

MCS Selective

Health and Society in the Context of Climate Crisis

Instructors

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Syllabus

Course Overview/Description:

Climate change is one of the greatest challenges of our generation and will continue to influence how we perform medicine and deliver patient care. To be sure, our generation of physicians will be charged with the task of understanding the mechanisms by which climate affects the health and lives of our patients, as well as how to deliver care within the setting of crisis. Medical schools around the country and abroad have begun educating future physicians on the intimate interrelation between climate change and health. This elective at Renaissance SOM seeks to provide future physicians with a brief exposure to the many ways in which climate change is already affecting patients, populations, and specific medical specialties.

The course will start with a brief overview of climate science, and then turn to an extensive discussion of areas of medical practice that are most affected and challenged, now and in the future.

We will then turn to the voices of native American indigenous populations (with representatives from the Shinnecock Indian Nation Environmental Department) as well as global indigenous impact, with a focus on Iukaieka Guainia Taino Council of the Greater Antilles. We will explore the implications of extreme weather changes and catastrophic events in the Caribbean and other parts of the world.

We will then focus on societal dynamics of migration and consequent social pressures on the clinical practice of medicine in the U.S., and its implications for medical education. We will also consider Randal's Island and Orchard Beach in New York City, where migrants receive shelter, aid, and medical care. These more than 24,000 asylum seekers will be removed from these camps to midtown Manhattan to hotel facilities. We will review several residency programs that focus on migrant medicine in New York and Boston.

Becoming successful agents of changes is essential. In the fourth session we will examine several initiatives from medical and nursing organizations intended to begin to address climate

change in hospital and other clinical venues. We will also team up into student small groups of three in the weeks before this class to present on strategies for coping, treating, and becoming active agents of change.

Educational Objectives

At the conclusion of this course, you will have the ability to:

1. Be cognizant of and be able to converse about the impact of climate change on health.
2. Understand climate change to be anthropogenic at its core and a social determinant of health.
3. Understand the various fields of medicine that are being affected by the dynamics of climate change and immigration.
4. Discuss eco-health literacy, assessment methods, and teaching insights for clinical practices.

Topics and Dates

Time and Location: 1:00-3:00, Room TBD

Week 1 (4/25): Defining the Problem: Climate-Related Clinical Correlates (Post, Rivera)

Our first session will open with an overview and discussion of up-to-date climate science, defining of climate crisis as anthropogenic in both its origins and impacts, and consideration of the ways in which human health and medical practice has and will continue to be influenced by climate. We will also turn to an extensive discussion of areas of medical practice that are most affected and challenged, now and in the future.

Reading prior to class:

[Climate Change as a Social Determinant of Health](#)

[Disproportionate Exposure to Urban Heat Island Intensity Across Major US Cities](#)

“Specific Impacts Upon Human Health” in *Global Climate Change and Human Health* J. Lemery, K. Knowlton, C. Sorenson, eds., Jossey-Bass, 2015), pp. 497-51. (pdf will be emailed)

Week 2 (5/2): Climate Crisis is Here and Now: Shinnecock Presentation Smith, Rivera)

One of the greatest challenges faced by climate crisis activists is the overlooking and dismissing of climate crisis as a problem of the future and the far-away. But, that is not the case. With a foundational understanding of climate change and a basic understanding of climate-related clinical correlates, we will learn how climate change is currently affecting the Shinnecock Indian population on Long Island. The session will be led by Shavonne Smith, the Director of the

Shinnecock Environmental Department. Shavonne will talk about how climate change has already made itself known in the form of certain health problems and specific anthropogenically-caused disasters. The global indigenous impact, with a focus on Iukaieka Guainia Taino Council of the Greater Antilles, will be led by Maxx (Guazabara) Rivera, clinical bioethicist, United Confederation of Taino People representative. We will explore the implications of extreme weather changes and catastrophic events in the Caribbean and other parts of the world.

The lecture will be concluded by a group discussion and Q&A session with the goal being for students to obtain a deep understanding of how intimately climate change is affecting people around us.

Readings for the session:

- <https://www.cnbc.com/2021/12/05/long-island-native-american-tribe-is-losing-land-to-rising-seas-.html>
- [Shinnecock Indian Nation Climate Vulnerability Assessment and Action Plan - Peconic Estuary](#)
- <https://news.climate.columbia.edu/2019/09/18/shinnecock-coastal-habitat-restoration-project/>

Week 3 (5/16): Migration, Social Pressures, and the Potential Impact on Hospital Systems (Rivera, Post)

We will then focus on societal dynamics of migration and consequent social pressures on the clinical practice of medicine in the U.S., and its implications for medical education. We will also consider Randal's Island and Orchard Beach in New York City, where migrants receive shelter, aid, and medical care. These more than 24,000 asylum seekers will be removed from these camps to midtown Manhattan to hotel facilities. We will review several residency programs that focus on migrant medicine in New York and Boston.

Week 4 (5/30): What Can We Do? Becoming Successful Agents of Changes. (Post, Rivera)

In this fourth session we will examine several initiatives from medical and nursing organizations intended to begin to address climate change in hospital and other clinical venues. We will also team up into student small groups of three in the weeks before this class to present on strategies for coping, treating, and becoming active agents of change.

Evaluation

The course is P/F. Attendance is required for each class. Active participation in class discussions is required. Group presentations are mandatory. A reflection piece of 1 page in length, single spaced, Times New Roman will be required at the end of Week 4.

Number of Students

Minimum 3 Maximum 12
