Table of Contents

INTRODUCTION
Naval STEM Welcome pg. 3
Naval STEM Overview pg. 4
Naval STEM Stakeholder Organizations pg. 6
Naval STEM Stakeholder Organizations Overview pg. 8

THE NAVAL STEM COMMUNITY
Navy Bureau of Medicine and Surgery (BUMED) pg. 12
Commander, Navy Installations Command (CNIC) pg. 14
Marine Corps Systems Command (MCSC) pg. 18
Naval Air Systems Command (NAVAIR) pg. 20
Naval Facilities Engineering Command (NAVFAC) pg. 22
Naval Postgraduate School (NPS) pg. 24
Naval Sea Systems Command (NAVSEA) pg. 26
Naval Supply Systems Command (NAVSUP) pg. 28
The Office of Naval Research (ONR) pg. 30
The Space and Naval Warfare Systems Command (SPAWAR) pg. 32
United States Naval Academy (USNA) pg. 34
United States Naval Research Laboratory (NRL) pg. 36

Editor in Chief
► Dr. Michael M. Simpson
Director of Education and Workforce, ONR

Editorial Staff (Contractors)
► Jaime Carter, Managing Editor
► Sierra Jones, Associate Editor and Designer
► Jeff Wright, Graphic Designer

► To submit an article or subscribe to the Naval STEM newsletter, please contact the managing editor.
► All photos are credited to the Department of the Navy unless otherwise noted.

Naval STEM Magazine
Naval STEM Coordination Office
Office of Naval Research
875 N. Randolph Street, Suite 1425
Arlington, Virginia 22203-1995

Email: naval_STEM@navy.mil
Phone: (703) 696-5031
Web: http://navalstem.navylive.dodlive.mil
Naval STEM Welcome: A Message from ONR's Director of Education & Workforce

From the ironclad ships of the Civil War to the nuclear-powered submarines of the Cold War to the unmanned systems of today, there’s always been a need for the Department of the Navy to have the technological and warfighting advantages that keep the naval community ahead of shifting threat environments.

But to maintain this edge, it’s not only advancements in technology that are needed. The Navy and Marine Corps need a workforce of talented, diverse and dedicated naval scientists and engineers whose knowledge and expertise will ensure a supply of advanced, innovative solutions to meet these changing environments.

To do this, strategic educational and outreach opportunities must be provided to the workforce of today and tomorrow—inspiring and developing both students and employees to be powerful problem-solvers for the Navy and Marine Corps. These opportunities are developed, implemented and managed by naval commands and organizations, and are coordinated by the Naval STEM Coordination Office—the central coordination and information resource for naval STEM efforts, under the leadership of the chief of naval research, as laid out in SECNAV Instruction 3900.45.

This 2017 Guide to Naval STEM contains brief overviews of the commands and organizations that lead these naval opportunities—opportunities that collectively inspire, engage and educate the next generation of scientists and engineers, while supporting the current naval STEM workforce through initiatives to attract, employ, develop and retain superior knowledge and expertise.

Each command highlighted in this guide has specific workforce needs that influence its offered educational and outreach activities. But each contributes to the overall need of capabilities desired in the naval STEM workforce community.

These commands inspire students via outreach activities such as internships and other programs that employ high school, undergraduate and graduate students, while increasing awareness of naval-relevant STEM opportunities and careers that relate to command missions. These activities and programs also inspire current workers by connecting them to potential members of the next workforce, building on the excitement of current knowledge and success.

I invite you to take part in these important endeavors.

Sincerely,

Michael M. Simpson, Ph.D.
Director of Education and Workforce
Office of Naval Research
The Department of the Navy (DoN) aims to foster and cultivate a diverse, world-class STEM workforce in order to maintain the U.S. Navy and Marine Corps’ technological superiority. This includes naval civilians, active-duty Sailors and Marines as well as Navy and Marine Corps Reserve components. Naval STEM programs are mission-critical investments in the DoN current and future workforces, and are vital to meeting present and future warfighting challenges.

The strategy of Naval STEM is to inspire, engage and educate the next generation of scientists and engineers—and to attract, employ, develop and retain our diverse technical workforce through collaboration to promote an effective and efficient STEM portfolio across the DoN, the federal government and the broad STEM community.

**NAVAL STEM STAKEHOLDER ORGANIZATIONS**

Local STEM efforts are managed and executed at the command or organization level. These organizations implement STEM education, outreach and workforce activities within their respective communities. This guide provides an overview of these stakeholder’s STEM efforts.

**EDUCATION INITIATIVES**

The Navy and Marine Corps reach out to students nationwide. For K-12 audiences, hands-on learning experiences are emphasized to encourage students and teachers of all ages to “learn by doing.” This encouragement comes in a variety of forms, including participation in expos and festivals; sponsorship of summer camps and teacher trainings; and support of STEM competitions.

