

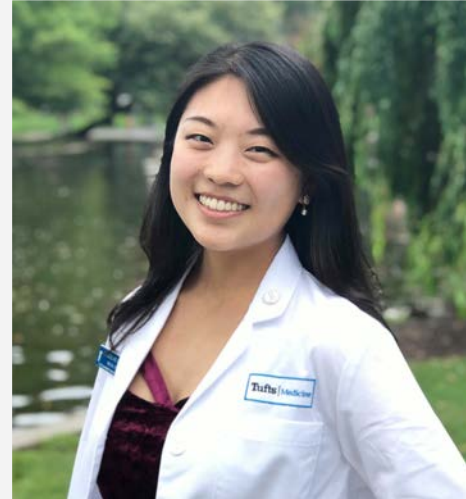
Climate in Medical Education Panel



Your Moderators



Jesmehar Walia
M1, Albany



Jackie Shen
M3, Tufts

MS4SF

MS4SF is a national network of medical students in the United States who recognize climate change as an urgent threat to health and social justice.

Motivated to protect our future patients and the communities we love, we catalyze action to prevent and address the health harms of climate change.

Land Acknowledgement

As we gather in this virtual space, we acknowledge that the ground beneath our feet is historically the home of Indigenous Peoples, many of whom have been forced to leave for other lands. May we also remember that Indigenous Peoples are not a people of the past, but are here with us now. If there are Indigenous People on this call, you are invited to share your tribe so that we may recognize you.

Panelists



Natasha Sood, MPH

M3, Penn State



Karly Hampshire

M3, UCSF



Savita Potarazu

M3, GWU



Kanika Malani

M1, Brown

Opening Question

**How is your school integrating climate change into meded?
What has the timeline been for these changes and what were
the strategies used to implement these changes?**

Q&A



Promoting
EcoMedical
Literacy at GW
SMHS

MSCCH Annual meeting

23 May 2021

“The ability to access, understand, integrate, and use information about the **health-related ecological effects of climate change** to *deliver and improve* medical services.”

(Bell, 2010)

What is
EcoMedical
Literacy
(EML)?

EML Competencies

1. The health impacts of environmental change
2. Sustainable and healthy lifestyles on an individual level
3. Sustainable and healthy societies and communities on a population level
4. The environmental footprint of health services
5. The bioethics of sustainability





2019-2020 Pilot
U.S. & Canadian Medical Schools

Planetary Health Report Card

Overall
Curriculum
Research
Community Outreach & Advocacy
Support for Student-led Initiatives

UC Berkeley/UCSF Joint Medical Program	B	B-	A	B+	B-
Perelman SOM at the Univ. of Pennsylvania	B	B	B	B+	A-
University of California, San Francisco	B	B	B	B	B+
George Washington Univ. School of Medicine	B	C	A	B-	A-
Alpert Medical School at Brown University	B-	B+	A-	D+	B-
John A. Burns SOM at the Univ. of Hawaii	B-	D	A	B	B
Harvard Medical School	B-	C	A+	D+	B-
Georgetown University School of Medicine	C+	C	C	C	A-
Tufts University School of Medicine	C	C	A-	F	A-
University of Arkansas for Medical Sciences	C	C-	B-	C	C
University of Minnesota Medical School	C	D-	B-	D-	A-
McGill University Faculty of Medicine	C-	D	B-	D	C

80-100% = A, 60-79% = B, 40-59% = C, 20-39% = D, 0-19% = F
Scores within top or bottom 5% awarded + or -, respectively

phreportcard.org

Where does GW SMHS stand?

Planetary Health Grades for the George Washington University School of Medicine and Health Sciences

The following table presents the individual section grades and overall institutional grade for the GW SMHS on this medical-school-specific planetary health report card.

