



# USAF School of Aerospace Medicine Overview

November 6, 2014

**Col Christian Benjamin**

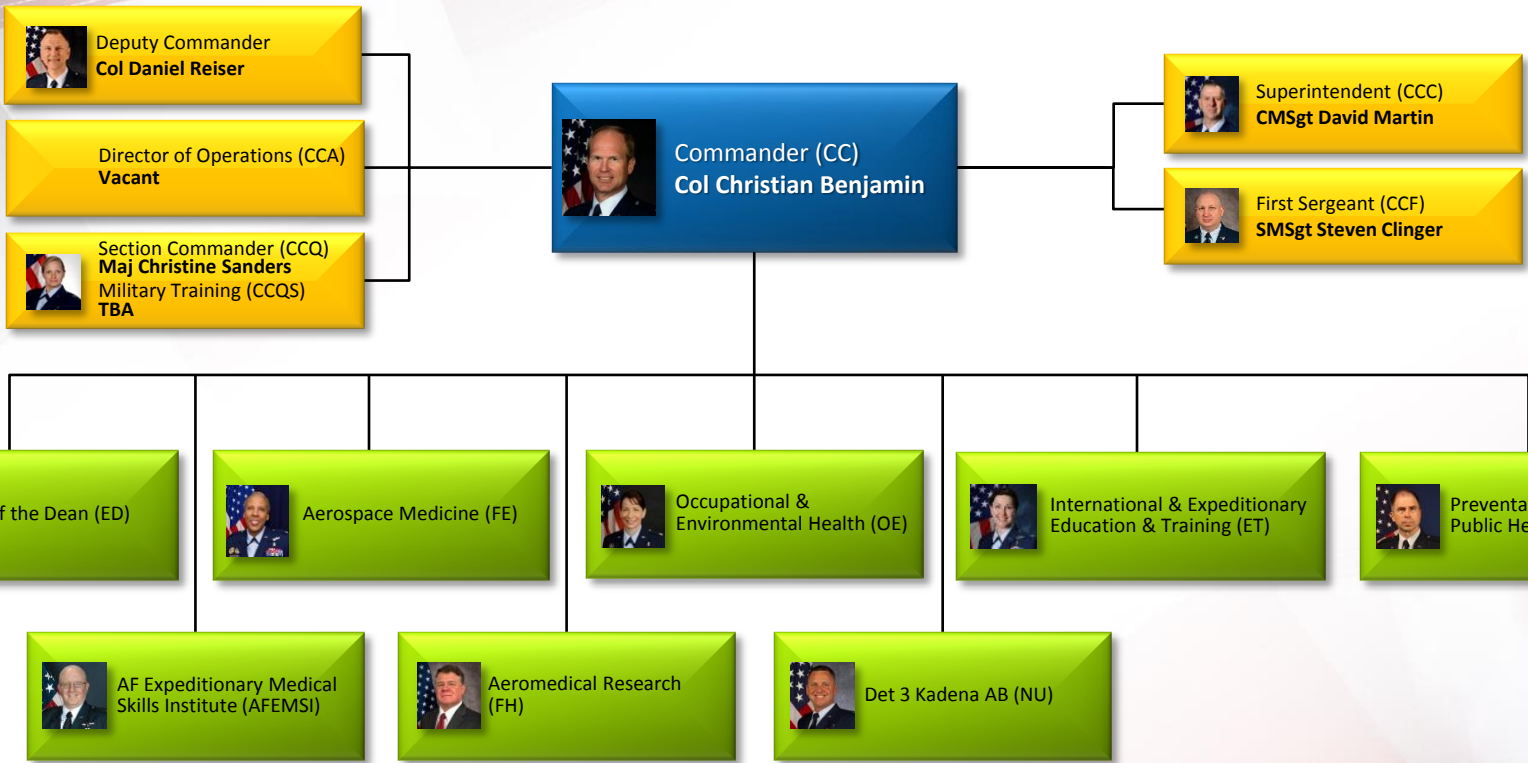
Commander  
USAF School of Aerospace Medicine  
711th Human Performance Wing  
Air Force Research Laboratory

***Integrity ★ Service ★ Excellence***





# USAF School of Aerospace Medicine



USAFSAM's Org Chart Oct'14



# Education and Training

\*Office of the Dean



- **Enlisted Technical Training**

- Bioenvironmental Engineering, Public Health, Aerospace and Operational Physiology

- **AFSC-Awarding Officer Training**

- Flight Surgeon, Bioenvironmental Engineering, Public Health, Aerospace and Operational Physiology

- **Graduate Medical Education**

- Aerospace Medicine, Aerospace Medicine-Family Practice Medicine

- **AF Center for Expeditionary Team Training**

- Basic Expeditionary Medical Readiness Training, Center for Sustainment of Trauma and Readiness Skills