**WORKFORCE INITIATIVES**

The development of the current and future naval STEM workforce is a primary concern for the naval STEM community. Numerous programs are available to students, academic faculty and naval scientists and engineers. These programs include internships and mentorships as well as professional development opportunities.
Naval STEM Stakeholder Organizations

- Office of Naval Research (ONR)
- U.S. Naval Research Laboratory (NRL)
- Space and Naval Warfare Systems Command (SPAWAR)
- Naval Supply Systems Command (NAVSUP)
- Naval Air Systems Command (NAVAIR)
- Naval Facilities Engineering Command (NAVFAC)
- Naval Sea Systems Command (NAVSEA)
- The Navy Bureau of Medicine and Surgery (BUMED)
NAVAL STEM STAKEHOLDER ORGANIZATIONS

The Commander, Navy Installations Command (CNIC)

Marine Corps Systems Command (MCSC)

Naval Postgraduate School (NPS)

U.S. Naval Academy (USNA)

Office of the Assistant Secretary of the Navy (Manpower and Reserve Affairs) ASN (M&RA)

Office of the Assistant Secretary of the Navy (Research Development & Acquisition) ASN (RD&A)

Office of the Deputy Chief Naval Operations (Manpower, Personnel, Training and Education)

Yokosuka, Japan

Okinawa, Japan

Agano Heights, Guam

Piti, Guam

Guantanamo Bay, Cuba
Naval STEM Stakeholder Organizations Overview

**Navy Bureau of Medicine and Surgery (BUMED)**
BUMED is the headquarters for Navy medicine. BUMED develops the policies and direction for the naval medicine enterprise to ensure that its vision for patient-centered medical care is carried out throughout the world, including in naval hospitals, medical centers, dental battalions, preventive-medicine units and technical schools for medical department personnel. BUMED also oversees support commands and their subordinate commands that are not directly involved with patient care, but are important contributors to Navy and Marine Corps medical readiness.

**Commander, Navy Installations Command (CNIC)**
CNIC is the Echelon II command under the chief of naval operations responsible for Navy-wide shore installation management. The standup of CNIC was an effort in the continuation of fleet and regional shore installation management organizational alignment, which began in 1997 with the reduction of installation management claimants from 18 to eight. The intent of CNIC is to establish a single shore installation—management organization that will focus on installation effectiveness and improve the shore installation—management community’s ability to support the fleet.

**Marine Corps Systems Command (MCSC)**
MCSC serves as the Department of the Navy’s systems command for Marine Corps ground weapon and information technology system programs in order to equip and sustain Marine forces with full-spectrum, current and future expeditionary and crisis-response capabilities.
Naval Air Systems Command (NAVAIR)
NAVAIR provides full life-cycle support of naval aviation aircraft, weapons and systems operated by Sailors and Marines. This support includes research, design, development and systems engineering; acquisition; test and evaluation; training facilities and equipment; repair and modification; and in-service engineering and logistics support. NAVAIR has more than 34,000 military, civilian and contractor personnel stationed at eight locations across the continental United States and one site overseas.

Naval Facilities Engineering Command (NAVFAC)
NAVFAC is the systems command that builds and maintains sustainable facilities, delivers utilities and services, and provides Navy expeditionary combat force capabilities. NAVFAC delivers best-value facilities engineering and acquisition for the Navy and Marine Corps, unified commanders, and Department of Defense agencies through our six business lines: capital improvements, environmental, expeditionary, public works, asset management and contingency engineering. NAVFAC also provides program management for all aspects of the Naval Construction Force, the Seabees, and equipment/materiel management for the Naval Beach Group and other Naval Special Operating Units.

Naval Postgraduate School (NPS)
NPS provides relevant and unique advanced educational and research programs to increase the combat effectiveness of commissioned officers of the naval service to enhance the security of the United States.
Naval STEM Stakeholder Organizations Overview (cont...)

Naval Sea Systems Command (NAVSEA)

NAVSEA, the largest of the Navy’s systems commands, designs, builds and maintains ships, submarines and combat systems that meet the fleet’s current and future operational requirements.

Naval Supply Systems Command (NAVSUP)

NAVSUP is the Navy’s trusted provider of sustained global logistics and quality-of-life support to the Navy and joint warfighter. It manages supply chains for Navy aircraft, surface ships, submarines and their associated weapons systems. NAVSUP also provides centralized inventory management for the Navy’s non-nuclear ordnance stockpile; supports base and waterfront logistics and operations; coordinates material deliveries; contracts for supplies and services and offers material management and warehousing services. NAVSUP is responsible for many of the quality-of-life programs that touch the lives of Sailors and their families, including Navy Exchanges, Navy Lodges, the Navy Personal Property Program and the Navy Postal System. NAVSUP also administers the Navy Food Service Program, including the policies and procedures governing the daily operations of general messes afloat and ashore.

