

Dennis K. McBride

Lake Providence, Falls Church, Virginia

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Highly-experienced Ph.D. level chief strategist, specializing at the intersection of science, technology, public policy, and industry/business. Technology leader in strategic formulation, development, adaptation, and transition of science/technology/acquisition programs. Retired Naval Officer (O-6 CAPT) - 20 years active duty as formally designated scientist/technologist. Bench level to highly technical two tour DARPA Program Manager and Tri-Service S&T Chair. Served as Senior Executive (4), Director, Center for Technology and National Security Policy, National Defense University. President (now emeritus), Potomac Institute for Policy Studies -- high profile nonpartisan/nonprofit think tank, advisors to congress, administration on Defense S&T priorities, through to implementation and systems retirement; role formerly performed by Congressional Office of Technology Assessment. Elected by faculty to Professor, Colleges of Engineering, and of Arts & Sciences. Taught and supervised graduate research - Georgetown University GPPI - McCourt School of Public Policy affiliated professor.

RELEVANT BACKGROUND

- Twenty-Year Career as U.S. Naval Officer/Scientist, Retired as O-6 (Navy Captain), Aerospace Engineering Psychologist, Formally trained Flight Test Engineer, Six R&D,T&E Labs, three HQ orgs
 - Ten Years as President (now *emeritus*), Potomac Institute for Policy Studies; serving role, in part, of former Office of Technology Assessment
 - Affiliated Professor (2004--2014) Georgetown Public Policy Institute, and Medical School; co-led Army/Joint Staff Military graduate degree program; taught 12 courses, supervised 60+ graduate completions; focus on system evaluation
 - Advisory Board Member, Systems Engineering Research Center (SERC), a DDR&E University Affiliated Research Center (UARC), comprising 22 universities
 - Executive Director (Dean-level), UCF Institute for Simulation & Training – tripled revenue and impact; \$3B Research Park Director
 - Elected by R1 (UCF) University Faculty to Full Professor--Joint Appointments, College of Industrial Engineering & Management Science, and in Department of Psychology
 - Served on DUSD staff – evaluation/selection of ACTD proposals; DASN staff: C2 ACQ
 - Successfully Led Congressionally authorized, presidentially sponsored, National BRAIN Project (\$50M DARPA; \$50M NIH) via Center for Neurotechnology Studies
 - Chief Strategic/Science Officer, NeuroRx Pharma; First Bio-Marker in Neuro-Psychiatric Medical Science – PTSD focus
 - Created first SECDEF approved Advanced Concepts Technology Demonstration (STOW); led Mine CM; Telemedicine ACTDs
 - Lecture Widely: High Technology -- Ethical Implications for Business/Society
 - Leadership of Numerous National Academies/Research Council Panel Studies
 - Recent co-authored invited article in National Academies journal, *The Bridge*
 - Served as GMU AVP, Research; President, George Mason Research Foundation
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EDUCATIONAL

Ph.D. (*With Distinction*, 1979) Experimental Psychology, The University of Georgia
M.S.S.M. (1987) Systems, Viterbi School of Engineering, University of Southern California
MBA (Program, 1981-1982) Temple University (Ambler Campus)
MPA/M.S.P.A. (1984) Public Administration, Business-Government-Society, Troy State University
M.S. (1978) Differential and Quantitative (Industrial) Psychology, The University of Georgia
B.S. (1975) Psychology, Franklin College of Arts and Sciences, The University of Georgia
Graduate (1980) Naval Aerospace Experimental Psychologist, Naval Aerospace Medical Institute
Graduate (1988) Flight Test Engineer Training Program, University of Tennessee Space Institute
Certificant (2017), Harvard Business School: Disruptive Strategies with Clayton Christensen
Certificant (2019), MIT: Corporate Innovation: Strategies for Leveraging (gov-industry-univ) Ecosystems
Graduate (2020) Biostatistics, Analytics and Statistical Studies Program, Institute for Statistics Education

PROFESSIONAL EXPERIENCE *(Reverse Chronological Order)*

2021—Current: **Hume Center for National Security and Technology, Virginia Tech**, Arlington, Virginia
Senior Advisor, Systems Strategy (Intelligent Systems Lab)

2014—Current NONPAYROLL: NeuroRx Pharma; Radnor, Pennsylvania; Haifa
Consulting Chief Strategist and Senior Scientist
Development of small molecule compounds for treatment of PTSD, bipolar depression, suicidality
FDA Fast Track Approval; clinical phase 2b/3 trials underway (anticipate 2021 go to market)
First Clinical Biomarker in Neuro-Psychiatric Medical Sciences
Led pivot to Aviptadil development for CoV-related ARDS; FDA Phase 3; early 2021 market intro

2003—Georgetown University, Washington D.C.

Affiliated Professor, **Georgetown Public Policy Institute (now McCourt School of Public Policy)**
Part time Instructor; principal contact for Joint Staff/US Army Internship/Master's Program
See courses taught, below
Public Policy Decision Making (PPOL 740)
Evaluation of Government Programs (PPOL 742)
National Security, Foreign Policy (Non-Negotiable: Strategic Technological Superiority; PPOL 850)
Ethical Decision Making: Leading in an Interagency Environment (contract DOD)
Supervise thesis projects:
PPOL 800, PPOL 701, 702 (thesis project)
Direct supervision of 50+ graduate research degree completions
Adjunct Professor, Appointment in **Department of Microbiology and Immunology**
Georgetown University School of Medicine
Co-Developed/Direct Regulatory Science Track (Biomedical Science Policy & Advocacy Program)
Public Policy for Scientists (MICB 606)
Seminar for Scientists (MICB 601)
Introduction to Regulatory Science and Public Health (MICB 702)
Advanced Regulatory Science and Public Health (MICB 703)
Ethics in the Joint Environment (Joint/Interagency (SES) Senior Leadership Preparation)
Supervise:
Research Internship for Scientists (MICB 900, 902)
Direct supervision of 20+ research project completions

2015—2020: Source America, National Headquarters - Designated Ability One Central Nonprofit Agency
Chief Strategy Officer and Vice President, Strategy and Innovation Division
Development and Implementation of Corporate and Enterprise Long Term Strategies (\$2.8B/yr/annum)
Development of Lines of Business for Government and Commercial Customers
Interface daily with senior-most executive leadership of: DOJ, HHS, DoD, Labor, DoE, NASA, CIA, etc.

2001—Current: Potomac Institute for Policy Studies, Arlington Virginia
President Emeritus (2001—2009 as President)
Non-partisan, not-for-profit, academic think tank, providing expertise to
Congress, the Administration, and Judiciary; with specialties in:
Science and technology / Defense Acquisition policy, impact of innovation
Established in 1994 after the disestablishment of United States **Congressional Office of Technology Assessment** to fulfill the role of OTA; demand exploded immediately after “9/11”
\$12M/y competitively funded; non-degree granting, highest clearances, academic institution
Increased revenue by factor of three within three years of assuming position as president

Frequent “talking head” on networks (CBS, BBC, Fox News Channel, etc.)