- **AF Center for En Route Care Training**

- Flight Nurse, Aeromedical Evacuation Technician, Critical Care Air Transport Team

- **Joint International Medical Training Platform**

- Advanced Aerospace Medicine for International Medical Officers, Flight Nurse, Flight Surgeon, Critical Care Air Transport Team, Aerospace and Operational Physiology

- **Aerospace and Expeditionary Medical Sustainment Courses**

- Global Medicine, Operational Entomology, Aircraft Mishap Investigation and Prevention, Hearing Conservation, Medical Personnel Reliability Program, and more



# Operational Consultation and Reachback



- **National and International Consultants for everything “Team Aerospace”**
  - Occupational and Environmental Health
  - Public Health
  - Aerospace Medicine
  - Aeromedical Evacuation
- **Deployable/Homeland Defense Teams**
  - DoD Theater Epidemiological Teams
  - DoD’s Radiological Assessment Teams
    - 24/7 Homeland defense call
  - Multiple Medical Teams



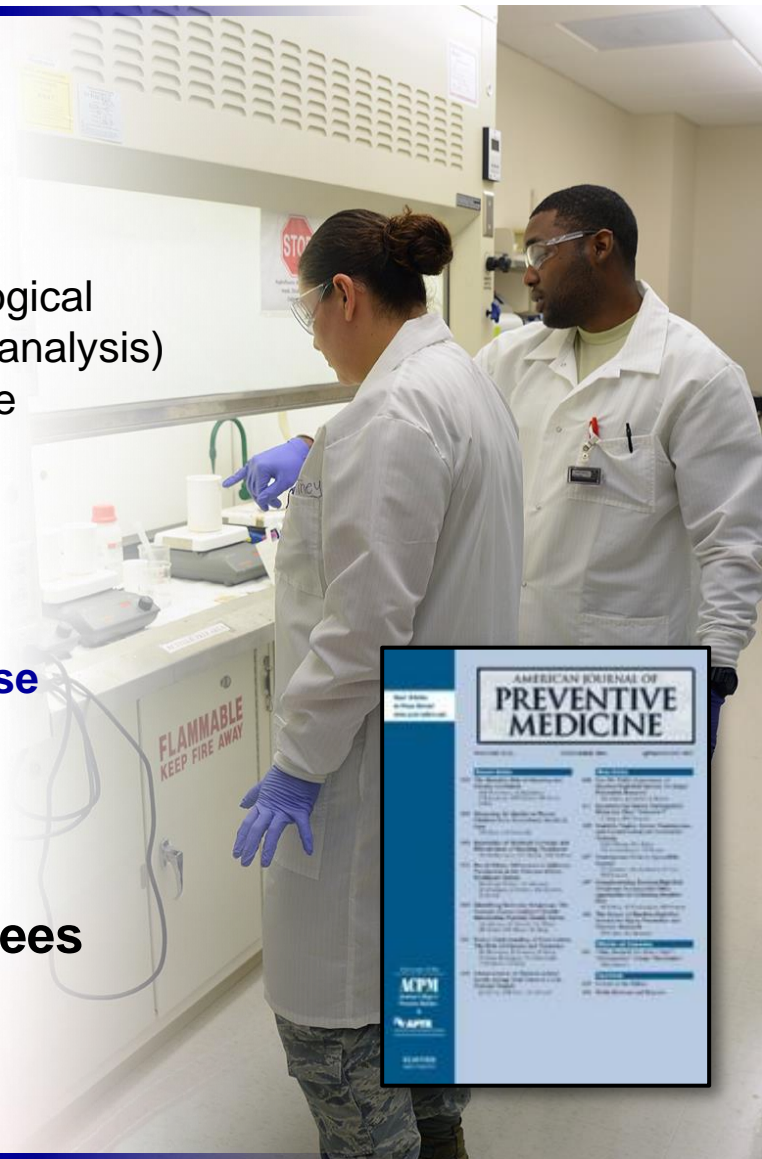




# Research and Technology Development



- **Over 70 current active RDT&E initiatives**
  - DHP funded from multiple sources (COCOM, MAJCOM, AF/SGR, and O&M)
  - Vast majority of consultant activities (epidemiological study, health effects studies, exposure and risk analysis) have research component not captured in above
- **Major Thrust Areas**
  - **Human Performance (Sustain and Optimize)**
  - **En-Route Care and Aeromedical Evacuation**
  - **Airman Selection and Performance in Adverse Environments**
  - **Force Health Protection**
- **Aeromedical Research Department oversees entire Wing DHP R&D Mission**