Office of Naval Research (ONR)

ONR provides technical advice to the chief of naval operations and the secretary of the Navy. Led by the chief of naval research, who is also the naval STEM executive, its senior leadership oversees a portfolio of investments ranging from immediate, quick-turnaround technologies to long-term basic research. As an executive branch agency within the U.S. Department of Defense (DoD), ONR supports the president’s budget while also developing the science and technology strategic plan that enables the future operational concepts of the U.S. Navy and Marine Corps.
Space and Naval Warfare Systems Command (SPAWAR)
As the Navy’s information warfare systems command, SPAWAR develops, delivers and sustains command, control, communications, computers, intelligence, surveillance and reconnaissance capabilities for warfighters—keeping them connected anytime, anywhere. With a space support activity and two systems centers, and through partnerships with three program executive offices, SPAWAR provides the hardware and software needed to conduct Navy missions. The team consists of more than 9,700 active-duty military and civil service providers who keep SPAWAR at the forefront of research, engineering and acquisition to provide and sustain fleet capabilities.

U.S. Naval Academy (USNA)
As the undergraduate college of the naval service, the United States Naval Academy prepares young men and women to become professional officers in the U.S. Navy and Marine Corps. After four years of undergraduate study and military training, midshipmen graduate with bachelor of science degrees and reserve commissions.

U.S. Naval Research Laboratory (NRL)
NRL operates as the full-spectrum corporate laboratory for the Navy and Marine Corps, conducting broadly based multidisciplinary programs of scientific research and advanced technological development. These programs are directed toward maritime applications of innovative materials, techniques, equipment and systems, as well as ocean, atmospheric and space science technologies. NRL provides the advanced scientific capabilities required to bolster our country’s position of global naval leadership. NRL is in an environment where the nation’s best scientists and engineers are inspired to pursue their passion, everyone is focused on research that yields immediate and long-range applications in the defense of the United States.
Navy Bureau of Medicine & Surgery (BUMED)

**STEM:** Navy Medicine is a successful enterprise spanning research and development, battlefield medicine, at sea medicine, wounded warrior care, humanitarian assistance/disaster relief and medical support to Navy and Marine Corps service members and their families. To sustain our legacy in biomedical research and development, we look to the future, and that means reaching out to our nation’s young people and inspiring them to pursue a productive and creative career in medicine and research. BUMED’s STEM programs offer education and workforce opportunities in medicine and research, offered at various BUMED sites, through partnerships with local schools and collaborative efforts with other naval organizations.

**Bureau of Medicine and Surgery**  
Falls Church, Virginia  
Capt. Patricia McDonald | patricia.mcdonald3.mil@mail.mil

**Naval Medical Research Center**  
Silver Spring, Maryland  
Capt. Patricia McDonald | patricia.mcdonald3.mil@mail.mil

**U.S. Naval Hospital Annapolis**  
Annapolis, Maryland  
HM3 Grant Cook | grant.j.cook2.mil@mail.mil

**U.S. Naval Hospital Beaufort**  
Beaufort, South Carolina  
Lt. Janice Whittaker | janice.p.whittaker.mil@mail.mil

**U.S. Naval Hospital, Guam**  
Agano Heights, Guam  
HMC Kaknesha P. Wimbush | laknesha.p.wimbush.mil@mail.mil

**U.S. Naval Hospital, Guantanamo Bay**  
Guantanamo Bay, Cuba  
Lt. Nelson Guadalupe | nelson.h.guadalupe.mil@mail.mil

**U.S. Naval Hospital Jacksonville**  
Jacksonville, Florida  
Jeanne Casey | jeanne.e.casey.civ@mail.mil

**U.S. Naval Hospital Lemoore**  
Lemoore, California  
Lt. Geoffrey Burgerhoff | geoffrey.c.burgerhoff.mil@mail.mil

**U.S. Naval Hospital Naples**  
Naples, Italy  
Lt. Angela Robinson | angela.s.robinson6.mil@mail.mil

**U.S. Naval Hospital Oak Harbor**  
Oak Harbor, Washington  
Lt. Cmdr. Sara R. Edmondson | sara.r.edmundson2.mil@mail.mil

**U.S. Naval Hospital Okinawa**  
Okinawa, Japan  
Lt. Eric S. Banker | eric.s.banker.mil@mail.mil

**U.S. Naval Hospital Patuxent River**  
Patuxent River, Maryland  
Lt. Wisdom K. Henyo | wisdom.k.henyo.mil@mail.mil

**U.S. Naval Hospital Quantico**  
Quantico, Virginia  
Lt. Karmenid MedinaZayas | karmenid.medinazayas.mil@mail.mil

**U.S. Naval Hospital San Diego**  
San Diego, California  
HM1 Danilo Morada | danilo.o.morada.mil@mail.mil

**U.S. Naval Hospital Sigonella**  
Sigonella, Italy  
Lt. Cmdr. Christopher Linger | christopher.a.linger.mil@mail.mil

**U.S. Naval Hospital Twentynine Palms**  
Twentynine Palms, California  
Derrick LeBeau | derrick.j.lebeau.mil@mail.mil

**Uniform Services University of the Health Sciences**  
Bethesda, Maryland  
Shawntell Williams | shawntell.williams@usuhs.edu
Commander, Navy Installations Command (CNIC) - U.S. Sites

STEM: A guiding principle of Vice Adm. Dixon Smith, commander, Navy Installation Command is that “CNIC represents Navy to the surrounding communities; installations are the face of the Navy; it’s about relationships” and providing “service through action: customer-focused, efficient, effective and responsive.” One way regional and installation commanders build these relationships is through the Partnerships-In-Education (PIE) initiatives to provide numerous STEM activities at all Navy installations:

- CNIC’s daily interaction with our partnered communities will reflect the commitment to these guiding principles.
- Values: citizenship, respect for diversity, teamwork, honesty and caring.

