MILITARY MEDICAL: THE USE OF BATDOK INTEGRATED MEDICAL DEVICES TO ACCOMMODATE THE NEEDS OF SERVICE PERSONNEL



1. OVERVIEW

The Greater Pittsburgh area is uniquely positioned to assist organizations, such as the Defense Health Agency, lead in the discovery of innovative medical solutions responsive to the needs of Combatant Commands.

Our collective experiences surrounding medical research, military facilities and a rich entrepreneurial landscape in areas such as technology, medical devices and robotics makes for an ideal location for collaboration to help solve the most complex issues facing service personnel, and the services medical professionals responsible for their care.

SDS, in conjunction with the Pittsburgh Technology Council, proudly present a day of vision, learning and collaboration surrounding the providing of solutions leveraging BATDOK (Battlefield Assisted Trauma Distributed Observation Kit).

BATDOK integration for medical devices allows military medics to monitor, manage and record patient information, vital signs and treatment details on a smartphone or tablet in real-time during battlefield situations.

Features include:

- Patient data capture
- Wireless sensor integration
- Alerting and notifications
- Decision support tools
- Offline capabilities

2. DATE AND LOCATION

Tuesday, May 13, 2025 (9am – 3pm)

Location:

Nova Place Conference Center 100 S. Commons #172 Pittsburgh, PA 15212

https://novaplace.com/

- Introduction and Welcome (9:00am 9:15am)
 - Ed Kuzemchak, CTO/COO

Ed is the founder of SDS and has been creating embedded software solutions and performing IoT engineering for nearly 30 years.

- Brian Kennedy, SVP for Operations and Government Affairs Pittsburgh Technology Council
- Keynote Speaker (9:15am 10:00am)
 - Jan Berkow, Program Manager for Commercialization
 Center for Military Medicine Research at the University of Pittsburgh

Topic: Navigating SBIR/STTR funding in an atmosphere of uncertainty.

- Speaker (10:10am 10:40am)
 - Julie Gulick, CEO Bally Design

Julie began her career as a design engineer of ultrasonic transducers before moving into upstream marketing at MEDRAD, McKesson and then Philips Respironics, leading marketing efforts in new product development teams to develop new products in the medical device and services industry.

Julie's most recent role was as program director at Philips HealthWorks in Cambridge, Massachusetts, a startup incubator, where she helped Philips' transformation in digital healthcare.

Julie is currently the President & CEO of Bally Design, a graphical user interface and industrial design firm in Pittsburgh and holds BS and MS degrees in Ceramic Engineering from Penn State University and an MBA from Katz Graduate School of Business at the University of Pittsburgh with an emphasis in finance and marketing.

Topic: Moving your medical device from concept to commercialization.

- Speaker (10:45am 11:15am)
 - Dr. Maurissa D'Angelo

Maurissa D'Angelo is the Chief Executive Officer at D'Angelo Technologies, LLC and an adjunct professor at Wright State University. Dr. D'Angelo currently holds an American Society of Quality Six Sigma Green Belt certification, received her B.S. in Biomedical Engineering (Polymers/Biomaterials) from Case Western Reserve University, and her M.S. and PhD in Human Factors/Biomedical Engineering from Wright State University.

Dr. D'Angelo has significant experience leading teams to implement radically innovative changes that transform the state-of-the-art to help DoD and commercial customers continue to operate as a dynamic and elite team. She enjoys understanding how people learn and delivering the proper training mechanism to best foster that learning.

Topic: Integrated training with advanced technologies on and off the battlefield.

- Speaker (11:25am 12:00pm)
 - o Byron Brown, Senior Software Engineer

As a Senior Engineer at SDS, Byron brings a unique blend of creativity and precision to every project. His analytical mentality and unwavering attention to detail pushes all our projects forward whether they be IoT, cloud or mobile development.

Byron also grew up on a farm, is an accomplished musician, and leads our BATDOK integration practice.

Topic: Integrating with BATDOK

Lunch and Networking (12:00pm - 12:45pm)

- Speaker (12:45pm 1:30pm)
 - o Capt. Jessica Ellis, Ph.D.

Capt. Jessica Ellis obtained her Ph.D. in Behavior Economics and is a Medical Service Corps officer assigned to the 911th Aeromedical Staging Squadron. In addition, Capt. Ellis is the Innovation Officer for the Steel City Spark Cell whose primary goal is to accelerate the development and adoption of new technologies, particularly in areas such as robotics and artificial intelligence, by leveraging the local talent pool in Pittsburgh.

Topic: How BATDOK integrated devices enhance care for warfighters from Point of Injury to Definitive Care.

- Speaker (1:40pm 2:10pm)
 - o 911th Aeromedical Evacuation Unit

Topic: The use of BATDOK devices from triage to evacuation.

- Speaker (2:15pm 2:45pm)
 - Sam Fahnestock, Lead Security Engineer

As the Lead Security Engineer at SDS, Sam is responsible for maintaining the high security standards across SDS projects. An ICAgile-certified Agile Coach, Sam also works with team members across the company to implement and maintain Agile processes and practices.

Prior to joining SDS, Sam worked for the United States Air Force, providing cybersecurity support, including vulnerability analysis, penetration testing, and managing the cyber defense team.

- Topic: Integrating with ATAK
- Closing Remarks and discussion