

J. Clay McGuyer, Ph.D.

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Objective: Results driven Ph.D. Biomedical Engineer with exceptional communication and team building skills, 30 years of military experience, and passion for developing innovative technological solutions

Education: Ph.D. Biomedical Engineering, Louisiana Tech University, 1999
MEMS, microsensor systems

B.S. Zoology (Parasitology), Louisiana State University, 1991
Advanced studies in parasitology

Skills: Innovation strategy Program development / management
Proven interagency team builder WMD analytics, operations, and policy

Experience:

Senior Advisor, BMNT Partners (08/18-present)

Developing innovative technology solutions for organizations with critical missions in uncertain environments using evidence based, data driven processes

- Providing DOD leader innovation education in support of the Defense Innovation Board
- Executed technology exploration studies for DTRA covering biometrics and battery disruption

WMD-CST Trainer, Eniwetok Group (08/18-present)

Trainer for Weapons of Mass Destruction – Civil Support Team CBRNE policy, analytics, tactics, techniques, and procedures

- Trained WMD-CSTs Advanced Diagnostics Training course, covering policy, analytics, effects, and procedures for WMD crisis management focusing on improvised nuclear devices and materials

Tech Outreach Team Lead, Joint Improvised-threat Defeat Organization (JIDO) (12/17-07/18)

Led search and evaluation of novel or emerging technologies relevant to active warfighter problems from commercial, academic, DOD, and foreign partner sources

- Developed artificial intelligence programs under direct supervision of the Three-Star Director, JIDO
- Executed 60-day Rapid Prototyping Event to develop counter-IED solutions to SOCOM urgent needs
- Led partnerships with universities and foreign partners in novel sensors, forensics, machine learning

Deputy Chief, Tech Strategy Division, JIDO (09/15-11/17)

Developed JIDO Technology Outreach Strategy and defined technology needs to enable integration of DOD laboratory, industry, academic, and international partner capabilities into solutions for warfighters

- Developed, reviewed, approved, and published technical documentation and reports DOD wide
- Integrated technology from In-Q-Tel, IARPA, DARPA, DIUx, and the Remote Sensing Center
- Provided oversight of technical feasibility and performance for over 100 JIDO initiatives (\$200M)

Deputy Chief, Integration and Delivery Division, JIDO (02/15-08/15)

Provided programmatic oversight over capability development for over 100 initiatives to deliver rapid solutions to urgent warfighter requirements (\$200M) in identification, detection, neutralization of IEDs

- Developed interagency workgroups for tunnel, vehicle attached, vehicle based, and person borne IEDs
- Developed warfighter counter-IED programs across identification, detection, defeat, and mitigation
- Completed Nuclear Counterproliferation Officer (CBRN Strategist) - Functional Area 52

Chief, Readiness Reporting, Army National Guard (ARNG) Readiness Division (09/13-01/15)

Lead readiness advocate for the Three-Star Director, ARNG, to resolve urgent readiness issues

- Articulated ARNG readiness challenges and solutions monthly to the Four-Star Army Chief of Staff
- Developed new paradigms for Army BCT readiness reporting metrics resulting in changes to AR 220-1
- Requested by name from White House National Security Council with DHS, DOS, DOJ, DOE, USDA, and DHHS public health experts to develop and validate the International CBRNE Response Protocol

Deputy Chief, Countering Weapons of Mass Destruction (CWMD) Division, National Guard Bureau (NGB) Domestic Operations Directorate (09/12-08/13)

Deputy for CWMD Programs, over 10k personnel and \$100M under Two-Star, NGB J3/7

- Worked with State emergency responder and public health authorities to integrate 566-man National Guard Homeland Response Forces (HRFs) into State emergency response operations
- Deployed White House mandated advanced threat chemical hazard detection systems with JPEO-CBRND in under two years in support of an urgent homeland defense public health need
- Validated HRF and WMD-CST units for CBRN mass-casualty response
- Invited lecturer for Georgetown University Master's Program in Emergency Risk Management

Chief, Strategic Initiatives Group, NGB Domestic Operations Directorate (05/11-08/12)

Led Two-Star J3/7 strategic initiatives group responsible for critical initiatives

- Established bi-lateral training exchange with Israel to develop CBRN tactics, techniques, and procedures
- Led development of international CBRNE public health risk management with ten EUCOM partners through the George Marshall Center under the National Guard State Partnership Program
- Developed standards for Mass Human Chemical Decontamination with DHS Office of Health Affairs
- Wrote "Building a National Biothreat Response Capability" in Defense Standardization Program Journal

Deputy Assistant Commandant – National Guard, US Army Chemical, Biological, Radiological, and Nuclear (CBRN) School (03/10-04/11)

Led innovation and modernization as National Guard Deputy for One-Star Commandant CBRN School

- Responsible for training over 1,900 soldiers in CBRN operations, CONOPS, and policy
- Led complete revision of CBRN School training working with NFA and EPA under NFPA and OSHA standards to enable CBRN soldiers to be interoperable with first responders worldwide
- Co-authored the National Strategy for CBRNE Standards with White House OSTP

Strategic Plans and Communication Officer, Army National Guard G5 (09/09-02/10)

Strategic Plans officer for the Two-Star Director, Army National Guard

- Lead for development of CBRNE plans and policies with NORTHCOM and STRATCOM
- Developed Biological Military Exposure Guidelines with US Army Public Health Command

Science Advisor, NGB Domestic Operations and Homeland Defense (02/04-08/09)

Science Advisor to Three-Star Chief, NGB, developing counter WMD technology and partnerships

- Established WMD-CSTs as part of public health Laboratory Response Network with CDC, APHL, FBI
- Developed a rapid fielding program with JPEO-CBD to quickly validate and field CBRN technology
- Developed Analytical Laboratory System (ALS), Mass Casualty Mobile Decon System (MCMDS), CBRN TIC/TIM Response Ensemble (CTTRE), Dismounted Recon Set, Kit, and Outfit (DR-SKO)
- White House National Science and Technology Council Grand Challenges for Disaster Reduction
- NGB liaison officer for Hurricane Katrina integrating over 50k personnel in seven days

Medical Science Officer, Louisiana Army National Guard 62nd WMD-CST (03/01-01/04)

Responsible for technical validation of all team analytical products in over 100 CBRNE missions supporting first responder, state, and federal agencies in events before and after September 11, 2001

- Senior team public health advisor on 1-hour recall to support life safety decisions in real-world events
- Managed team operations to collect, analyze, and identify samples of unknown CBRNE materials
- Trained hundreds of first responders, nurses, physicians on the public health effects of CBRNE
- Invited speaker at American Institute for Chemical Engineers, Louisiana Public Health Association

Research Fellow, University of Louisville & Louisiana Tech University (11/99-03/01)

Managed graduate student research laboratory and taught courses in graduate and undergraduate engineering

- Developed novel micro electrode capable of measuring oxygen concentration inside a single cell
- Developed MEMS based ultrasound Doppler acoustic flow transducers
- Developed novel micro-machined acoustic lenses
- Conducted cardiovascular research, developing data sets on intimal hyperplasia in a bovine model
- Highest rated instructor of the quarter in Biomedical Engineering
- Developed online lectures in fluid mechanics and mass transport phenomena

Clearance: TS/SCI

References & Publications: Available upon request