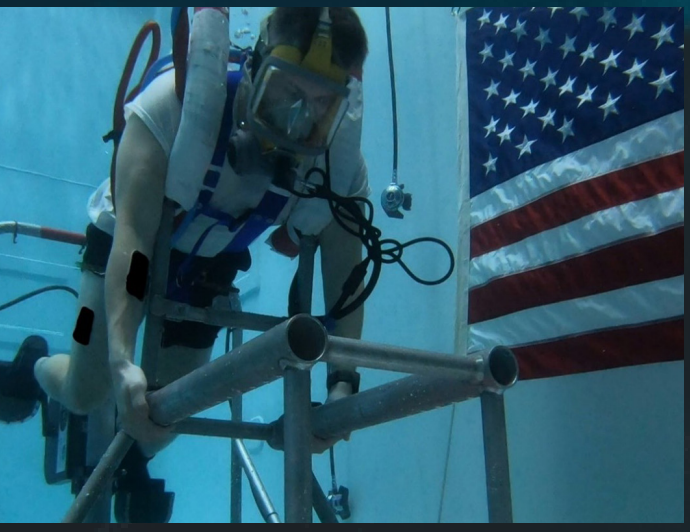
FACT FILE
Research Physiology



- **HEALTHCARE SCIENCE SPECIALTY**
- **SIZE:** 18 ACTIVE/0 RESERVE COMPONENT BILLETS
- **SPECIALTY LEADER (SL)/ASST. SPECIALTY LEADERS (ASL):**
  - CDR Joshua Swift (SL)
  - LCDR Melissa Laird (ASL)
- **CORE MISSION:**
  - Navy Research Physiologists lead and manage R & D efforts to optimize performance, protect health, improve battlefield care and accelerate the rehabilitation of Sailors, Marines, and Joint Service Members.
- **WHERE DO RESEARCH PHYSIOLOGISTS SERVE?**
  - **TRAINING:** Uniformed Services University of the Health Sciences (USUHS)/Armed Forces Radiobiological Research Institute (AFRRI)
  - **RESEARCH:** Naval Medical Research Center/ Naval Health Research Center/Naval Submarine Medical Research Laboratory/Naval Medical Research Unit Dayton
  - **OPERATIONAL:** Naval Experimental Diving Unit (NEDU)
  - **HEADQUARTERS:** Office of Naval Research(ONR) /Bureau of Medicine & Surgery (BUMED)/OPNAV N17 Navy Culture and Force Resilience Office
  - **SYSCOMS:** NAVAIR/NAVSEA

HISTORY
Research Physiology

- BUMED recruited eight academically trained physiologists during World War II to conduct physiological research for operational forces. These pioneers included LTs Nello Pace (1916-1995) and Clair R. Spealman (1909-1994).
- In World World War II, these trailblazing research physiologists investigated the effectiveness of protective masks used for surgical applications, assessed total body fat and body specific gravity by underwater weighing technique, explored the "respiratory resistance of gas masks, and devised special emergency food rations for sea castaways.
- Spealman's experiments with chemically processing seawater in 1943 led to the development of an effective multi-process filtering system. Within a year, this kit was adopted by the Army, Navy as well as American Airlines.