Examples: Delivered acquisition strategies IC and for NYPD, post 9-11 (UNCLASS available)

Ex officio, Chief of Academics, Potomac Academic Centers, oversaw
scholarly rigor, led business development:

International Center for Terrorism Studies (Professor Yonah Alexander, Director)

National Security Health Policy Center (Dr. Don Donahue, Director)

National Center for Unconventional Thought (Professor Sean Fitzpatrick, Director)

Risk Analysis Center (served as Co-Director with Professor Alan Moghissi)

Center for Neurotechnology Studies (Professor James Giordano, Director)

2019—Current: Board Member, Systems Engineering Research Center, University Affiliated Research Center
Leverages expertise of 22 collaborator universities; auspices of Director, Defense Research & Engineering

2018—Current: IEEE Committee WG P2794 Standards for Neural Interface Research

Vice Chair (professional association, voluntary responsibility)

Development of engineering reporting standards for direct, brain—computer interface research

2014 – 2015 (one-year appointment): National Defense University, Washington, DC

Senior Executive 4

Director, Center for Technology and National Security Policy and Distinguished Research Fellow

Direct Reimbursable Research, 20 specialists at confluence of technology and national security policy

Special focus on issues of protected privacy and unintended use of counter-intelligence technologies

Sponsor/customers from Intelligence, State, Office of Secretary of Defense

2012 -- 2014: George Mason University, Fairfax, Virginia

Associate Vice President, and Acting VP, **Office of Research & Economic Development** and

Associate Director, C4I Center of Excellence, Volgenau School of Engineering

Manage \$1.1 MM high tech/ human factors rapid development/rapid fielding technology

DARPA funded, GMU executed program

President, **George Mason Research Foundation** (2012—2013)

Manage administration of university sponsored intellectual property development

Oversee/direct legal/filing support from major D.C. IP/Patent law firm

2009 – 2012: Defense Advanced Research Projects Agency, Arlington, Virginia

Program Manager, Information Innovation Office, Strategic Management Technology Research

Resilient Command and Control Technology (delivered to U.S. Pacific Command)

Integrated Crisis Early Warning System (delivered to U.S. Strategic Command+)

Deep Green (Delivered to Army 2nd Infantry Division, Korea)

First DARPA exploitation of real time social media activity operationally—UNCLASS: *Social Satellites*

Technical Advisor/Lecturer, Joint Forces Staff College, Information Operations emerging HFE technologies

2005—Current: Institute for Regulatory Science, Arlington, Virginia

Vice President (voluntary capacity), promoted to Executive Vice President (2018)

Develop methodologies to support examination of regulatory claims, scientific issues

Provide expert witness testimony in courts of law

Author invited amici curiae for courts, including Supreme Court of the United States

Effectively drove the decision in *Massachusetts v EPA*, 2006

Conduct regulatory sciences studies for sponsors

Author, co-author scientific papers for peer review, publication

2002—2010: Institute for Creative Technology, University of Southern California, Los Angeles, California

Founding Member, Board of Advisors/Directors; University Affiliated Research Center

Assisted in creation of congressionally funded academic/virtual reality R&D Center of Excellence

Focused on academic, breakthrough, human-centric virtual reality research

Connected Army Research Lab funding with Hollywood special effects professionals to:

ICT produces internationally acclaimed leaps in simulation/wargaming capabilities

2001—Present, Occasional Consultant: Strategy & Innovation: Disruptive Strategies, Blue Ocean; Intentional Innovation; DARPA Canonical Criteria. Listed below are exemplary, compensated S&I engagements.

Exemplary University Consultancies

University of Pittsburgh; University of Southern California, Virginia Tech; among many

Exemplary Small Business Consultancies, Scientific Board Memberships

Object Video, Inc., Productivity Apex, Bennett Aerospace, IcoSystem, Quantum Leap Innovations – as Acting Chief Scientific/Strategy Officer from 2008-2009, Soar Inc., *inter alia*.

Exemplary Large Business Consultancies

Radio Shack (advisor to Len Roberts, CEO, and business strategy team)

Motorola Mobility (Chicago) Scientific consultant to C-Suite – state of art in Government R&D

Lockheed-Martin, CSC (Falls Church)

Exemplary U.S. Government Cabinet Level Consultancies

Strategic Advisor to Department of Homeland Security Secretary (Acting) James Loy (subsequently as Administrator, Transportation Security Administration), and to Department of Homeland Security Secretary, Michael Chertoff (specializing in leveraging of DoD S&T and Acquisition Strategies for DHS application)

Exemplary Supreme Court Consultancies (via authorship of invited *Amicus Curiae*)

Co-Lead Author, as Scientific Board member, Atlantic Legal Foundation: Scientific *amicus*, cited as “*decisively influential*,” submitted before **Supreme Court of U.S.**

Exemplary Legislative Consultancies on S&T Legislative Issues, U. S. Congress (via hands on expertise) Provided on request.

Work example: see “Bush signs grant, UCF gets \$5.5 million,” January 23, 2002

The Central Florida Future, 34, (19), Marcia Meji

Work example: see article, multi-year \$1+MM/yr recurring appropriation for GMU Krasnow Institute

2000—2010: Master Link, Inc., Orlando, Florida

Director and Chief Strategy Officer

Co-developed, patented human interface technologies to optimize mobile worker performance

Exploit emerging mobile communication technologies, operations research techniques

Realized significant revenue in multiple millions; executed planned obsolescence buyout

Optimized schedules, tool/expendables loading, skill-matching/up-skilling

Saving university customers \$MM/yr in campus maintenance costs, fuel consumption

Penetrated U.S. Navy shipboard application and handoff to Office of Naval Research

Extensive successful marketing of company to investors; through multiple rounds, Angel to ++

Secured Congressional appropriation support from geographical and substantive caucuses

2001—2007: Soar Tech, Inc., Ann Arbor, Michigan

Founding Board Member

Development of AI-based, commercial grade technologies for government, business customers

Based on SOAR, AI Program developed by Professor Alan Newell (father of AI at Carnegie Mellon)

1999—: University of Central Florida, Orlando, Florida

Professor¹ (and now Visiting Professor of Modeling and Simulation)

Executive Director, Institute for Simulation and Training

Nucleus of multi-billion dollar modeling, simulation, virtual reality, training industry, world-wide

Elected by faculties as:

Professor of Industrial Engineering and Management Science

College of Engineering and Computer Science (home of tenure)

Professor of Psychology, College of Arts and Sciences, and

Dean level position; direct report to Vice President for Research and Commercialization

Selection based on highly publicized, competitive, national search

CEO of internationally respected research institute (150+ employees)

Tripled research revenue, tripled facilities assets, quadrupled cross-faculty collaboration

Collateral *de facto* Director/Strategist, **Central Florida Research Park**

1,000-acre, 100-company, multi-B\$ university-centered high tech research park

Strategically developed master plan and initiation of M.S. and Ph.D. in M&S programs

Developed specifically to provide high tech trained employees for research park

State legislature required 25 students to justify state funding

Actuals: program initiated with 100+ graduate students; by far, world leader

Instructor for:

Graduate Human-Computer Engineering (EIN 6258; College of Engineering, Computer Science)

