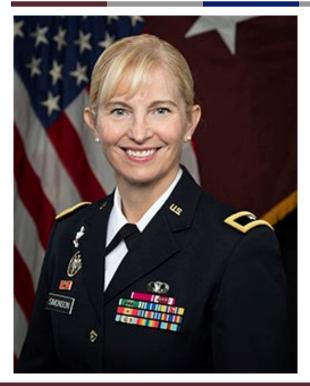


# R&D Funding and Collaboration to Deliver Novel Military Medical Solutions

BG Katherine Simonson
Deputy Assistant Director, Research and Engineering
Defense Health Agency
June 9, 2022

## **Brigadier General Katherine Simonson**



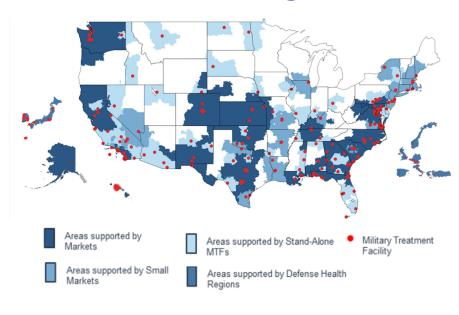
- Currently serves as the Defense Health Agency Deputy Assistant Director for Research and Engineering
- Previously served as Commander, 2nd Medical Training Brigade, Medical Readiness and Training Command and Deputy Commander, Task Force 8th MED, in Qatar
- Education includes a Bachelor of Science in Nursing and Masters of Nursing in both Critical Care and Education





## **Military Health System**

### A comprehensive, integrated healthcare delivery system



- \$50+ billion per year military medical enterprise
- 49 hospitals, 465 medical clinics, 192 dental clinics
- ~130,000 participating providers
- 9.6 million beneficiaries including 1.4 million active duty, 331,000 reserve-component personnel, military retirees, and family members
- University with accredited medical school and graduate programs
- ~\$2.2 billion medical research and development (R&D) program





## **Defense Health Agency**

The Defense Health Agency (DHA) supports the delivery of integrated, affordable, and high-quality health services at all military medical treatment facilities (MTFs).

#### **DHA Mission:**

Support the National Defense Strategy and the Service Military Departments by leading the MHS as an integrated, highly-reliable system of medical training, readiness, and health

#### **DHA Vision:**

Unified, Reliable, and Ready...

## DHA Priorities:

- 1 Great Outcomes
- 2 Ready Medical Force
- 3 Satisfied Patients
- 4 Fulfilled



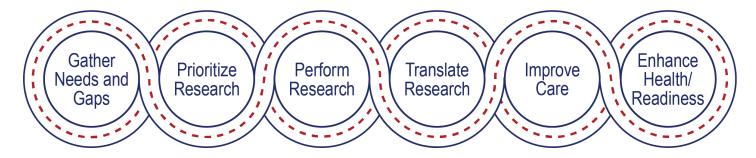


## **DHA Research & Engineering**

**R&E Mission:** Lead the discovery of innovative medical solutions responsive to the needs of Combatant Commands, the military Services, and the Military Health System

#### How we do it:

- Shepherd innovative materiel and knowledge products from concept to transition
- Manage the enterprise research portfolio to align with medical priorities







## Research, Studies & Analysis



Research, Development, Test & Evaluation (RDT&E) Funding: Big "R"

- Science and Technology (S&T)
- Develop investment strategies for the Defense Health Program S&T Portfolio
- Create and maintain relationships with biomedical R&D partners



#### **Operations and Maintenance Funding: Little "r"**

- Studies and Analysis (focus of the Centers of Excellence)
- Military Health System Research
- Clinical Investigations Program
- Implementation Science
- Research Protections





## **RDT&E Major Investment Areas**



#### **Military Operational Medicine**

- Musculoskeletal injury prevention and reduction
- Blunt, blast, accelerative, and neurosensory injury prevention and readiness
- Psychological health & resilience
- Performance in extreme environments
- Optimized cognition & fatigue mitigation

#### **Combat Casualty Care**

- Neurotrauma
- Hemorrhage control & battlefield resuscitation
- Prolonged Care
- Severe burn
- En Route Care
- · Autonomous care & evacuation
- · Radiation health countermeasures
- Sustainment of medical expeditionary skills
- · Military medical photonics

UNCLASSIFIED

#### Military Infectious Diseases

- Viral
- Bacterial
- Wound Healing





## DHA Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) Programs

- Congressionally mandated programs to increase participation of U.S. small businesses in federal research and development
- Support businesses in developing high-risk, high-impact medical materiel technologies with potential for wider commercialization
- Funding: FY21 SBIR \$63.1 Million, FY21 STTR \$8.8 Million
- DHA topic areas: combat casualty care, military infectious diseases, military operational medicine
- Resources:
  - SBIR-STTR website (sbir.gov) provides information on SBA policy directives, award data, and statebased proposal assistance coordinators
  - Defense SBIR/STTR Innovation Portal (dodsbirsttr.mil) offers DoD SBIR/STTR broad agency announcements, topic Q&A, and email list registration for updates
- Contacts:
  - CDR Tatana Olson, Program Director, <u>tatana.m.olson.mil@mail.mil</u>
  - Mr. JR Myers, Project Manager, james.r.myers38.civ@mail.mil





## Research, Acquisition and Sustainment Transition Update

- Establishing plans and procedures to execute transition of USAMRMC to DHA by Sep. 30, 2022
- Goal of transition planning is to ensure MRMC remains intact with minimal disruptions to personnel, processes and functions



- Congressional Directed Medical Research Program (CDMRP) will transfer into DHA intact with no changes to program processes
- Vast majority of medical RDT&E capability gaps are joint issues (i.e., hemorrhage control, resuscitation, vaccines)
- Linking RDT&E investments with the MHS enterprise will support improved outcomes across all roles of care



