The Climate Security Fellows Program

A Joint Effort of Naval Postgraduate School and Stanford Doerr School of Sustainability
NPS POC: Kristen Fletcher / kristen.fletcher@nps.edu
Stanford POC: Mark McVay / mcvaym@stanford.edu

BACKGROUND

The Climate Security Fellows Program is a pilot program for the 2023-2024 academic year organized through the Education Partnership Agreement of the Naval Postgraduate School and Stanford Doerr School of Sustainability. The Fellows Program enriches graduate student experiences at NPS and Stanford by creating a space to learn about and discuss issues in climate change, national security, and sustainability. Most Fellows sessions are virtual and there will be optional in-person events. In its pilot year, there are 9 fellows from NPS and 3 from Stanford.

The program aligns with (1) the three bins of the NPS-Doerr partnership, which are energy security, ocean sciences, and climate security and sustainability, and (2) the priorities laid out in the Navy Climate Strategy. Faculty from NPS and Stanford will present related topics and hold interactive discussions on such topics as:
- Issues related to US national security policy and climate change
- Military installations and surrounding communities impacted by climate change
- The nexus of environmental security, climate security, and energy
- Security and sustainability implications of climate-induced migration
- Topics chosen by faculty as timely and relevant to climate security and participating curricula

Schedule
7 Virtual Meetings: Dec 2023 (1), Jan 2024 (1), March 2024 (2), April 2024 (1) May 2024 (2)
2 in-person (optional) Meetings:
      Feb 2024 / Hopkins Marine Station, Monterey, CA
      April 2024 / Stanford campus, Palo Alto, CA
Optional networking events shared throughout the fellowship program

Requirements for Fellows
- Attend 4 of the 6 virtual Fellow events.
- Complete assigned readings prior to the start of the respective fellowship event.
- Join NPS Climate & Security Network for time period of fellowship.
- Write a professional article (3,000-5,000 words) with a team of 4 members + 1 faculty mentor on a topic of choice related to the Navy Climate Strategy.
- Present Findings in the final session (10 May 2024) as a collaborative brief on research findings and lessons learned from the program.

Application Requirements
- Applications were accepted from September – mid-October 2023.
- Students were nominated by a faculty member or self-nominated.
- Students were required to submit the following materials.
  - 1-2 page Resume/CV
  - Brief Statement of Interest (Limit of 400 words)

Climate & Security Fellows

**Naval Postgraduate School and Stanford Doerr School of Sustainability
Welcome the 2023-2024 Class of the Climate and Security Fellows Program**

As part of the Naval Postgraduate School-Stanford Doerr School of Sustainability Education Partnership, the institutions are pleased to hold the Climate Security Fellows Program and announce its first class of 12 fellows for the 2023-2024 Academic Year.

Climate change today is likened to an existential threat to mankind, bringing us increasingly frequent and extreme weather events with far-reaching consequences affecting everything from the global food supply to national security. The U.S. Navy Climate Strategy calls climate change "…one of the most destabilizing forces of our time…."

To better understand this threat and its many repercussions, the Climate Security Fellows Program provides a stimulating space to explore and discuss major issues in climate change and the nexus with national, environmental, and energy security and sustainability. Fellows will have an opportunity to engage with world-class NPS and Stanford faculty, all of whom are subject matter experts in their fields, via both in-person and virtual events, thereby enriching graduate student experiences at both institutions. Fellows are members of the NPS Climate & Security Network for the duration of their fellowship, will write 1 professional article with a team of 4 members on a topic of choice related to the Navy Climate Strategy, and will deliver a collaborative brief in May on their findings and lessons learned from participating in the program.

We welcome and look forward to engaging with this year's class over the 2023-2024 Academic Year.

Anna Broome
Anna Broome is currently a PhD candidate in electrical engineering in the Stanford Radio Glaciology Lab at Stanford University. Her doctoral research focuses on the design of ice-penetrating radar systems that are optimized to characterize the material beneath the ice sheet, as well as the temperature within the ice. Anna has traveled to Antarctica, Greenland, Iceland, and Svalbard to conduct field tests of the radars she is building. She is excited to learn more about the intersection of polar research and national security. Anna received her undergraduate degree, also in electrical engineering, from Princeton University.