Section	Raw Score	Grade
Planetary Health Curriculum	15 / 28 = 53%	C
Interdisciplinary Research in Health and Environment	9 / 10 = 90%	A
Community Outreach and Advocacy in Environment and Health	8 / 13 = 62%	B-
University Support for Student-led Planetary Health Initiatives	8 / 10 = 80%	A-
Institutional Grade	Average of four scores above = 71%	B

Planetary Health Report Card School Results
(2020)

Integrating EML

A two-pronged approach

Top-down

(Faculty-Driven)

Develop EML-related
learning objectives &
competencies

Periodic assessment of
EML competencies

Curriculum development &
revision

Climate & health
committee (students &
faculty)

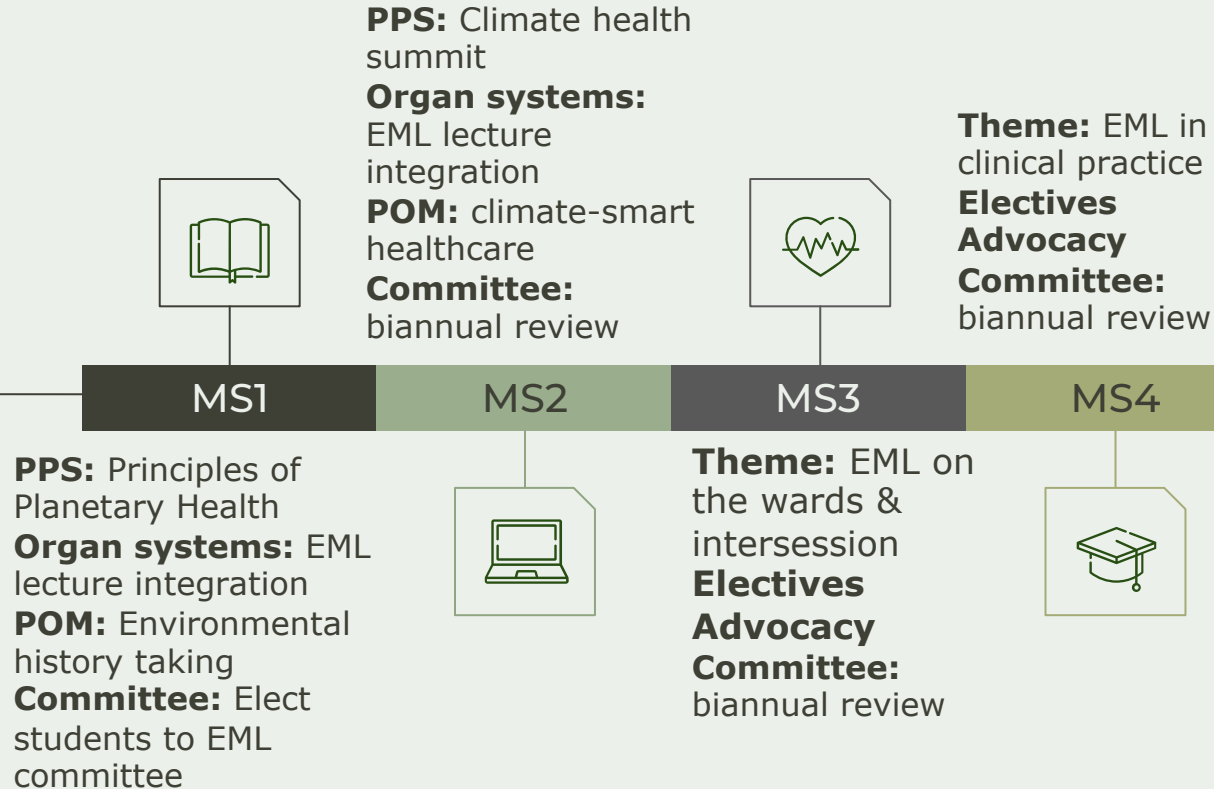
Climate Health Interest
Group (CHIG) curriculum
support

Bottom-up

(Student-Driven)



