

Climate Justice in Biology, Epidemiology and Exposure Science Module

Instructor Guide

This module discusses the integration of climate justice in Biology concepts, including microbiology and epidemiology, along with the broader field of exposure science. It is to be used as a guide to discover how you can include climate justice in your regular biology courses to demonstrate that climate justice is a part of all sciences and aspects of life.

Learning Objectives:

- 1. Recognize how climate justice can influence biology
- 2. Understand the climate justice approach to biological research
- 3. Identify the importance of microbiology in climate science
- 4. Discover how you can address inequalities with biology

Preparation for Teaching/Readings:

- 1. <u>An applied environmental justice framework for exposure science.</u>
- 2. <u>Global climate change in the physical/biological sciences</u>
- 3. What is climate justice?
- 4. Microbiologists as experts in the climate change conversation
- 5. Pervasive structural racism in environmental epidemiology
- 6. The All We Can Save Project

Advancing biology through climate justice

- Image from <u>An applied environmental justice framework for exposure science</u>
- Option to read the article as pre/during/post class activity

In-Class Activities:

- 1. Three partner discussions and sharing
- 2. Review of research article
- 3. In-class reading: <u>Microbiologists as Experts In Climate Change Conversation</u>

Suggestions for Future Learning:

1. <u>Introducing the Microbes and Social Equity Working Group: Considering the Microbial</u> <u>Components of Social, Environmental, and Health Justice</u>



- 2. <u>Climate Justice in Rural Southeastern United States: A Review of Climate Change</u> <u>Impacts and Effects on Human Health</u>
- 3. The role of biology in global climate change