DeVant'e D. Dawson
DeVant'e D. Dawson, PhD, is a postdoctoral researcher at Stanford University's Hopkins Marine Station. He holds two bachelor's degrees in biology (pre-health) and marine biology and a Master of Science in biology from Tuskegee University. He also earned a PhD in interdisciplinary ecology from the University of Florida. Dr. Dawson's expertise lies in the intersection of microbial ecology and bioinformatics, with the primary focus on addressing fundamental questions related to the interaction between environmental stressors and the structure of the coral microbiome. Beyond his scientific pursuits, DeVant'e aspires to pursue a career in marine policy to protect and restore the essential marine environment, working towards a more inclusive and sustainable future for marine conservation.

Rebecca (Bec) Grippo
Rebecca Grippo is a legal intern at the Energy Academic Group at the Naval Postgraduate School. She is also a third year law student at Roger Williams University School of Law with a bachelor's degree in supply chain management and economics from Michigan State University. As part of her internship, she researches climate security law and policy with a focus on climate-induced migration and economic impacts of climate change. She is

on the planning team for a NATO-sponsored Climate Security Course to be offered in 2024. She has also served as a legal intern with nonprofit and government entities in Rhode Island.

ENS Nicholas Hilaire, USN
Nicholas Hilaire is an ensign (ENS) in the United States Navy and a recent graduate of the United States Naval Academy where he earned his bachelor's degree in ocean engineering. He is studying operations research at the Naval Postgraduate School and has deep interests in coastal resilience, sparked by threats that rising sea levels pose to his two home states, Maryland and Florida, as well as to his alma mater along the Severn River. His passions for more practical coastal protection, incentives, and relief policies are driven by a desire for greater community awareness and intuitive solutions. He strives to understand how to incentivize more active ownership of present as well as emerging environmental/societal issues and views that as a catalyst for more responsive, sustainable community infrastructure.

LTJG Caroline Kelly, USN
Caroline Kelly is a Lieutenant Junior Grade (LTJG) in the United States Navy and a student at the Naval Postgraduate School (NPS) in the Meteorology and Physical Oceanography program (METOC). LTJG Kelly completed her bachelor's degree in oceanography at the U.S. Naval Academy where she was commissioned as a Surface Warfare Officer. There, she completed a capstone in microplastic distribution in the Severn River, fed by the Chesapeake Bay. Prior to NPS, Caroline spent three years operating and navigating an aircraft carrier based out of San Diego. She recently left the Surface Warfare community and became a METOC officer. Caroline intends to focus her thesis in oceanography and is interested in research topics involving sea ice in the Arctic and overall impacts of climate change.

Marina Lesse
Marina Lesse is a Faculty Associate-Research in the Energy Academic Group at the Naval Postgraduate School (NPS). Marina has a background in Marine and Environmental Science as well as robotics and unmanned systems. Marina is currently pursuing a Master of Arts in Strategic Studies in the National Security Affairs Department at NPS. She holds a Bachelor of Science in marine science from California State University Monterey Bay, and an Associate of Arts in social and behavioral science from Citrus College. Her expertise includes the utilization of autonomous systems for ocean research, environmental education, habitat restoration, watershed conservation and marine biology. Current research includes Climate Change Impacts on Naval Operations, AI Law & Policy, and the Role of Unmanned Systems in Addressing Climate Challenges.

LT Katherine Lindman, USN
A native of Minneapolis, Minnesota, Katie Lindman is a lieutenant in the United States Navy and graduated from the University of Minnesota, Twin Cities in 2015 with a Bachelor of Science in mortuary science. Afloat, Katie's first sea assignment was aboard USS ROBERT SMALLS (CG 62) where she served as the Combat Fire Control Officer and Main Propulsion Officer. In December 2020, she reported to USS LITTLE ROCK (LCS 9) as the ship's Assistant Chief Engineer. Ashore, Katie completed a military fellowship at Tesla in General Assembly for the Model 3 (GA3) for the Secretary of the Navy Tours with Industry program. She is currently a student at the Naval Postgraduate School earning a Master of Arts in Security Studies (Western Hemisphere) focusing her thesis on humanitarian aid missions in Latin America.