MD Program Snapshot



Next Steps

- 01** Develop sample EML pre-clinical and clerkship content (Now)
- 02** Present recommendations and sample content to CUMEC (Summer 2021)
- 03** Establish faculty-funded position to oversee climate & health in medical education (Fall 2021-Spring 2022)

Our Team

Advisors

Dr. Hana Akselrod

Dr. Jerome Paulson

Dr. Neelu Tummala

Students

Taylor Brewer, MS1**

Sam Duffy, MS2*

Alexander Dick, MS2*

Chelsea Holbrook, MS1**

Alison Hong, MS1**

Harleen Marwah, MS4

Anna Mattson, MS2*

Rohan Patil, MS1

Savita Potarazu, MS2*

Emily Youner, MPH, MS2*

*Founding members of Climate and Health Interest
Group (CHIG)

**Current Executive Board of CHIG

References

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Planetary Health Task Force at Brown Med

Presented by Kanika Malani MD-ScM'24

Slides from Megan Duckworth MD'23 & Sarah Hsu MD-ScM'22

Timeline

Spring 2018 - AMS climate & health needs assessment

Jordan Emont MD'20 & Dr. Monteiro

Spring 2019 - AMS Environmental Coalition Founded

Drew Cox '22, Mattie Tatman '22, Sarah Hsu '22

Fall 2019 - First Climate Change and Health Pre-Clerkship Elective

Jess Hoffen '22, Angela Zhang '21, Jordan Emont '22, Mattie Tatman '22, Sarah Hsu '22 Julia Rothschild '22

Spring 2020 - Brown completes first ever Planetary Health Report Card

Megan Duckworth '23, Swechya Banksota '23, winston McCormick '23

Fall 2020 - Planetary Health Task Force founded

Planetary Health Report Card

	Overall	Curriculum	Research	Community Outreach & Advocacy	Support for Student-led Initiatives
Stanford Medical School	B	B	A+	C	B+
UC Berkeley/UCSF Joint Medical Program	B	B-	A	B+	B-
Perelman SOM at the Univ. of Pennsylvania	B	B	B	B+	A-
University of California, San Francisco	B	B	B	B	B+
George Washington Univ. School of Medicine	B	C	A	B-	A-
Alpert Medical School at Brown University	B-	B+	A-	D+	B-
John A. Burns SOM at the Univ. of Hawaii	B-	D	A	B	B
Harvard Medical School	B-	C	A+	D+	B-
Georgetown University School of Medicine	C+	C	C	C	A-
Tufts University School of Medicine	C	C	A-	F	A-
University of Arkansas for Medical Sciences	C	C-	B-	C	C
University of Minnesota Medical School	C	D-	B-	D-	A-
McGill University Faculty of Medicine	C-	D	B-	D	C

Planetary Health Report Card

- A student-driven, metric-based tool designed to evaluate medical schools' commitment to planetary health and sustainable healthcare, and to inspire them to improve.
- Completed at Brown in 2021
- **AMS' overall grade: B-**

Timeline for 2021

Feb 2021 - Brown joined the 20 other medical schools in the Global Society Consortium on Climate Change and Health + the Planetary Health Alliance!

(Dean George, Swechya Banskota '23)

Mar 2021 - 2nd round of the Planetary Health Report Card Finished

May 1st - Submitted curriculum proposal to Curriculum Committee

Goals:

Fall 2021 - Planetary Health Task Force Committee

Proposal

We propose four-year longitudinal planetary health curriculum at Alpert Medical School.

- Planetary Health Task force developed planetary health competencies and objectives, which were presented to the Curriculum Committee on May 1st.
- Once approved, a ongoing committee of interested faculty and students will be tasked with **reaching out to faculty to identify areas for curricular changes** based on these competencies and **providing necessary research and content (Fall 2021)**.

