An Ocean Corps for Ocean Science

Brian K. Arbic\textsuperscript{1}, Osinachi Ajoku\textsuperscript{2}, Marcia C. Ford\textsuperscript{3}, Madeline Foster-Martinez\textsuperscript{4}, Winn Johnson\textsuperscript{5}, Edem Mahu\textsuperscript{6}, Paige E. Martin\textsuperscript{7}, Tashiana Osborne\textsuperscript{8}, Katherine Roche\textsuperscript{9}, Alexis Valauri-Orton\textsuperscript{10}

\textsuperscript{1}University of Michigan, USA \quad \textsuperscript{2}NCAR, USA \quad \textsuperscript{3}University of West Indies, Jamaica \quad \textsuperscript{4}University of New Orleans, USA
\textsuperscript{5}University of North Carolina Wilmington, USA \quad \textsuperscript{6}University of Ghana, Ghana \quad \textsuperscript{7}Columbia University, USA
\textsuperscript{8}University of California San Diego, USA \quad \textsuperscript{9}University of Rhode Island, USA \quad \textsuperscript{10}The Ocean Foundation, USA
Why an Ocean Corps?

- Ocean science infrastructure is very unequally distributed around the world.
- Forming collaborations between US scientists and scientists in under-resourced countries can help to address this.
- Just as the Peace Corps inspired young Americans to engage the world, Ocean Corps will inspire US oceanographers to engage the world.
Why an Ocean Corps?

- Oceanography is a global science and we need partners everywhere to observe and model the global ocean.
- Solutions to marine plastic pollution, climate change, and other global ocean problems, will require global participation.
- Need to increase participation by everyone in “the global oceanography enterprise”
  - conferences
  - decision-making bodies
  - scientific journals
  - etc
My history in the Peace Corps...

- Form 5 Science Class
- Damongo Secondary School
- Northern Ghana
- 1992
Coastal Ocean Environment Summer School in Ghana (COESSING; https://coessing.org)

2015 Summer School
Held at Regional Maritime University
2016 Summer School
Held at University of Ghana

Coastal Ocean Environment Summer School in Ghana (COESSING; https://coessing.org)
2017 Summer School
Held at Regional Maritime University

Coastal Ocean Environment Summer School in Ghana (COESSING; https://coessing.org)
2018 Summer School
Held at University of Ghana

Coastal Ocean Environment Summer School in Ghana (COESSING; https://coessing.org)
2019 Summer School Held at Regional Maritime University

Coastal Ocean Environment Summer School in Ghana (COESSING; https://coessing.org)
2020 Virtual COESSING

Coastal Ocean Environment Summer School in Ghana (COESSING; https://coessing.org)
Coastal Ocean Environment Summer School in Ghana (COESSING; https://coessing.org)
Idea: An Ocean Corps for Ocean Science

• Many scientists want to join our Ghana summer school.
  – Young scientists are especially interested!

• Why not instead have many (10? 50?) similar schools around the world?

• Scientists in other under-resourced countries want to host similar schools.

• The interest is there for much more collaboration.

• We propose an “Ocean Corps” as a unifying concept to obtain funding and create a network of summer schools, workshops, etc. around the world ...

https://globaloceancorps.org
Connections to other UN Decade Programs

- Ocean Corps will collaborate with other UN Decade programs, for instance:
  - EquiSea: The Ocean Science Fund for All
  - IOC
  - GOOS
  - POGO
  - CoastPredict
  - Global Ocean and Human Health Program
  - Marine Life 2030
  - Ocean Practices for the Decade Programme
  - OASIS
  - And others

- All UN Decade programs will benefit from strong capacity development.

https://globaloceancorps.org
Ocean Corps co-leads

Osinachi Ajoku
Postdoctoral Fellow I
National Center for Atmospheric Research

“With support from Ocean Corps, I would reach out to Earth scientists in Africa to set up more observational networks as well as collaborate on research involving aerosols and the local monsoon.”
Ocean Corps co-leads

Marcia Creary Ford
Environmental Data Manager
University of the West Indies
Centre for Marine Science
Mona Campus, Jamaica WI

“Ocean Corps’ focus on ocean science will facilitate the collaboration between local and overseas partners in developing much needed in-country training and research.”
Ocean Corps co-leads

Maddie Foster-Martinez
Assistant Research Professor
Pontchartrain Institute for Environmental Sciences
University of New Orleans

“If Ocean Corps is funded, I would build long-term, international collaborations to conduct research that supports and is informed by thriving coastal communities.”
Winn Johnson
Assistant Professor
University of North Carolina Wilmington

“I would use the global network created by Ocean Corps, to connect chemical oceanographers with access to advanced analytical tools to researchers seeking to apply these analyses in under-characterized regions of the ocean.”
“Ocean Corps is a great opportunity to bring African oceanographers a step closer to their counterparts in the Global North. Students from Ghana and Nigeria have received coaching, mentorship and studentship support through COESSING and we are very hopeful of broader impacts when Ocean Corps is funded.”
“If Ocean Corps is funded, I would be thrilled to bring open-source software, accessible data, and cloud computing to ocean scientists across the globe.”
“With support for Ocean Corps, I would look forward to deepening and multiplying international partnerships to tackle challenges within the natural science-social equity-sustainability nexus.”
Ocean Corps co-leads

Katie Roche  
*PhD Student*  
University of Rhode Island  
RPCV Guinea 2017-2019

“As a former Peace Corps volunteer, I have seen the immense impact that STEM programs can have on encouraging diverse voices in our field, and I aspire to bring an Ocean Corps summer school to Guinea.”