Undergraduate Psychology (PSY 2012H, Burnett Honors)

Personal Scientific Research: Biological origins of simulator sickness (ONR Grant)

Member, University President's Strategic Planning Committee

Major strategic accomplishment: Establishment (ultimately) of UCF School of Medicine

First "new" medical school endorsed by AMA, funded by a state in "years"

Extremely innovative strategy for first year medical class recruitment

1979—1999: Naval Aerospace Experimental (*Engineering*) Psychologist

Direct Commission, Medical Service Corps, U.S. Navy – Direct Commission as Lieutenant (JG) 1979 --

Retired as Navy Captain (CAPT, O-6, 1999)

Permanent Change of Station Assignments as U.S. Naval Medical Service Corps Officer (1999—1979)

1997—1999, Naval Medical Research Institute, Bethesda, Maryland; Office of Naval Research, Arlington, Virginia

CEO/Program Officer, Defense Biomedical Science and Technology Programs

Strategically transitioned U.S. Navy Medical R&D Command to Office of Naval Research

Program Officer for all biomedical and operational medicine S&T

Established Office of the Chief Technology Officer of the Navy

Seconded to ASN (RDA); concentration in information operations research

Selected for Command (CEO), Naval Research Laboratory

Krasnow Institute for Advanced Study (1994—1999), Fairfax, Virginia

External Faculty (Research Option for Program Officers)

ONR Grants: N000014-98-1-0845

Appointed to Graduate Faculty - Ph.D. and M.S. thesis committees (2005--)

1994—1997, Naval Research Laboratory, Information Technology Directorate, Washington, DC

Chief Scientist, Human Modeling and Simulation [Wargaming Asymmetric Competition]

Program Manager, Advanced Concepts Technology Demonstrations – Human Factors

Advanced Concepts Technology Demonstration - Navy Program Manager, Telemedicine Technology
Initiated portable medical ultrasound (soft tissue prosecution) technology (now \$10B/yr industry)
Developed hearing loss recovery medication (transitioned to clinical trials)
Developed comprehensive Modeling and Simulation S&T program

1989—1994, Defense Advanced Research Projects Agency, Arlington, Virginia

Program Manager, Computer Modeling and Simulation Technology for Human Factors Engineering
Manage \$100M+ computer wargaming for strategic supremacy program
Initiated first approved DoD Advanced Concepts Technology Demonstration
Synthetic Theatre of War for Human Training (\$100 MM, 4-year program)
Program Manager (acting, 1994) X-31 Vectored Thrust experimental aircraft
Agile Warrior PM: Develop off-line-of-sight targeting, tactical aircraft platforms (revolutionized aircraft combat maneuvering, Human Factors “breakthrough” as adjunct to X-31 program)
Managed Simulation for President’s Missile Defense (“Star Wars”) Program via Wargaming
Proof of concept from gaming supported decisions to proceed with NMD technology development

University of Denver, Southern Maryland Campus, Lexington Park, Maryland

Adjunct Associate Professor

Instruct graduate human systems sciences courses

National Defense University, Washington DC

Affiliated Faculty, School of Information Warfare

Lecturer in Information Warfare (IBW 100; support Professor Geisler)

1987—1989, Manned Flight Simulator, Naval Air Test Center, Patuxent River, Maryland

Head, Computer Simulation Branch; Chief Flight Test Officer/Engineer
Co-established Manned Flight Simulation component of Air Combat Environment T&E Facility
Supervised flight test rigor for all manned and non-piloted flight simulations
Chief Human Factors Officer, F-14A+, F-14D Programs
Engineering authority for human flight worthiness, all neuro-medical
Collateral Duty: Systems Directorate Public Affairs Officer

Saint Mary’s College, Saint Mary’s, Maryland

Visiting Instructor, psychology

Instruct undergraduate human factors psychology

1984—1987, Pacific Missile Test Center, Point Mugu, California

Director, Manned Systems Laboratory; NATOPS Qualified F-4 Phantom II NFO
Devised and flight-tested Red Team strategy/tactics against adaptive engagement concepts
Supervised human engineering tests, Electronic Warfare Human Computer Interface
Command expert: medical, physiological, psychological science/technology issues
Collateral Duty: Command Speakers Bureau

Naval Post-Graduate School, Monterey, California

Affiliated Lecturer, Department of Operations Research

Instruct human factors/operations research; human performance as acquisition driver

1982—1984, Naval Aerospace Medical Research Laboratory, Pensacola, Florida

Chief, Engineering Psychology Division

Led all basic science research, human decision making under stress
Engineering basis for reducing crew complement in tactical aircraft from two, to one aviator
Foundation neuropsychological research used to help define combat related PTSD
Collateral Duty: Public Affairs Officer

University of West Florida, Pensacola, Florida

Adjunct Assistant Professor, Department of Psychology

Instruct human factors psychology

University of South Alabama Graduate School, Mobile, Alabama

Adjunct Faculty Member

Supervise graduate research in human factors psychology

National Research Council (Office of Scientific and Engineering Personnel)

Research Associateship Advisor (competitively awarded, 1983--)

Human Information and Effects of Workload (National Research Council 56.51.06.01)

1980—1982, Naval Air Development Center, Warminster, Pennsylvania

Program Officer, Human Factors and Technology Division, Aircraft and Crew Systems Division

Project Officer, Design for Maintainers (human factors) R&D

Condition-Based Maintenance to replace dogma of "Scheduled Maintenance"

Project Officer, ECX-TACAMO Human Factors Program

Field test technology for POTUS' Strategic Communication with National Assets

Led scientific systematic experimentation, recovery from g-induced loss of consciousness

Contracts Technical Officer, Contracts Specification Review Board

Penn State University College of Liberal Arts, Ogontz (now Abington) Campus, Pennsylvania

Adjunct Instructor

Instruct undergraduate Introductory Psychology

1979—1980, Naval Aerospace Medical Institute, Pensacola, FL

Student Naval Aerospace Experimental Psychologist

Student Flight Surgeon Class 80-1; Graduated 1st among Staff Corps students

Professional Certifications

Certification, Professional Ergonomics (Human Factors) (CPE 603, 1993)

Board of Certification in Professional Ergonomics, Bellingham, Washington

Certification, Professional Modeling and Simulation (CMSP; C00023, 2002)

M&S Professional Certification Commission, National Training Systems Association, Arlington, Virginia

Certification, Intentional Innovation Expert, Edge Dweller, Inc., 2018

Blue Ocean Strategy Navigator, Blue Ocean Academy™ and Blue Ocean Studio™ (2006, renewed 2017)

Disruptive Strategy, Harvard Business School (online certificate program completion, April, 2017)

MIT: Corporate Innovation: Strategies for Leading (university-industry-government) Ecosystems Certificate 2019

Business Strategy: Achieving Competitive Advantage, Samuel Johnson Graduate School of Management,

Cornell University Online (June, 2018)

Economics for Managers, Certificate Program Completion (2018), Harvard Business School

Elected to Senior Member, Society of Industrial and Organizational Psychologists

Elected to Senior Member, Institute of Industrial and Systems Engineers

Strategic Competitive Intelligence Professionals (full member)