# Department of Public Health and Preventive Medicine (PH)



## Epidemiology Laboratory Services Division

PHE AF's Only Clinical Reference Laboratory

- Delivers >2 million test results/year to 220+ DoD customers
- Saves each MTF up to \$25K per month in outsourced costs
- On the cutting edge of molecular/genomic research



## Public Health Education Division

PHD AF's Academic Excellence for Public Health Training

- Provides training on the full spectrum of AF Public Health to 1,900 DoD Officers/Enlisted yearly
- Delivers 3,700 hours in basic PH instruction/year; awarded over 3,600 CCAF credit hours in 2012



## Epidemiology Consult Service Division

PHR The AF Service Hub for Operational Public Health

- Synergistic mix of consultation, epidemiology reach-back, entomology, food, audiology and applied researchers
- Moment's notice outbreak investigation expertise, COCOMs Theater Epidemiology Team support







# USAFSAM - Department of Occupational & Environmental Health



## Consultative Services

## Analytical Services

## Force Development

## Air Force DOEHRS Support Office

- **Consultation in:**
  - Industrial Hygiene
  - Radiation & Health Physics
  - Chemical, biological, radiological and nuclear response
  - Environmental Surveillance
  - Occupational Medicine
- **Base guidance development**
- **3.5K calls per year**
- **On-site technical support**

- **Laboratory analysis per year:**
  - 18K chemistry samples
  - 10K radioanalytical samples
  - 14K dosimetry analysis
- **AF radiation exposure history for 4.5 million personnel over 65 years**
- **AF BEE Proficiency Assessment Testing Program**

- **Resident courses for:**
  - BEE Apprentice
  - BEE Officer
  - Readiness Operations
  - Occ Health Measurements
  - Radiation
  - Advanced Management
- **Computer based courses**
- **BEE readiness skills verification**



## AF Radiation Assessment Team



# Department of Aerospace Medicine (FE)



## *FEE: Aerospace Medicine Education Division*

- **Graduate Medicine**
  - PM, OM and AM Residencies
  - Hyperbaric Fellowship
- **Primary Medicine**
  - Aerospace Medicine Primary, Global Medicine, Mishap Investigation
- **Hyperbaric Medicine**
  - Hyperbaric Medicine course
  - Clinical Hyperbaric medicine
- **Physiologic Training**
  - 1400 aviators/year in chamber
    - Medics, line aviators, aviation service/PJ Basic Military Trainee candidates
- **Combat Air Forces Gz Awareness Training Move to WPAFB**
  - Relocated to Brooks Sept 10
  - Moves to WPAFB upon completion of 'fuge







# Department of Aerospace Medicine (FE)



## ***FEC: Clinical Sciences Division***

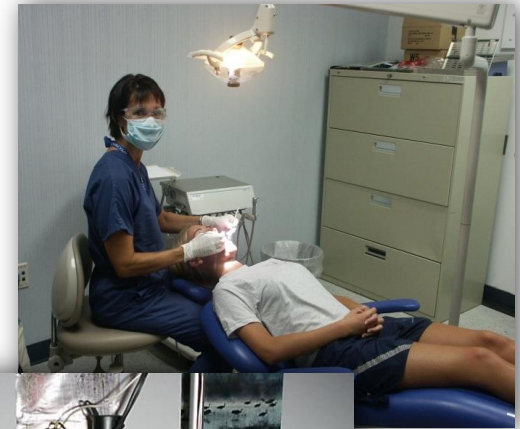
- **Aeromedical Consultation Service (ACS)**

- The world's leading multi-specialty referral center evaluating aircrew with complex medical problems for fitness to fly. ~1200 evaluations/year with ~85% returning to the cockpit

- FECA - Aerospace
- FECI - Internal Med (Pulmo, Cardiology, Neurology)
- FECN - Neuro-Psychiatry
- FECO - Ophthalmology

- **Flying Class 1 / Medical Flight Screening (MFS)**

- Conducts all initial pilot applicant medical qualification exams for ROTC, AFRC & ANG. ~1100/yr
- Conducts 'top off' evaluations for all AD personnel pursuing career change to flight status. ~600/year





# Air Force Expeditionary Medical Skills Institute (AFEMSI)



## C-STARS Baltimore

R Adams Cowley Shock Trauma Center

- Advanced trauma care/surgical techniques, immediate shock assessment, resuscitation and stabilization



## C-STARS Cincinnati

University Hospital Cincinnati

- Designated CCATT Advanced Course



## C-STARS St. Louis

St. Louis University Medical Center

- Advanced trauma care/surgical techniques, immediate shock assessment, resuscitation and stabilization
- Total Force platform (Missouri ANG)





*Questions?*

*Volanti Subvenimus*