Emily Pesicka
Dr. Emily Pesicka currently serves as an Oak Ridge Institute for Science and Education (ORISE) postdoctoral research fellow at the Naval Postgraduate School in the Center of Infrastructure Defense within the Operations Research Department. Dr. Pesicka's research advances resilience and surprise theories relating to the U.S. military, critical infrastructure systems, and military and civilian communities. Her primary focus lies in investigating the implications of climate change on military installation infrastructure, military personnel, their families, and civilian personnel. Prior to her current role, Dr. Pesicka held a teaching position in the Political Science Department at the University of Hawaii at Manoa from 2015 to 2021. Dr. Pesicka's expertise extends to various facets of environmental studies, including environmental law and policy, climate change planning, and climate resilience. She earned her PhD in political science from the University of Hawaii at Manoa, a Master of Arts in Environment

and Community from Humboldt State University, and a Bachelor of Arts in Global Studies with a specialization in Global Environmental Policy from Sonoma State University.

LT Dishan Romine, USN
Dishan Romine graduated from the United States Naval Academy with a bachelor's degree in economics in 2017. He is a lieutenant in the United States Navy and a Human Resources Officer. Dishan served his first two-year assignment as the Electrical Officer onboard USS Green Bay (LPD-20) where he qualified as a Surface Warfare Officer. After his acceptance into the Human Resources community, he served two years as the Naval Postgraduate School's (NPS) Deputy Director of Programs. He is currently a student in the Operations Research Department at NPS.

Capt Colby C. Smith, USMC
Colby Smith is a captain in the United States Marine Corps (USMC) and a Master of Arts student at the Naval Postgraduate School (NPS), enrolled in the Security Studies program specializing in Southeast Asia. He received his Bachelor of Arts in 2017 from Carroll College in Helena, Montana, with a double major in international relations and political science. As an officer in the USMC, Capt Smith specialized in communications before arriving at NPS. He was previously stationed in Okinawa and has worked extensively on training with allies and partner nations across the first island chain and the Western Pacific region.

Jia-Yi (Issac) Tham
Jia-Yi (Issac) Tham is a master's student in the Sustainable Design and Construction program at Stanford University. As an undergraduate, he majored in cultural geography at Oxford. Issac recently completed his compulsory service with the Singapore military as a Logistics Officer. Through this experience, he witnessed how climate change was materially impacting military operations and considerations - in wartime, peacetime training, and humanitarian missions. Specifically, Issac is interested in strategies to protect troops against rising temperatures and electrification and hydrogen fuels for military vehicles.

LT Joseph Ward, USN
Joseph Ward is a lieutenant in the United States Navy and is from Oneonta, Alabama, where he attended Auburn University graduating in 2015 with a Bachelor of Science in geology. LT Ward is actively pursuing a master's degree in meteorology and oceanography at the Naval Postgraduate School. LT Ward enlisted in the Navy in 2007 as an aviation electronics technician. His first tour was with Helicopter Sea Combat Squadron 26 based in Norfolk, Virginia. He completed two deployments and advanced to the rank of Petty Officer 2nd Class. Following this tour, he became a Navy recruiter stationed in northern Alabama. During his recruiting tour he was promoted to Petty Officer 1st Class and was selected as a Surface Warfare Office (SWO)/Ocean candidate for the Seaman to Admiral program. Following completion of the Seaman to Admiral program and commissioning, his initial sea tour was aboard USS Iwo Jima as a Deck Division Officer and assistant Navigator. After a rewarding SWO tour he re-designated as a Navy Meteorology and Oceanography (METOC) Officer and completed two METOC tours. His assignment as the Training Officer at the Navy Data Center in Yokosuka, Japan, was followed by a significant assignment as the Joint METOC Services Officer for the Joint Interagency Task Force in Key West, Florida. His personal decorations include the Armed Forces Service Medal, Navy Achievement Medal (six awards), Joint Service Achievement Medal, and Joint Service Commendation Medal.