Educational Programs: PIE installations use Sailors and civilian employees to serve as volunteers, mentors, tutors and role models. The following are a few suggestions for school academic support: Provide career awareness involvement with career-focused activities on campus; assist in the delivery of drug abuse resistance education instruction; participate in or chaperone field trips to installation facilities for special occasions and tours; serve as judges for science fairs and other academic competitions; serve as celebrity readers and guest lecturers; support academic improvement workshops; support safety and fitness education programs.

Workforce Programs: CNIC uses postsecondary preparation in military associated communities. In addition to high school course work, extracurricular activities, sports and leadership roles, family attitudes and practices regarding careers help shape a student’s postsecondary option. Role modeling by parents and parent expectations and support can contribute significantly to helping a teen make decisions which will create a positive postsecondary experience.

Region 1: Headquarters
Chuck Clymer | chuck.clymer@navy.mil
- CNIC, Washington, D.C.

Region 2: Naval District Washington
Daniel Dunham | daniel.l.dunham@navy.mil
- Joint Base Anacostia-Bolling, D.C.
- NSA Washington, D.C.
- NAS Patuxent River, MD
- NRC Solomons, MD
- NSA Annapolis, MD
- NSA Bethesda, MD
- NSF Thurmont, MD
- NSA South Potomac, VA
- NSF Dahlgren, VA
- NSF Indian Head, VA

Region 3: Navy Region Southeast
Dawn Kaunike | dawn.caunike@navy.mil
- NAS Key West, FL
- NAS Jacksonville, FL
- NAS Orlando, FL
- NAS Pensacola, FL
- NAS Whiting Field Milton, FL
- NAVSTA Mayport, FL
- NSA Panama City, FL
- SUBASE Kings Bay, GA
- NAS JRB New Orleans, LA
- NAS Meridian, MS
- CBC Gulfport, MS
- NSA Charleston, SC
- NSF Beaufort, SC
- NSA Mid South, Millington, TN
- NAS Corpus Christi, TX
- NAS JRB Fort Worth, TX
- NAS Kingsville, TX
- NAVSTA Guantanamo Bay, Cuba

Region 4: Navy Region Mid-Atlantic
Debbie Patch | deborah.patch@navy.mil
- SUBASE New London, CT
- NAVSTA Great Lakes, IL
- NSA Crane, IN
- NSY BOS Portsmouth, NH
- WPNSTA Earle/Colts Neck, NJ
- NSA Lakehurst, NJ
- NSA Saratoga Springs, NY
- NSA Mechanicsburg, PA
- NSA Philadelphia, PA
- NAVSTA Newport, RI
- Cheatham Annex, VA
- Dam Neck Annex, VA
- JEB Little Creek-Fort Story, VA
- NAS Oceana, VA
- NAVSTA Norfolk, VA
- NSA Hampton Roads, VA
- NSA Northwest Annex, VA
- NSS Norfolk Naval Shipyard, VA
- SCSC Wallops Island, VA
- WPNSTA Yorktown, VA
CNIC - International Sites
Region 8: Navy Region Europe, Africa, Southwest Asia
Paula Cabrera | paula.cabrera@eu.navy.mil
- Camp Lemonnier Djibouti, Africa
- NAS Sigonella, Italy
- NAVSTA Rota, Spain
- NSA Naples, Italy
- NSA Bahrain
- NSA Souda Bay, Greece
- NSF Deveselu, Romania
- NSF Redzikowo, Poland

Region 9: Navy Region Korea
Christine Monroe | christine.monroe@fe.navy.mil
- CFA Chinhae

Region 10: Navy Region Japan
Kathryn Hardebeck | kathryn.hardebeck@fe.navy.mil
- NAF Misawa
- NSF Diego Garcia
- NAF Atsugi
- CFA Yokosuka
- CFA Sasebo
- CFA Okinawa

Region 11: Joint Region Marianas
Lydia Broussard | lydia.broussard@fe.navy.mil
- Anderson Air Force Base/NSA Andersen
- NAVBASE Guam

Region 12: Singapore
Terra Hendrickson | terra.hendrickson@fe.navy.mil
- Singapore

Find us online
http://navalstem.navylive.dodlive.mil/naval-stem-stakeholders/cnic/
https://www.facebook.com/NavyInstallations
https://twitter.com/cnichq
Marine Corps Systems Command (MCSC)

STEM: MCSC has over 500 engineers, scientists and IT professionals who support the design, development, testing and fielding of Marine Corps systems supporting over 180,000 Marines. MCSC is dedicated to promoting the development of its future workforce through hands-on engagement with students in competitions, camps and festivals.