Selected Continuing Education (*academic credit)

Certificate, Flight Simulation Engineering Resident Course, Massachusetts Institute of Technology (MIT)*

Certificate, Engineering Management, George Washington School of Engineering*

Certificate, Systems Safety (and Risk Management), University of Indiana

Certificate, Government R&D Contracting, Sterling Institute

Certificate, Operations Research Summer Course (in residence), University of Michigan*

Certificate, Human Factors Engineering Summer Course (in residence), University of Michigan*

Selected Awards

Chatelier Career Award, Society of U.S. Naval Aerospace Experimental Psychologists (2011)
Citation, U.S. Congress House Armed Services Ranking Member: UNCLASS: Iraqi Freedom Impact (2007)
Certificate of Appreciation, Director of National Intelligence: Superior Accomplishment (2006)
Legion of Merit (advancement of strategic communication technologies, 1999)
Father of Computer-Generated Forces award, BRIMS IEEE 1272 International Consortium (1998)
L.P. Coombes Medal (for technological leadership), Australian Institution of Engineers (1994)
Meritorious Service Medal (applied information operations technology, 1997)
Selection for Medical Research Laboratory Command, Navy Surgeon General Board (1997)
Defense Superior Service Medal (development of high tech experimentation technology, 1994)
Joint Service Commendation Medal (Desert Storm Impact: rapid C2 technology, 1991)
Navy Commendation Medal (human-computer interaction in high performance aircraft, 1989)
Selected as NASA Astronaut Candidate (Mission Specialist), Navy Selection Board (1989) (opted to remain USN)
Fourth in Class, Flight Test Engineer Training Program, University of Tennessee Space Institute (1988)
Best Scientific Article (Fellows), Aerospace Medical Association (1985)
Post-Doctoral Research Advisor, National Research Council Associateship Program (1983-)
Navy Achievement Medal (pioneering science of g-induced loss of consciousness (1982)

Summary of Undergraduate and Graduate Teaching Related Positions

George Mason University, Fairfax, VA

Research Professor (2012—)

Krasnow Institute External Faculty (1994—1999)

Graduate Faculty (Arts & Sciences, 2005--)

Georgetown University, Washington DC (2003--)

Affiliated Professor, McCourt School of Public Policy

Adjunct Professor, Microbiology and Immunology, School of Medicine

Biomedical Science Policy and Advocacy M.S. Program

Track developer, Regulatory Science

Graduate Courses Taught at **Georgetown University** (MICB (microbiology); PBIO (biology); PPOL (public policy); 60 sections total last ten years from university web site:

MICB-601-01. Spring 2008: SEM: SCIENCE POLICY & ADVOCACY. Spring 2008

MICB-601-01. Spring 2009: SEM: SCIENCE POLICY & ADVOCACY. Spring 2009

MICB-601-01. Spring 2010: Sem: Science Policy & Advocacy. Spring 2010

MICB-601-01. Spring 2011: Sem - Science Policy & Advocacy. Spring 2011

MICB-601-01. Spring 2012: Sem - Science Policy & Advocacy. Spring 2012

MICB-601-01. Spring 2013: Sem: Science Policy & Advocacy. Spring 2013

MICB-601-01. Spring 2014: Sem: Science Policy & Advocacy. Spring 2014

MICB-606-01. Fall 2007: PUBLIC POLICY FOR SCIENTISTS. Fall 2007

MICB-606-01. Fall 2008: PUBLIC POLICY FOR SCIENTISTS. Fall 2008

MICB-606-01. Fall 2009: Public Policy for Scientists. Fall 2009

MICB-606-01. Fall 2010: Public Policy for Scientists. Fall 2010

MICB-606-01. Fall 2011: Public Policy for Scientists. Fall 2011

MICB-606-01. Fall 2012: Public Policy for Scientists. Fall 2012

MICB-606-01. Fall 2013: Public Policy for Scientists. Fall 2013

MICB-702-01. Fall 2011: Regulatory Sci & Public Health. Fall 2011

MICB-702-01. Fall 2012: Regulatory Sci & Public Health. Fall 2012

MICB-702-01. Fall 2013: Regulatory Sci & Public Health. Fall 2013
 MICB-703-01. Spring 2012: Adv Reg Science & Public Hlth. Spring 2012
 MICB-703-01. Spring 2013: Adv Reg Science & Public Hlth. Spring 2013
 MICB-703-01. Spring 2014: Adv Reg Science & Public Hlth. Spring 2014
 MICB-900-01. Fall 2011: Tutorial - Internship. Fall 2011
 MICB-900-01. Fall 2012: Tutorial - Internship. Fall 2012
 MICB-900-01. Fall 2013: Tutorial: Internship. Fall 2013
 MICB-900-01. Spring 2013: Potomac Inst for Policy Stud's. Spring 2013
 MICB-900-01. Spring 2014: Potomac Inst for Policy Stud's. Spring 2014
 MICB-900-06. Spring 2012: Intrnshp - Potomac Inst. Spring 2012
 MICB-902-01. Spring 2007: PUBLIC POLICY ANAL:POTOMAC INST. Spring 2007
 MICB-902-01. Spring 2008: PUBLIC POLICY ANAL:POTOMAC INST. Spring 2008
 MICB-902-01. Spring 2009: PUBLIC POLICY ANAL:POTOMAC INST. Spring 2009
 MICB-902-01. Spring 2010: Public Policy Anal:Potomac Ins. Spring 2010
 MICB-601-01. Spring 2007: SEM: SCIENCE POLICY & ADVOCACY. Spring 2007
 PBIO-537-01. Fall 2006: SEX DIFFERENCES:PHYSIO/PATHOPHYS. Fall 2006
 PPOL-700-09. Fall 2007: THESIS WORKSHOP. Fall 2007
 PPOL-701-09. Spring 2008: THESIS WORKSHOP. Spring 2008
 PPOL-740-01. Fall 2004: MGMT OF POLICY ANALYSIS. Fall 2004
 PPOL-740-01. Fall 2005: DECISION MAKING PUBLIC POLICY. Fall 2005
 PPOL-740-02. Fall 2008: DECISION MAKING PUBLIC POLICY. Fall 2008
 PPOL-740-02. Fall 2009: Decision Making Public Policy. Fall 2009
 PPOL-740-02. Spring 2004: MGMT OF POLICY ANALYSIS. Spring 2004
 PPOL-742-01. Fall 2006: MGMT OF PROGRAM EVALUATION. Fall 2006
 PPOL-742-01. Fall 2007: MGMT OF PROGRAM EVALUATION. Fall 2007
 PPOL-742-01. Fall 2008: MGMT OF PROGRAM EVALUATION. Fall 2008
 PPOL-742-01. Spring 2005: MGMT OF PROGRAM EVALUATION. Spring 2005
 PPOL-742-01. Spring 2006: MGMT OF PROGRAM EVALUATION. Spring 2006
 PPOL-800-02. Fall 2007: ADV POLICY MGMT PROJECT. Fall 2007
 PPOL-800-02. Fall 2008: ADV POLICY MGMT PROJECT. Fall 2008
 PPOL-800-02. Fall 2009: Adv Policy Mgmt Project. Fall 2009
 PPOL-800-02. Fall 2010: Adv Policy Mgmt Project. Fall 2010
 PPOL-800-03. Spring 2007: ADV POLICY MGMT PROJECT. Spring 2007
 PPOL-800-03. Spring 2008: ADV POLICY MGMT PROJECT. Spring 2008
 PPOL-800-03. Spring 2009: ADV POLICY MGMT PROJECT. Spring 2009
 PPOL-800-03. Spring 2010: Adv Policy Mgmt Project. Spring 2010
 PPOL-800-04. Spring 2005: ADV POLICY MGMT PROJECT. Spring 2005
 PPOL-800-06. Spring 2006: ADV POLICY MGMT PROJECT. Spring 2006

