

Application for UC President's Carbon Neutrality Initiative Fellowship Program at UCSF

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To: UCSF Committee for the UC President's Carbon Neutrality Initiative Fellowship Program

I am applying for the University of California Carbon Neutrality Initiative with the intent of continuing an elective course related to climate change and health that addresses critical issues and topics of our day and age and to work on a project that improves on reducing medical waste and promoting safe drug disposal of unwanted and expired medications at UCSF.

Currently at UCSF, majority of students receive their training with an emphasis on clinical knowledge, however the topic of environmental health is often times overlooked. Not addressing the essential topic of climate change has overarching implications on human health because it creates a disparity at the provider level that can manifest as negligence and harm to society. As future health-care providers, UCSF students should be at the forefront of advocating for environmental justice, educating others, and endorsing policy changes that bring about real solutions. Achieving these goals require foundational knowledge about climate change and how it affects human health.

During spring quarter, I was able to help coordinate an elective titled Earth Health, and made it available to all graduate programs within UCSF. We had a great turnout of students who enrolled in the course and we received a positive response from UCSF faculty who were eager to help with our efforts. We aimed to address the issue of climate change and health from different perspectives and included interesting lectures such as: climate change and health, nuclear weapons, sustainability efforts at UCSF, pharmaceutical waste management, sustainable food practices, fracking, carbon tax & citizen lobbying, sugar industry & environmental economics, health equity, and environmental justice. Furthermore, we actively gathered student feedback via online surveys after each class in an effort to hear student voices, and we provided feedback to our presenters in order to make improvements for next year. Additionally, from the beginning we were motivated to understand the impact of this course and wanted to measure student learning, therefore we piloted a study to learn more about student's preconceived notions and feelings towards climate change before and after taking the course. We are interested in publishing our results once we gather all the data. The main learning objectives for our course can be summarized as follows:

At the end of this elective, students will be able to:

1. Describe how climate change affects human health
2. Explain how social determinants influence health across the lifespan
3. Outline the relationship between health care waste, health systems, and the environment
4. Describe practical steps that can be taken to reduce greenhouse gases in health care
5. Develop plans for how health care providers can serve as advocates for sustainability in their communities

We currently have a working course that is supported by students, faculty, and advisors; and we have strategies in place for making improvements for the future and gathering data to help us better understand the impact of this course on student perspectives. My hope is to continue offering the course next year in partnership with the Academic Senate Committee on Sustainability.

In addition, pharmaceuticals in the environment are a growing problem. Once released into the environment, pharmaceuticals will be transported and distributed into the air, water, soil, and sediment. Students at UCSF have expressed the need for a drug take-back program of unwanted and expired medications. I am planning on working with Dr. Gruenberg on a safe drug disposal project to keep the environment safe from toxic drugs as well as preventing medication diversion.

Sincerely,
Ereca Nguyen