Educational Programs: MCSC participates in various activities to enhance the education and awareness of students in STEM disciplines and careers. These include participation in various festivals, such as the U.S. Science and Engineering Festival held biannually at the Washington Convention Center; a yearly one-week STEM Robotics Camp at the Quantico Middle/High School composed of challenges, displays, demonstrations, design activities and career briefings; participation in specialized school days set aside for STEAM activities (STEM with arts included). We are also involved in STEM outreach to local schools and sponsor STEM activities at other Marine Corps facilities, such as Science Week at the Marine Corps Tactical System Support Activity at Camp Pendleton in California.

Workforce Programs: All of our education programs require close collaboration with other STEM and teaching professionals and engineering/scientist mentors. We host days-long training events for robotics camp teams in conjunction with The College of William and Mary. MCSC engineers/scientists train on Marine Corps equipment used for displays and hands-on demonstrations at festivals, camps and in classrooms. We participate in refresher training provided by the Naval Academy (best practices for STEM outreach) and do STEM outreach through a group started by our women engineers, scientists and IT professionals at MCSC, called "Marine Corps Females in Technology."

Marine Corps Systems Command
Quantico, Virginia
Mike Ferraro | michael.ferraro@usmc.mil

Marine Corps Tactical System Support Activity
Camp Pendleton, California
Dave Yergensen | david.yergensen@usmc.mil
A GUIDE TO NAVAL STEM

Find us online

http://navalstem.navylive.dodlive.mil/naval-stem-stakeholders/mcsc/
https://www.facebook.com/marinecorpssystemscommand
https://www.youtube.com/user/MarineCorpsSysCom

MCSC

Quantico, VA

Camp Pendleton, CA
Naval Air Systems Command (NAVAIR)

**STEM:** Approximately one half of NAVAIR's 23,000-person civilian workforce has either an engineering or a science degree. Our ability to support the development of systems to be used by operational Sailors and Marines depends on our ability to obtain a highly educated, technical workforce. Reaching out to today's scientist and engineering student is vital.

**Educational Programs:** NAVAIR's STEM outreach programs include several education components. NAVAIR scientists and engineers (S&Es) reach out to local teachers to and help them prepare to teach S&E disciplines. This includes assistance with curriculum as necessary. We also help them in the classroom by being there to help address student's challenging S&E questions. And we bring students to our facilities to perform hands-on activities in our S&E laboratories and to show them how we apply S&E concepts in real life.

**Workforce Programs:** NAVAIR engages in many STEM workforce programs. These include:

- Mentor local high school students that participate in high school engineering classes and robotics/engineering clubs.
- Provide apprenticeship, internship and research opportunities for high school and undergraduate students.
- Provide opportunities for several hundred other summer hires who assist in a wide variety of science and engineering activities.
- Participate in the Office of the Secretary of Defense Science Math and Research for Transformation scholars program.
- Support large national diversity organizations by sponsoring their recruiting events.
- Support current workforce development by sponsoring research projects proposed and conducted by the workforce, and by supporting our employees pursuing advanced degrees.

**Fleet Readiness Center East**
Cherry Point, North Carolina
Bettina Jahr | bettina.jahr@navy.mil

**Fleet Readiness Center Southeast**
Jacksonville, Florida
Rob Lynn | robert.lynn@navy.mil

**Fleet Readiness Center Southwest, North Island**
San Diego, California
Claudia Garcia | claudia.a.garcia@navy.mil

**Naval Air Warfare Center, Aircraft Division**
Lakehurst, New Jersey
Gaetan Mangano | gaetan.mangano@navy.mil

**Naval Air Warfare Center, Aircraft Division**
Patuxent River, Maryland
Holly Kellogg | holly.kellogg@navy.mil

**Naval Air Warfare Center, Training Systems Division**
Orlando, Florida
Bob Seltzer | robert.seltzer@navy.mil

**Naval Air Warfare Center, Weapons Division**
China Lake & Point Mugu, California
Julie Marshall | julia.marshall@navy.mil
Naval Facilities Engineering Command (NAVFAC)

**STEM:** NAVFAC supports STEM outreach efforts through its Echelon IV Facilities Engineering Commands (FEC) which provide products and services throughout the world with more than 99 service points; its Civil Engineer Corps (CEC) accessions officers; and its CEC officers attending graduate school at civilian institutions. STEM outreach is a priority for building future leaders and recruiting the best and brightest to work at NAVFAC.

**Educational Programs:** NAVFAC supports education programs at the local FEC level at multiple schools and organizations by involvement of both our military and civilian workforce. Programs include partnerships with local schools, participation in local science and math competitions and involvement in speaking engagements.