PPOL-800-13. Spring 2012: Adv Policy Mgmt Project. Spring 2012
 PPOL-800-13. Spring 2013: Adv Policy Mgmt Project. Spring 2013
 PPOL-855-01. Spring 2009: DEFENSE AND FOREIGN POLICY. Spring 2009
 PPOL-855-61. Spring 2008: DEFENSE AND FOREIGN POLICY. Spring 2008
 PPOL-855-62. Spring 2006: DEFENSE AND FOREIGN POLICY. Spring 2006
 PPOL-855-62. Spring 2007: DEFENSE AND FOREIGN POLICY. Spring 2007

George Washington University School of Business (W. Halal classes, 2011--)
 Periodic Lecturer: Development of highly advanced technology

University of Central Florida, Orlando, FL (1999—2001)
 Professor, Industrial Engineering and Management Sciences (tenure)
 Professor, Psychology (College of Arts and Sciences)

National Defense University, Washington, DC
School of Information Warfare
Affiliated Faculty Lecturer (1993—1995)
Joint Forces Staff College, Joint C2 & Information Operations School (2011--)
Lecturer, Emerging Concepts for Joint Operations
Center for Technology and National Security Policy (2012--2014)
Professor (IPA)

University of Denver, Lexington Park, MD (1988—1990)
Adjunct Associate Professor, Systems

Saint Mary's College of Maryland, Saint Mary's, MD (1987—1989)
Visiting Instructor in Psychology

Naval Postgraduate School, Monterey, CA (1984--)
Periodic Lecturer, Human Factors/Operations Research

University of West Florida, Pensacola, FL (1983—1984)
Adjunct Assistant Professor, Psychology

Naval Aerospace Medical Institute, Pensacola, FL
Lecturer, Aeromedical Physiology and Psychology (1982--)

Penn State University, Ogontz, PA
Adjunct Instructor, Psychology (1981—1982)

University of Georgia (1975—1979)
Teaching Assistant, Introductory Psychology
Instructor, Experimental Psychology; Advanced Statistics/Experimental Design
Macon State College
Teaching Assistant, Biology

Representative Business, Professional, Community Board Appointments

Pen Air Federal Credit Union, Pensacola, FL (elected member, Board of Directors: 1983—1985)
Personnel Committee (Chair), Investments Committee
Board of Directors, Master Link, Inc. (Director, “my” company in Orlando, Florida)
Past Member, Board of Directors, Board of Certification in Professional Ergonomics
Founding Member, Board of Directors, Foundation for Professional Ergonomics
Expert Member (information sciences, neurotechnology), Tech Cast, Inc. (501(c)3, technology forecasting (GWU)
Board Member, DoD Human Systems Information Analysis Center (HSIAC)

Selected Expertise in Judicial, Legal Affairs

Invited Lecture, Best Available Science (government regulation), National Science Foundation
NCAS: <http://www.youtube.com/watch?v=E3luZ6Mqg18&list=PL07F838B496EE159D> (2009)
Faculty Lecturer, Judicial Symposium, Scientific Evidence in the Courts (2007)
Judicial Education Program, AEI-Brookings Joint Center for Regulatory Studies
Member, Board of Scientific Advisors, Atlantic Legal Foundation (New York City; 2006--)
Principal co-author of decisive *amicus*, U.S. Supreme Court: *Mass. v. U.S. E.P.A.* (2007)

Expert witness testimony, civil and criminal cases (see publications; details provided on request)
 High profile criminal case: Prevailed for defense in U.S.A. v David S. Chase
 High profile civil case: Did not prevail in wvc3 v Plexus Scientific Corporation
 Extensive pre-trial preparation support (25+ cases) in human factors/medical forensics
 Provision of day-long workshop on admissibility and exploitation of scientific evidence in courts
 Defenders Association of Philadelphia (2007)
 Testimony for President's Defense Advisory Committee on Women in the Services (2003)
 Scientific preparation for U.S. Supreme Court Cases (e.g., for plaintiff, PGA Tour v Martin, 1994)
 Expert Testimony before U.S. Department of Health and Human Services (2006)

Professional Editorial

Editor-in-Chief, *Review of Policy Research* (Policy Studies Organization; American Political Science Association, 2003—2005)
 Co-Editor-in Chief, *Technology* (2005--2009)
 Co-Editor-in-Chief, *Regulatory Science* (2012--)
 Associate Editor, *Human Nature Review* (June 2003--)
 Member, Editorial Board, *International Journal of Human-Computer Interaction* (2001—2005)
 Editorial Associate, *Behavior and Brain Science* (2004--)
 Member, Editorial Board, *Theoretical Issues in Ergonomics Science* (2004--)

Occasional Reviewer:

Human Factors and Ergonomics
International Journal of Industrial Ergonomics
Politics and the Life Sciences
Georgetown Public Policy Review

Principal Professional Memberships (Fellowships, etc.)

IEEE - Systems Man and Cybernetics Society
 National Defense Industrial Association (Individual)
 American Evaluation Association
 Society for Neuroscience
 International Ergonomics Association
 Military Officers Association of America
 Aerospace Medical Association
 APA (Division 19, Military Psychology; Division 21, Engineering Psychology)

Pro Bono Community Involvement

Instructor, GMU Arlington Learning in Retirement Institute (since inception of ALRI)
 Course Short Titles from ALRI:

Instructor		Course		Semester
Dennis	McBride	406	Terrorism (Strategic Comm)	04F
Dennis	McBride	406	Terrorism (Strategic Comm)	04W
Dennis	McBride	406	Terrorism (Strategic Comm)	05W

Dennis	McBride	406	Terrorism and Foreign Policy	06F
Dennis	McBride	615	Science in Government	07F
Dennis	McBride	616	Science in Government	08W
Dennis	McBride	617	Neuroscience	10W
Dennis	McBride	422	Scientific Foundations of Regulation	12W

Scientific and Technical Publications (*last ten years*; total technical and peer-reviewed papers (150+ available on request)

Rouse, W.B., & McBride, D.K., (2021). Cost/Benefit Analysis for Human Systems Investments: Predicting and Trading Off Economic and Non-Economic Impacts of Human Factors & Ergonomics, In W. Karwowski & G. Salvendy, Eds., *Handbook of Human Factors & Ergonomics* (5th Edition), New York: Wiley.