Ideas for Pre-Clerkship Years

- Connect PH with specific human ailments and organ systems within the curriculum
- Develop planetary health electives and interest groups for Years 1/2
 - “Global Environmental Change and Emerging Infectious Disease”
- Create a funded PH research opportunity
- Facilitate connections between students and community environmental justice groups during M1 learning orientation

Ideas for Clerkship Years

- Develop new planetary health elective for Years 3/4
 - In discussion with SAEM Climate and Health Faculty
- Develop Planetary Health Internship Prep Course in Year 4
- Work with every block clerkship to identify lectures conducive to incorporating planetary health competency.

OB-GYN



Climate Change and the Health of Pregnant Women

Association of Air Pollution and Heat Exposure With Preterm Birth, Low Birth Weight, and Stillbirth in the US A Systematic Review

Bruce Bekkar, MD¹; Susan Pacheco, MD²; Rupa Basu, PhD^{3,4}; [et al](#)

> [J Epidemiol Community Health](#). 2017 Dec;71(12):1131-1136. doi: 10.1136/jech-2017-208963. Epub 2017 Sep 25.

Maternal ambient air pollution, preterm birth and markers of fetal growth in Rhode Island: results of a hospital-based linkage study

Samantha L Kingsley¹, Melissa N Eliot¹, Kimberly Glazer¹, Yara Abu Awad², Joel D Schwartz², David A Savitz¹, Karl T Kelsey^{1 3}, Carmen J Marsit⁴, Gregory A Wellenius¹

2. Climate Change and Pregnancy (with Dr. Adelle Montebianco and Julia Rothschild)

[Code Green: The Climate-Smart Health Professional](#)

Medicine

[Listen on Apple Podcasts ↗](#)



19 min

PLAY ▶

Let's talk climate change and reproductive health. Join us as we discuss the latest literature on climate change's impacts on pregnancy with our co-producer Julia Rothschild. Then, we'll dive into clinical pearls with Dr. Adelle Montebianco, Asst. Professor of Sociology at Middle Tennessee State University, and talk about her recent project training maternal health workers to effectively advise their pregnant patients about heat. We close out this episode with what healthcare professionals can do to protect pregnant patients from climate change, at both the patient and policy levels.

For rack cards, brochures, and urine charts to use in your clinic (in English & Spanish), check out Dr. Adelle Montebianco's website! Have questions for Dr. Montebianco? Email her at Adelle.Montebianco@mtsu.edu and follow her on Twitter @adelle_dora.

*Note, the ACOG recognizes that climate change disproportionately affects women. However, as our episode focuses on pregnancy, we use the terms "pregnant patient/people/individuals" in acknowledgement that not all pregnant individuals identify as women.

Hosted by Sarah Hsu



Thoughts or
Questions?

Relevance to MedED

- 67% of Americans trust health professionals for guidance on climate change, second only to scientists. Yet **only 19% have heard about climate change from their physicians.**
- The field of medicine is starting to view climate change with urgency.
 - **In 2019, the AMA released a policy on “Global Climate Change and Human Health” advocating for inclusion of climate education in medical school curricula.**
- Climate change is [taught in less than 15% of medical schools](#) worldwide.

Relevance to Brown & RI

- Rhode Island is the fastest warming state in the continental U.S. The number of heat waves is expected to quadruple from 10 days a year to 40 days a year by 2050.
- South Providence continues to experience myriad health effects of environmental racism. Climate change will exacerbate existing racial inequities.
- There is one landfill in Rhode Island, estimated to reach capacity in 10 to 15 years. There are national health consequences of this landfill space filling up.

Relevance to Brown & RI

While 95% of AMS students agreed that it is important for medical providers to know about the health impacts of climate change (CC).

Only 6.8% of students felt that AMS currently provides sufficient education on CC and health.

9.6% felt confident discussing health impacts of CC with patients.

6.8% felt they knew ways to mitigate CC.

13.7% felt they knew how to advocate for climate-threatened populations.