**Workforce Programs:** NAVFAC participates in partnerships with local universities and colleges through its Naval Expeditionary Warfare Center. Their research and development programs provide opportunities for mutual partnerships. NAVFAC also utilizes the PATHWAYS intern program to develop promising young engineers for future full-time employment with NAVFAC.

---

NAVFAC
Washington, D.C.
Cmdr. Susanne Wienrich | susanne.wienrich1@navy.mil

NAVFAC Far East
Yokosuka, Japan
Capt. Kevin Juntunen | juntunen@fe.navy.mil

Naval Facilities Engineering and Expeditionary Warfare Center
Port Hueneme, California
Capt. Tim Liberatore | timothy.liberatore@navy.mil

Naval Facilities Engineering Command Southeast
Jacksonville, Florida
Capt. Drew Hascall | andrew.hascall@navy.mil

Naval Facilities Engineering Command Southwest
San Diego, California
Lt. Justin Erholtz | justin.erholtz@navy.mil

NAVFAC Mid-Atlantic
Norfolk, Virginia
Lt. Cmdr. Dalone Jenkins | dalone.jenkins@navy.mil

NAVFAC Hawaii
Pearl Harbor-Hickam, Hawaii
Cmdr. Scott Cloyd | scott.cloyd@navy.mil

NAVFAC Northwest
Bremerton, Washington
Lt. j.g. Sam Corey | samuel.corey@navy.mil

NAVFAC Europe, Africa, Southwest Asia, Naples, Italy
Capt. Scott Raymond | scott.raymond@eu.navy.mil
Naval Postgraduate School (NPS)

STEM: The Naval Postgraduate School’s interdisciplinary faculty and student expertise are harnessed to engage and inspire youth to explore STEM fields through a number of special programs. NPS faculty and students are vital and sought-after members of local and national STEM efforts. The collective program supports academic and research projects of academic excellence, as well as NPS student thesis work.

Educational Programs: NPS educational activities include resident astronauts and faculty visiting K-12 classes, inspiring students to consider a STEM career; and middle and high school students exploring emergent unmanned and robotic systems technology at the annual “Robots in the Roses” event. Additionally, NPS faculty and students engage in local STEM efforts, including FIRST Robotics Competitions, California State University Monterey Bay Camp Sea Life, Monterey County Science and Engineering Fair and Monterey Peninsula College Marine Advanced Technology Education.

Workforce Programs: NPS works closely with community scientists, educators and professionals to expand our STEM reach. We host robust STEM internship programs, including partnerships with several Hispanic Serving Institutions accessing our local underrepresented population. NPS interns are introduced to female scientists and military officers during “PhDs + Polka Dots.” The National Naval Officers Association and the Cyber Professional Association, student-run programs, work with local middle and high schools to offer free one-on-one tutoring and mentoring, student scholarships and other STEM outreach activities.

Naval Postgraduate School
Monterey, California
Alison Kerr | adkerr@nps.edu
Naval Sea Systems Command (NAVSEA)

**STEM:** NAVSEA works to expose students to STEM activities and its vast talent pool of STEM professionals. Students who participate in these programs interact with scientists, engineers and technicians to acquire valuable skills that can be applied to their future academic and vocational endeavors.

**Educational Programs:** NAVSEA education program activities span the educational spectrum, from early elementary school science labs through the university graduate-level directed research, providing students a continuous thread of STEM experiences. Students work side by side with engineers, scientists and technicians on a variety of challenging, hands-on activities, which not only reinforce the basics tenets of engineering and physics, but show students the importance of these principles in the work the Navy does every day. In sum, educational outreach provides NAVSEA’s 21st century future workforce a progressive, integrated path aimed at building a rewarding professional career and a lifetime of service to our nation.

**Workforce Programs:** NAVSEA offers a variety of student employment opportunities at various sites. Students team with engineers, scientists and technicians to work on real-world problems and projects. NAVSEA offers STEM scholarships, internship positions and co-op positions.

Naval Sea Systems Command
Washington, D.C
Tara Landis | tara.landis@navy.mil

Naval Surface Warfare Center
Combat Direction Systems Activity
Dam Neck, Virginia
Dale Bloodgood | vernon.bloodgood@navy.mil

Naval Surface Warfare Center Carderock Division
Bethesda, Maryland
Melanie Zajic | melanie.zajic@navy.mil

Naval Surface Warfare Center Carderock Division
Acoustic Research Detachment
Bayview, Idaho
Patrick Molvik | patrick.molvik@navy.mil

Naval Surface Warfare Center Carderock Division
Detachment Norfolk
Norfolk, Virginia
Christine Schleicher | christine.schleicher@navy.mil

Naval Surface Warfare Center Corona Division
Norco, California
Douglas Sugg | douglas.sugg@navy.mil

Naval Surface Warfare Center Crane Division
Crane, Indiana
Tina Closser | florentina.closser@navy.mil

