

Call for Early Career Researchers

Help Ocean Visions develop the next set of our <u>digital, interactive road maps</u> to accelerate the research and development of ocean-based carbon dioxide removal technologies.

In 2021 Ocean Visions released a series of five digital interactive road maps to accelerate the research and development of ocean-based carbon dioxide removal technologies. These digital road maps highlight the highest priorities for action and are intended to catalyze global engagement on research and development of ocean-based CDR approaches. Initial road maps were focused on: Macroalgal cultivation and carbon sequestration, ocean alkalinity enhancement, electrochemical removal of carbon dioxide from seawater, as well as two cross-cutting issues of importance: building and maintaining public support and expanding finance and investment.

Now we are building on that foundational set of road maps by announcing our plans to build two new road maps and are looking for early career researchers who want to get involved. This year, Ocean Visions will develop road maps for:

- Microalgae cultivation and carbon sequestration: Cultivating microalgae and sequestering the carbon embedded in it. Microalgae can be fertilized from surface application of nutrients (e.g., nitrogen, phosphorus, and/or iron), as well as artificial upwelling of nutrient-rich deep ocean water. Cultivation can also occur in shore-based bioreactors and raceway ponds. Sequestration pathways include artificial downwelling and/or harvesting for shore-based bioenergy, as well as production of stable bioproducts.
- Marine Ecosystem Restoration: Restoration and protection of coastal blue carbon ecosystems, including mangroves, salt marshes, and seagrass meadows, as well as historical populations of large marine mammals to enhance coastal and oceanic storage of organic carbon.

These road maps will live on the same interactive platform as the existing road maps, ensuring that they are easily accessible to a global audience.

Ocean Visions is looking for early career researchers (ECRs; graduate students, postdocs, research staff, etc.) who would like to help develop the foundational information base upon which these maps will be built. We are looking for ECRs who can devote ~5-10 hours per week

during spring and summer 2022 to work either alone or as part of a small team (~3 individuals) to gather and synthesize relevant information and preliminary analyses upon which the maps will be based. Once initial drafts have been produced, ECRs may help Ocean Visions conduct a series of workshops and public review to further develop the maps. You are a good fit if you have a background in physical or life sciences, engineering, policy, governance, or any other related field.

If you would like to be considered, please complete this <u>brief self-nomination form</u>.