISP, Prolog, Python, FORTRAN. Received Thomas Edison and Tandy Technology Scholarships; awarded International Science and Engineering Fair and Westinghouse awards before college in 1993-1996. Sent as U.S.'s single representative to the South American Science Fair in to Mendoza, Argentina and presented computer model of oil spills to 3,000+ students and teachers; received "El Mejor Trabajo" in 1994.

1996-present. **PUBLICATIONS** Not able to list all papers written (e.g., those produced for government)

Bray, D. and Jeffrey, W. f5: Forest Fire Flame Front Forecaster. Institute for Defense Analyses. (1996).

Bray. D. Enterprise Knowledge Management and Personalization Strategies. Presented at Microsoft Solutions Provider Conference (1998).

Kun, L. and Bray, D. Information Infrastructure Tools for Bioterrorism Preparedness. IEEE Engineering in Medicine and Biology, Vol. 21, No. 5. (2002). http://ssrn.com/abstract=961067

Bray, D. Needs of the Bioterrorism Preparedness and Response Program (BPRP) With Regard to Public Health Information Technology. Public Health Information Network (PHIN) Annual Conference and Subsequent MSPH Thesis. (2003). http://ssrn.com/abstract=962531

Bray, D. and Konsynski, B. Fighting Fear of a Bioterrorism Event With Information Technology: Real-World Examples and Opportunities. IEEE Intelligence and Security Informatics, Lecture Notes in Computer Science. (2006). http://ssrn.com/abstract=962278

Bray, D. Exploration, Exploitation, and Knowledge Management Strategies in Multi-Tier Hierarchical Organizations Experiencing Environmental Turbulence. North American Assoc. for Computational Social and Organizational Science (NAACSOS) Conference. (2006). http://ssrn.com/abstract=961043

Bray, D. Exploration, Exploitation, and Knowledge Management. Proceedings of the Twelfth Americas Conference on Information Systems (AMCIS). (2006). http://ssrn.com/abstract=962534

Bray, D., Chidambaram, L., Epstein, M., Hill, T., Thomas, D., Venkatsubramanyan, S., Hill, T., Watson, R. The Web as a Digital Reflection of Reality. Communications of the Association for Information Systems, Vol. 18, No. 28. (2006). http://ssrn.com/abstract=961088

Bray, D. Designing a Knowledge Ecosystem: A Solution for Organizations Confronting Hyperturbulent Environments. Queen's University Annual International Knowledge Management Doctoral Consortium. (2006). http://ssrn.com/abstract=961046

Bray, D., Konsynski, B., and Streator, J. Being a Systems Innovator. IS GlobalText Effort, Chapter 1. (2007). http://ssrn.com/abstract=964672

Bray, D. Literature Review - Knowledge Management Research at the Organizational Level. Emory University, Goizueta Business School. (2007). http://ssrn.com/abstract=991169

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1994-present. **VOLUNTEER ACTIVITIES**

Volunteered with Habitat for Humanity efforts in the Philippines, Romania, Nepal, Ghana, and South Korea and Hurricane Mitch recovery in Honduras efforts, in addition to efforts both locally and abroad in Afghanistan, Thailand, Mexico, Kyrgyzstan, Brazil, and Peru from 2001-present. Served as crew lead and EMT with annual Jimmy Carter Work Projects and blitz builds, received Habitat for Humanity's "President's Circle" honor; served as a health correspondent in South Africa covering post-apartheid public health problems in 1998, taught HIV/AIDS prevention to local students in Cape Town.

Selected by U.S. Navy to work with Dr. Robert Ballard and Woods Hole Oceanographic Institute in 1993; developed computer model of tectonic activity around the Sea of Cortez, mapped hydrothermal vents, and assisted with computer operations; televised internationally by CNN.