Naval Surface Warfare Center Dahlgren Division
Dahlgren, Virginia
John Wright | john.c.wright1@navy.mil

Naval Surface Warfare Center Fleet Readiness Center East Cherry Point
Cherry Point, North Carolina
Bettina Jahr | bettina.jahr@navy.mil

Naval Surface Warfare Center Indian Head Explosive Ordnance Division
Indian Head, Maryland
Jon Kilikewich | jon.kilikewich@navy.mil

Naval Surface Warfare Center Keyport Division
Keyport, Washington
Paul Fukuhara | paul.fukuhara@navy.mil

Naval Surface Warfare Center Newport Division
Newport, Rhode Island
Candida Desjardins | candida.desjardins@navy.mil

Naval Surface Warfare Center Panama City Division
Panama City, Florida
Edward C. Linsenmeyer | edward.linsenmeyer@navy.mil

Naval Surface Warfare Center Philadelphia Division
Philadelphia, Pennsylvania
Peter Mark | peter.mark@navy.mil

Naval Surface Warfare Center Port Hueneme Division
Port Hueneme, California
Dr. Ramon Flores | ramon.flores@navy.mil
Naval Supply Systems Command (NAVSUP)

Educational Programs: NAVSUP Weapons Systems Support (WSS) and Independence Seaport Museum have aligned to guide high school students toward STEM-related occupations through the Educating Acquisition, Global Logistics, and Engineering (EAGLE) Program. EAGLE is a four-year government-sponsored program for Philadelphia high school students designed to spark passion for STEM education, college majors and career fields. With the guidance of NAVSUP WSS and Independence Seaport Museum mentors, students complete three hands-on projects through the application of an intensive mathematics and logistics-based curriculum: a remotely operated submersible, a wooden rowboat and a robot. With their finished projects, students compete in the Office of Naval Research’s (ONR) SeaPerch competition; compete against each other in sailboat competitions; and enter their robots in the FIRST Tech Challenge, which is partially sponsored by ONR. At the completion of the program, students have access to a variety of scholarship opportunities through FIRST, as well as through local colleges and universities. Additionally, EAGLE participants are eligible to apply for co-ops within NAVSUP WSS and the Navy.

NAVSUP WSS STEM volunteers also participate in Junior Achievement of South Central Pennsylvania events at local high schools to promote STEM education and personal financial literacy. Volunteer events coordinated through the NAVSUP WSS STEM program during 2016 included participation in Junior Achievement “Real Life” financial literacy forums at Camp Hill High School and Cumberland Valley High School.

Workforce Programs: NAVSUP WSS coordinates and participates in various outreach events to attract, employ, develop and retain a current and future naval STEM workforce. The annual “Navy Pi” day event held in Philadelphia inspires hundreds of educationally underserved students from Title 1 high schools to pursue and achieve their career goals in STEM. The event features interactive booths and displays from local colleges, universities and naval agencies, hands-on engineering challenges and an underwater remotely-operated vehicle competition illuminating the multitude of Navy career opportunities available for those pursuing a STEM education.

The EAGLE program currently engages 22 NAVSUP WSS civilian and military mentors spanning various directorates including engineering, operations research, logistics and information technology. The curriculum creates synergies of learning while maintaining and stimulating current employee’s STEM proficiencies. NAVSUP WSS EAGLE mentors and students further participate in annual Naval STEM Expos and Junior Science & Humanities Symposium as they continue to gain awareness of STEM’s integral role in the U.S. Navy now and in the future.

Naval Supply Systems Command Weapon Systems Support
Philadelphia Pennsylvania
Lt. Cmdr. Diana Dalphonse | diana.dalphonse@navy.mil

Mechanicsburg, Pennsylvania
Lt. Cmdr. Michael Mullerheim | michael.mullerheim@navy.mil
Office of Naval Research (ONR)

STEM: Ensuring access to skilled scientists and engineers, ONR’s STEM Grants Program sponsors projects that provide “game-changing” and innovative solutions, while establishing a diverse pipeline of U.S. citizens interested in uniformed or civilian Navy and Marine Corps careers.

The STEM Grants Program focuses on students at the high school, post-secondary and graduate levels, encouraging them to learn more about naval career opportunities. Other initiatives include:
- Helping to create innovative educational programs targeting naval science and engineering workforce needs
- Providing grants up to $750,000 over three years
- Partnering with educational institutions, nonprofits and businesses
- Cultivating and strengthening the STEM disciplines across all naval activities, and improving the naval technician talent pipeline
- Supporting efforts to connect military veterans with naval STEM careers
- Developing the capacity of the naval workforce to use big data and analytics to strengthen information science disciplines

Educational Programs: ONR STEM initiatives encourage, promote and coordinate naval S&T. Through participation in expos and other outreach events, ONR highlights naval-relevant STEM content, skills and career paths to K-12 and older students. ONR also supports students at STEM fairs and competitions, providing hands-on activities and an introduction to naval applications for subject matter and skills taught in school.