Rouse, W.B., & McBride, D.K., (2021). Assistive Technologies for Disabled and Older Adults: Models of Use Cases, Market Economics, and Business Cases. In A. Madni & N. Augustine, Eds., *Handbook of Model-Based Systems Engineering*. Berlin: Springer.

Rouse, W.B. and McBride, D.K. (2019) A systems approach to assistive technologies for disabled and older adults. *National Academy of Engineering, The Bridge*: 32-38.

Moghissi, A. A., O'Brien J., Stoneham J., Calderone R.A., & McBride D.K. (2018) Regulatory Biomedical Engineering: Application of the Regulatory Science Framework to Biomedical Engineering. *Journal of Biotechnology and Bioengineering* 2; 51-60.

Moghissi, A.A., Calderone R.A., Azam, F., Nowak, T., Sheppard S., McBride D.K., and Jaeger, L. (2018) Regulating Ionizing Radiation Based on Metrics for Evaluation of Regulatory Science Claims. *Dose Response*. 16; 1-6.

Moghissi, A.A., Calderone R.A., Jaeger L., McBride D.K., and Steen T. A logical process for labeling food. (2018) *Agricultural Research and Technology*.13; 1-3.

Moghissi, A.A., Calderone R.A., McBride, D.K., & Jaeger, L. (2017) Innovation in Regulatory Science: Metrics for Evaluation of Regulatory Science Claims based on Best Available Regulatory Science. *Journal of Regulatory Science*. 5; 50-59.

Moghissi, A.A., Calderone, R.A., McBride, D.K., Geleta, A., Nowak, T., Spivak, A., Alavi, E., Estupigan, C., & Koch, R. (2017) Innovation in regulatory science: Translational regulatory science based on lessons learned from clinical translational science. *Journal of Translational Science*. 3 (6).

Moghissi, A.A., McBride, D.K., Amangero, L., Amin, M., Aqbal, D., Briseno, M, Carloni, N., Choi, H., Dehkharghani, R., Farmer, B., Khamooshi, K., Pavy, A., Rivera-Aquino, P., J., Varco J., & Winston, C. (2015) Innovation in Regulatory Science: The Critical Role of Review Criteria in Independent Peer Review. *Technology and Innovation* 17; 127-133.

Moghissi, A.A., Gurudas, N.A., Pei S., McBride, D.K., & Swetnam, M.S. (2015) Scientific ethics: Emphasizing regulatory science requirements. *Technology and Innovation* 17; 61-73.

Moghissi, A.A., McBride, D.K., Garcia, P.M., Chen, C.W., & Das, S. (2015) Assessment of organic vs. conventional food using best available science concept and metrics derived from it. *Technology and Innovation* 17; 135-143.

Moghissi, A.A., Pei, S., & Liu, Y. (2015) Golden Rice: Scientific, regulatory, and public information processes of genetically modified organism. *Critical Reviews in Biotechnology*; 34; 1-7.

Moghissi, A.A., Gerra, V.K., McBride, D.K., & Swetnam, M. (2014) Scientific foundation of regulating ionizing radiation: Application of metrics for evaluation of regulatory science information: *Health Physics*. 107; 388-3294.

Moghissi, A.A., Straja, S.R., Love, B.R., McBride, D.K., & Stough, R.R. (2014) Innovation in Regulatory Science: Evolution of a new scientific discipline. *Technology and Innovation*. 16; 155-1165.

Moghissi, A.A., Keim, M., McBride, D.K., & Swetnam, M.S. (2013) Wakefield Effect. *Synesis* 4; 15-23.

Moghissi, A.A., Swetnam, M.S., Amin, M., & McNulty, C. (2012) Ruckelshaus Effect. *Synesis* 3; 12-19.

Moghissi, A.A., McBride, D.K., & Amin, M. (2012) Regulatory Sciences: Description of the discipline, education, and ethics. *Japan Ministry of Science and Technology*.

Jeannotte, A.M., Schiller, K.N., Reeves, L.M., Derenzo, E.G. & McBride, D.K. (2010) Neurotechnology as a public good. In Giordano, J.J. and Gordijn, B. (Eds.) *Scientific and Philosophical Perspectives in Neuroethics*. 302—320. Cambridge: Linton Atlantic.

Relevant, Exemplary Chairmanships, Reviews, Expertise, Leadership (DoD Military Acquisition focus)

Warfare technological competencies gained via Human Factors and/or Modeling & Simulation:

Anti-Submarine Warfare, Strategic Communication (TACAMO), Anti-Surface Warfare, TACAIR (Air-to-Air), Electronic Warfare, Countermine Warfare, Riverine Warfare, Air Defense, Infantry, Armor/Anti-Armor, Amphibious, C4ISR, NATOPS Qualified F-4 NFO RDT&E

Co-chair, Life Sciences, Session II. Science and Engineering Symposium, *Air Force Systems Command/Naval Materiel Command*, Dayton, Ohio; 29 October 1981.

Chair, Logistics Sub-TAG, DoD/FAA Human Factors Engineering Technical Advisory Group; 1981-1982.

Member, Committee for the Protection of Human Subjects. *Naval Air Development Center*, Warminster, Pennsylvania; 1981-1982.

Member, Contracts Specification Review Board, *Aircraft and Crew Systems Technology Directorate, Naval Air Development Center*, Warminster, Pennsylvania; 1981-1982.

Chair, Human Factors Design for Maintainers Conference, *Naval Air Development Center*, Pensacola, Florida; March, 1982.

Chair, Human Factors in Designing for and Training of the Maintainer, *American Psychological Association Divisions 13/21*, Washington, DC; August, 1982.

Periodic Lecturer, Human Performance Limitations--for Student Flight Surgeon Classes, *Naval Aerospace Medical Institute*, Pensacola, Florida; 1982-1984.

Technical Reviewer, Design for Sustainability Conference, *U.S. Army Research Institute*, El Paso, Texas; March, 1983.

Chair, Symposium, *Five Questions on the Symbiotic Relationship Between Theory and Applications in Our Technological World*, *American Psychological Association Divisions 3/21*, Anaheim, California; August, 1983.

Editor, Command History, *Naval Aerospace Medical Research Laboratory*, Pensacola, Florida; 1983.

Editor, Command Five Year (1383-1987) Research Plan. *Naval Aerospace Medical Research Laboratory*, Pensacola, Florida; 1983.

Reviewer, Program Committee, *Society of Engineering Psychologists*, *American Psychological Association Division*; 1984.

Chair, Program Committee, *Society of Engineering Psychologists*, *American Psychological Association Division 21*; 1985, 1986.

Member, Command Speakers Bureau, *Pacific Missile Test Center*, Point Mugu, California; 1985-1987.

Chair, Test and Evaluation SubTAG, DoD/FAA Human Factors Engineering Technical Advisory Group; 1987.

Chair, Knowledge engineering frameworks. *IEEE International Conference on Systems, Man and Cybernetics*. Los Angeles, California; November, 1990.

Member, *Department of Defense Laboratory Closure Study Group* as Office of the Secretary of Defense Representative; 1990-1991.

