Climate in Medical Education Panel
Your Moderators

Jessmehar 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.
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
What is EcoMedical Literacy (EML)?

“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)
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
Where does GW SMHS stand?

Planetary Health Report Card School Results (2020)

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

<table>
<thead>
<tr>
<th>Section</th>
<th>Raw Score</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planetary Health Curriculum</td>
<td>15 / 28 = 53%</td>
<td>C</td>
</tr>
<tr>
<td>Interdisciplinary Research in Health and Environment</td>
<td>9 / 10 = 90%</td>
<td>A</td>
</tr>
<tr>
<td>Community Outreach and Advocacy in Environment and Health</td>
<td>8 / 13 = 62%</td>
<td>B-</td>
</tr>
<tr>
<td>University Support for Student-led Planetary Health Initiatives</td>
<td>8 / 10 = 80%</td>
<td>A-</td>
</tr>
<tr>
<td>Institutional Grade</td>
<td>Average of four scores above= 71%</td>
<td>B</td>
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Integrating EML
A two-pronged approach

**Top-down**
(Faculty-Driven)
- Develop EML-related learning objectives & competencies
- Periodic assessment of EML competencies
- Curriculum development & revision

**Bottom-up**
(Student-Driven)
- Climate & health committee (students & faculty)
- Climate Health Interest Group (CHIG) curriculum support
MD Program Snapshot

**MS1**
- **PPS:** Principles of Planetary Health
- **Organ systems:** EML lecture integration
- **POM:** Environmental history taking
- **Committee:** Elect students to EML committee

**MS2**
- **PPS:** Climate health summit
- **Organ systems:** EML lecture integration
- **POM:** Climate-smart healthcare
- **Committee:** Biannual review

**MS3**
- **Theme:** EML in clinical practice
- **Electives Advocacy Committee:** Biannual review

**MS4**
- **Theme:** EML on the wards & intersession
- **Electives Advocacy Committee:** Biannual review
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


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

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

Bruce Bekhai, MD; Susan Pacheco, MD; Rupa Basu, PhD; et al.
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.

Emont, J., et al. Developing a Climate Change and Health Curriculum for Medical Students: A Needs Assessment