Workforce Programs: ONR’s workforce programs raise awareness of naval career opportunities; attract and nurture the future talent pool; and foster the continued development of the current naval STEM workforce. Laboratory workforce initiatives provide students and faculty opportunities to participate in research programs at Department of Navy (DoN) labs through internships, fellowships and sabbatical leave programs. ONR STEM grants lead to innovative solutions that directly support the development and maintenance of a robust DoN STEM workforce.

Office of Naval Research
Arlington, Virginia
Dr. Michael Simpson | michael.m.simpson1@navy.mil
Space and Naval Warfare Systems Command (SPAWAR)

**STEM:** The goal of SPAWAR outreach is to foster a culture that celebrates education, particularly in STEM, by empowering our professionals to bring an added richness to their communities.

**Educational Programs:** SPAWAR is dedicated to cultivating a zest for STEM among today’s youth, with the intent of developing future STEM professionals and a more informed and interested citizenry. SPAWAR is building a robust K-12 and post-secondary pathway that reflects the demographics of each community, leading to future STEM employment, preferably at our command.

**Workforce Programs:** SPAWAR delivers comprehensive human resource services in support of a mission-ready workforce. This includes numerous programs that develop future STEM professionals via internships, faculty research programs, work co-ops and Science, Mathematics and Research for Transformation (SMART) scholarships. It continues through to employment via the New Professionals program and engages our current scientists and engineers through various retention programs.

**SPAWAR Atlantic**
Charleston, South Carolina and New Orleans, Louisiana
Shanda Johnson | shanda.johnson@navy.mil

**SPAWAR Atlantic**
Hampton Roads, Virginia
Jerry Sekerak | gerard.sekerak@navy.mil

**SPAWAR Pacific**
San Diego, California; Pearl City, Hawaii; and Philadelphia, Pennsylvania
Ahn Nuzen | ahn.nuzen@navy.mil
United States Naval Academy (USNA)

**STEM:** The USNA STEM program provides opportunities to underrepresented populations and engages K-16 students and educators across the country and abroad. Emphasis is placed on sustainability of programs at a local level, empowering educators through teacher training, leveraging resources and building community networks. Hundreds of USNA midshipmen participate each year in outreach activities that help prepare them for intellectual challenges by creating opportunities to lead in the classroom, strengthen creative problem solving skills, enhance innovative thinking and hone the ability to respond to spontaneous situations.

**Educational Programs:** USNA STEM activities focus on Navy-relevant curriculum and teacher development. Formal and informal educators from across the country and abroad attend one day, two day and week-long workshops focusing on the use of project-based learning in engineering design, chemistry, physics, math, cyber and programming, biology, environmental science and many engineering disciplines. Additionally, thousands of students are reached directly each year via camps, mini-camps, engineering days, festivals and fairs supported by faculty and midshipmen utilizing Navy-oriented activities based on real world applications.

**Workforce Programs:** High-school and college students participate in a variety of paid and unpaid internships including ONR SEAP, Project Lead the Way, and USNA/Pathways internships. Students are mentored by a faculty member in a science or engineering research and development area. Additionally, the USNA STEM Center acts as a resource available within USNA to help introduce midshipmen to the rewarding aspects of STEM and to encourage retention of STEM majors at USNA by engaging them in their own studies, often through project-based learning as well as in educational outreach to others. Teacher training workshops focus on workforce preparation of students in critical subject areas.

United States Naval Academy
Annapolis, Maryland
Angela Moran, Ph.D. | amoran@usna.edu
U.S. Naval Research Laboratory (NRL)

**STEM:** The goals of the STEM outreach at NRL are to encourage students to pursue STEM careers, share the Navy’s mission with various communities and inspire the nation’s best and brightest talent for the future naval workforce.

**Educational Programs:** NRL’s original community outreach program was established by a 1985 presidential directive tasking government organizations with supporting local schools. Currently, NRL volunteers promote K-12 community and educational outreach through a set of core STEM programs, including SeaPerch, FIRST Robotics and MATHCOUNTS. NRL also provides professional development to science and math teachers in school districts and systems that are geographically local to our laboratories and field sites. NRL scientists and engineers support other activities such as STEM fairs, lectures and tutoring, to name a few.

**Workforce Programs:** In addition to the federal Pathways Internships Program, NRL also participates in the Science and Engineering Apprenticeship Program, a program geared toward secondary students. NRL also caters to the collegiate level, undergraduate to post-doctoral, with Naval Research Enterprise Internship Program and the American Society for Engineering Education and National Research Council. Full-time personnel are encouraged to participate in NRL’s long-term training programs to advance subject matter expertise by pursuing advanced degrees and further certifications.

**U.S. Naval Research Laboratory**
**Washington, D.C.; Stennis Space Center, Mississippi; and Monterey, California**

Steve Vanderwerff | steven.vanderwerff@nrl.navy.mil
To Learn more about Naval STEM visit:
http://navalstem.navylive.dodlive.mil