Chair, *Low cost simulation*. *Future Directions in Simulation Symposium, International Workshop*, Melbourne, Australia; 26 June, 1992.

Co-chair, Session on *Visualization technology*. *IMAGES '92 International Conference*, Phoenix, Arizona; 14 July, 1992.

Technical Faculty, Advanced modeling and simulation. *Modeling, Simulation and Gaming of War, Short Course*. *Georgia Institute of Technology*, Atlanta, Georgia; 1 September, 1992.

Chair, DARPA Modeling and Simulation Technology Futures. *Military Operations Research Society Seminar*, Alexandria, Virginia; 30 September, 1992.

Review and Presentation, Advanced Distributed Simulation at ARPA and Leading Laboratories, *DoD Human Factors Engineering Technical Advisory Group Annual Meeting*, Orlando, Florida; 3 November, 1994.

Member, Navy Representative, *Human Behavior Representation Committee, Defense Modeling and Simulation Management Office (DMSO)*, 1994-1997.

Invited, Expert Technical Consultation, Simulation-based acquisition, provided to *Chilean Ministry of Defense*, Vine del Mar, Chile; 30 January – 1 February, 1995.

Expert Testimony provided to *President's Commission on the Assignment of Women in the Military*, Dallas, Texas; 27 August, 1995.

Member, US Delegation, *US/UK ACTD Cooperation Exploratory Conference*, Ministry of Defence, London, England; 30 January-6 February, 1996.

Periodic Lecturer, *Introduction to Information-Based Warfare*, National Defense University, Washington, DC; 1994-1997.

Consultant and Plenary Address to *Discovery of Battlespace Metaphors Workshop*, Naval Command, Control, Ocean Surveillance Systems Center Conference, Alexandria, Virginia; 3-4 April, 1996.

Expert day-long tutorial, Modeling and Simulation Technology, National Academy of Sciences, Naval Studies Board, Santa Monica, California; 16 May, 1996.

Vice Chairman, *American Society of Naval Engineers Modeling, Simulation and Virtual Prototyping Conference*, Crystal City, Virginia; 22-24 June, 1996.

Chair, Visionaries Panel, *American Society of Naval Engineers Modeling, Simulation and Virtual Prototyping Conference*, Crystal City, Virginia; 24 June, 1996.

Co-Chair, Training and Mission Rehearsal Working Group, *Naval Air Systems Command, Naval Aviation Workshop*, La Plata, Maryland; 17-18 July, 1996.

Chair, Session on Modeling and Simulation, *1996 Navy Research and Education Symposium on Command, Control, Communications and Intelligence*, Annapolis, Maryland; 7 August, 1996.

Expert M&S testimony provided to *NATO Defense Research Group Long Term Scientific Study (LTSS/48)*, Alexandria, Virginia; 23-26 September, 1996.

Member, Making the Case for Human Factors, Committee on Human Factors, *National Academy of Sciences, National Research Council*, Washington, DC; 17 December, 1996.

Conference Member, Presenter, and Reviewer, *National Academy of Science, National Research Council Computer Science and Technology Board*, M&S: Competitiveness Through Collaboration, Irvine, California; 19-20 October, 1996.

Reviewer, Marine Corps Round Table on Marine Corps Combat Development Process, *Marine Corps Combat Development Command*, Quantico, Virginia; 30 October, 1996.

Author, Science and Technology Chapter, Navy Modeling and Simulation Master Plan, *Chief of Naval Operations - Director, Space and Electronic Warfare*, Arlington, Virginia; 21 February, 1997.

Member, US/UK Panel and Keynote Presenter, *Workshop on Human Factors Support to Effectiveness in Systems Acquisition*, Office of Naval Research and Defence Evaluation and Research Agency, San Diego, California; 24-25 February, 1997.

Government Chair, Acquisition Reform Focus Session (AR4), *American Society of Naval Engineers ASNE Day Conference*, Washington, DC; 20 March, 1997.

Panelist, *Distributed Interactive Simulation - High Level Architecture Expert Session, Defense Simulation and Imaging Conference*, Alexandria, Virginia; 8-9 May, 1997.

Co-Chair, *Force Warfare Systems Engineering Board* (Modeling and Simulation Based Design), *Office of Deputy Assistant Secretary of the Navy (C41)*, Washington, DC; 1997.

Chair: Capabilities, Requirements, and Technologies, Human Performance in Simulation Workshop, *Army Research Institute and Institute for Defense Analyses*, Alexandria, Virginia; 30-31 June, 1997.

Member, *Defense Director Net Assessment Highlands Forum*. Key participation:

Impact of Information Technology Revolution; Santa Fe,
New Mexico; 12-14 August, 1996.

*Mind, Brain, and Computing: What the Neurosciences May Have
to Say About Hardware and Software Design*; Fairfax,
Virginia; 20-22 October, 1997.

Technical Reviewer and Consultant to CNO *Strategic Studies Group XV*, U.S. Naval War College, Newport, Rhode Island; 1996-1997.

Member:

Navy M&S High Level (simulation) Architecture Implementation Team (1996-1997)

Navy Simulation System Technical Review Team (1996-1997)

DoD Joint Simulation System (JSIMS) Architecture Review Team (1997)

SC-21 M&S Integrated Product Team (1995-1997)

PEO TAD Ship Self Defense Modeling and Simulation Oversight Board (1996--1998)

Advisor to MOVES (Modeling of Virtual Environments Sciences) M.S. Curriculum, *US Naval Postgraduate School*, Monterey, California; 1997-1999.

Senior Member, Committee for the Protection of Human Subjects; *Naval Medical Research and Development Command*, Bethesda, Maryland; 1998-1999.

Navy Representative (Operational Medicine Technology), *Armed Services Biomedical Research and Engineering Management Board, Director, Defense Research and Engineering*, Arlington, Virginia; 1997-1999.

Program Officer, Women's Operational Medicine Science and Technology, Office of Naval Research and liaison to *Navy Bureau of Medicine and Surgery*, Arlington, Virginia; 1997-1999.

Invited member (Specialist in technology and the evolutionary sciences), *DARPA/George Mason University/RAND Study Panel, Information and Biological Revolutions: Implications for Global Governance*, 1998-1999.

Member, Human Systems Technical Expert, Naval Aviation Science and Technology Requirements Panel, *Office of Naval Research and Navy Science and Technology Office*, Arlington, Virginia; 1998.

Chair, *Office of Naval Research Scientific Conference on Motion Sickness, Simulator Sickness, Balance Disorders and Sopor Syndrome*. University of New Orleans, Louisiana; 9-11 September, 1998.

Member, *Office of Naval Research Data Mining Integrated Product Team*; 1998.

Member (as Navy Representative), Steering Board, *Crew Systems Ergonomics Information Analysis Center* (CSERIAC); 1999.

Member, *Board of Certification in Professional Ergonomics* Committee on Re-Certification; 1999--.

Chair, Modeling and Simulation Panel, Smart Sensor Web Conference. Defense Director, Research and Engineering Conference, Arlington, Virginia; 1999.

Chair, *Biomimetics for Computer Network Security Workshop*. Office of Naval Research, Krasnow Institute for Advanced Study, and Potomac Institute for Policy Studies. Fairfax, Virginia; 11-13 June, 1999.

Co-Lead, *Office of Naval Research Modeling and Simulation Planning Team*; 1998-1999. (To establish credibility for initiation of multi-M\$ program)

Member, *DARPA/IDA Information Science and Technology (ISAT)* Study Group for Building a Time Travel Machine. (Chair, Computer Generated Forces Committee); 1998.

Chair, Computer Generated Forces Panel, *Defense Director for Research and Engineering Smart Sensor Web Program*, Alexandria, Virginia; June, 1999.

Keynote Kickoff Symposiast, *Complexity and Warfare Workshop*. Center for Naval Warfare Studies, Naval War College, Newport, Rhode Island; 29 July, 1999.

Co-organizer, Win-Win Policy Analysis Seminar. *Policy Studies Organization/Potomac Institute for Policy Studies*. Arlington, Virginia; 29 July; 1999.

U.S. Navy Representative, *NATO Simulation Policy Group*; 1999.

Program Officer for Investigation of Potential U.S. Navy role in National Missile Defense; March-October, 1999.

Expertise provided to *Government Accounting Office, Community and Economic Development Division*. Review of National Institute for Standards in Technology Advanced Technology Program; December, 1999.

Consultant to *Chief Technology Officer of the Navy*, Investigation of Rapid Airborne Mine Clearance System feasibility; 2000.

Co-Chair, Committee for Modeling and Simulation Ph.D. Program. *University of Central Florida*; 1999--.

Member, Sub-Committee for Multidisciplinarity. *University of Central Florida*; 2000-2001.

Member, Industrial Advisory Committee. *School of Computer Science, College of Electrical and Computer Engineering, University of Central Florida*; 2000-2001.

Faculty Member, International Studies Summer Institute, *University of Central Florida*; 1-5 May, 2000.

Member (1999-), Executive Advisory Board, Virtual Environments Program, *Office of Naval Research*, Arlington, Virginia.

Member, Multidisciplinary Studies Committee, *University of Central Florida*, 2000-.

Member, University Strategic Planning Committee. Author, Simulation and Training section, 2001.

Chair, Neuroscience Human Factors Panel, *Out of the Box and into the Future*. Sponsored by National Science Foundation (NSF), DARPA, Potomac Institute for Policy Studies, et al., 26-27 June, 2000, Washington, DC.

Member, International Program Committee, *First International Conference on Grand Challenges for Modeling and Simulation*.

Member, Interactive Simulation Specialty, Industrial Engineering Examination Committee, *University of Central Florida* (2001-)

Co-chair, Committee to Establish M&S Ph.D. Program, University of Central Florida (1999-2001; program approved by Florida Board of Education).

Member, Committees to establish professional credentialing of M&S specialists, National Training Systems Association (Implemented in 2001; First Certificate Awarded in Spring 2002).

Periodic Reviewer (2001--), National Science Foundation, Ballston Arlington, VA.

Chair, Panel on Engineering for Complex Systems, *National Research Council, National Academy of Science*; 15 May 2002

Member (Multiple), Senior Executive Service (SES, ST) Promotion Board(s)

Chair, *National Academy of Science, National Research Council, Aeronautics and Space Engineering Board Review Panel* on NASA's Engineering of Complex Systems Program, and Member, Committee for the Review of NASA's Pioneering Revolutionary Technology Program (2002--2003)

Chair, Neuroscience Human Factors Panel, *Out of the Box and into the Future*. Sponsored by *National Science Foundation, DARPA, et al.*, 26-27 June, 2000, Washington, DC.

Member, Committees to establish professional credentialing of M&S specialists, *National Training Systems Association* (Implemented in 2001; First Certificate Awarded in Spring 2002).

Reviewer, *National Science Foundation* panel studies (multiple since CY 2000)

Member (Multiple), Senior Executive Service (SES, ST) Promotion Board(s)

Member, *American Association for the Advancement of Science* (AAAS), Department of Homeland Security Fellows Selection Committee, 2005, 2006

Member, Bioengineering and Environmental Systems Division Major Research Instrumentation (MRI) Panel, *National Science Foundation* (2002)

Panelist, Alternative Strategies Dialogue forum. Military Transformation: A Framework for Understanding the Speculation. *SAIC StrategiesGroup* (think tank). March, 2003, Arlington, VA.

Member, Privacy and Civil Liberties Workshop. *Office of National Risk Assessment, U.S. Department of Homeland Security*. Convened and chaired by Admiral James Loy, Administrator, *Transportation Security Administration*. Architected privacy-sensitive system for airline boarding security. 16-18 March, 2003, Aspen Wye River Conference Center, MD.

Participant, Co-leadership, Co-editing (ANSER Corp., Lead), Subcommittee on Bioterrorism and Public Health Preparedness; *U.S. Senate Committee on Health, Education, Labor and Pensions* (August, 2005)

Member, Workshop, Scalable Robotic Interfaces, *National Research Council, National Academies* (November, 2004)

Vice President, *Policy Studies Organization* (affiliated with American Political Science Association) (2003—2005)

Member, Committee on Research Multi-disciplinarity, University of Central Florida (2000-2001).

Convener and panelist. Seeing is believing: Beyond the third brake light. Capitol Hill symposium hosted by SEN J. Breaux (D, LA), focusing on visual capability of elderly drivers. (2004)

Burnett Honors Housing Faculty Mentor (elected by undergraduate students), University of Central Florida (2000-)

Member, Industrial Advisory Committee, School of Computer Science
College of Engineering and Computer Science, University of Central Florida (1999--)

Member, *American Association for the Advancement of Science* (AAAS) 2005-2006 Department of Homeland Security Fellows Selection Committee

Member, Board on Mathematical Sciences and Applications, *National Research Council*; Defense Modeling, Simulation and Analysis Review Panel (2004-2005)

Panel Chair, *National Research Council, National Academies*, Aeronautics and Space Engineering Board Review Panel on NASA's Engineering of Complex Systems Program, Committee for the Review of NASA's Pioneering Revolutionary Technology Program (2002-2003)

Member, *National Research Council, National Academies*; Board on Mathematical Sciences and Applications; Modeling, Simulation and Analysis Review Panel member and co-author (2004-2006).

Invited Panelist. Neuroethics and the ethics of augmented cognition: An interdisciplinary workshop. Hosted by University of Central Florida, 24 October, 2007.

Expertise (2010--): IVth Amendment privacy rights and the risks of social media technology.

Scientific advisor to Joint Concept Technology Demonstration, *Information Volume and Velocity*, component of privacy and personally identifiable information (PII), National Defense University, U.S. Northern Command (2012-).

Author and Expert: National Neurotechnology Initiative. Reintroduced as House Bill 1483 and Senate Bill 586; January 2014. See http://professionals.epilepsy.com/page/announce_31709.html.

Vol. Chair, Washington Area Research University – Defense Research Laboratory Consortium (2013-)
GMU, GWU, UMD, Virginia Tech, Catholic U., Army Research Lab, Office of Naval Research