Neuroscience and the environment

The new book *Minding the Climate: How Neuroscience Can Help Solve Our Environmental Crisis* was published by Harvard University Press in October 2022. Written by the Center for the Environment and Health Associate Director AC Duhaime MD, the book was the result of a several-year effort to explore the relationship between evolutionary brain design and our difficulties addressing climate change and environmental decline. The book covers the neural origins of how humans evolved to make decisions, some of the factors contributing to the acceleration of consumption in the 21st century, and what has been shown to work best for difficult behavioral change focusing on the environmental context. It is available online, in print, in audio, and at the MGH General Store.

Read the interview with Dr. Duhaime in the *New York Times* to learn more.

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Cambridge Street Project: sustainability update

The MGH Cambridge Street Project (CSP) is a new 1.2 million square feet state-of-the-art clinical building currently under construction at MGH.

Significant efforts have been made to integrate sustainability into all aspects of the building including the building envelope, lighting design, thermal comfort ranges, electrical loads, and operational...
parameters. The design has been optimized to target fossil fuel reduction, achieving an anticipated 82% reduction compared to the current MGH main campus. Shifting toward reliance on electricity, rather than fossil fuels prepares the building to rely on renewable energy and makes significant progress toward carbon neutrality goals.

Reducing the impact of anesthetic gases

Anesthetic gases used in health care can have significant environmental impacts, sometimes hundreds or even thousands of times more powerful than carbon dioxide (CO2). Dr. Sam Smith and Dr. Lucinda Everett have been instrumental in leading the multidisciplinary Anesthesia Sustainability Committee, in coordination with the MGH Center for the Environment and Health. Through educational efforts, individualized clinician quality measures, and Epic Best Practice Advisories that alert anesthesia clinicians if fresh gas flow remains above reduced thresholds, MGH has decreased the greenhouse impact of anesthetic gas on the main campus by nearly 40% over six months.

Watch our webinar to learn more about the environmental impact of anesthetic gases, and listen to our podcast with Dr. Smith to hear about these efforts.

Upcoming Events

Climate, environment, and health webinar series - co-sponsored by the MGH Center for Environment and Health, the MGH Institute of Health Professions Center for Climate Change, Climate Justice, and Health, and Brigham and Women’s Hospital
Featured speaker: Jonathan Levy, ScD
Professor and Chair of the Department of Environmental Health at Boston University School of Public Health.

**Housing, Climate Change, and Environmental Justice**

**January 18th, 12pm EDT**

[Register here]

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**Symposium 2023** - co-sponsored by the Institute of Health Professions, The Center for Climate Change, Climate justice, and Health, and the MGH Center for the Environment and Health

**Climate Change and Health 2023: Achieving Human and Planetary Health through Sustainability Action**

**Sat. April 1, 2023 8:30 am - 12:30pm (virtual)**

Attendees will be able to: articulate how climate change affects human and planetary health, identify strategies to achieve sustainability at the individual, healthcare system, community, and policy levels, and build community by engaging with other participants to learn and expand networking spheres. This event is for students, staff, and clinicians interested in climate change and healthcare sustainability.

[Save the Date!]

[Registration coming soon]

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**SHARP training: skills for health and researcher professionals** - sponsored by Columbia University's SHARP Program and Columbia University's Global Consortium on Climate Change and Health Education, with additional support from Health Care Without Harm.

**Life cycle assessment boot camp**

**February 13-14, March 27-28**

Life cycle assessment (LCA) is a tool used to quantify the environmental emissions of a product or process and is critical for anyone seeking a career in healthcare sustainability. The LCA Boot Camp is a 4-day intensive, hands-on course where an individual and/or team will learn the concepts of LCA and analytic methods required to complete their own LCA with their team.

[Register here]

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**Climate change and health series** - sponsored by the Blum Patient and Family Learning Center
Populations at risk for climate change health impacts

December 12th, 12:00pm ET

The Maxwell & Eleanor Blum Patient and Family Learning Center is offering an online session to learn about the populations most vulnerable to the health impacts of climate change. Speakers will discuss how factors such as poverty, racial discrimination, inadequate healthcare access, inadequate education, unhealthy living situations, unsafe working conditions, and more can exacerbate the negative health impacts of climate change. Participation is free for this event with no registration required.

[Zoom link here]

Awards

Mass General Hospital leads in New England

In recognition of its efforts in the areas of food waste reduction, renewable energy use, and other sustainable activities, MGH has been recognized by the Environmental Protection Agency with a 2022 Environmental Merit Award. ([Read full story](#))

Research

Investigating the health impacts of peaker power plants

The adverse health effects of residing near coal power plants are well-documented. What is less certain are the impacts of living next to intermittent (or "peaker") power plants. A new study by researchers at North Shore Hospital and the Center for the Environment and Health hopes to shed light on this question.

Peaker power plants are power plants that run on peak electricity days—typically on extremely hot or extremely cold days. The pollution generated by these plants may have significant impacts on cardiovascular and respiratory conditions. By combining data on emergency room visits in the Peabody area with patient exposure to
peaker plant pollution, researchers hope to quantify the adverse health impacts.

Advocacy

Become a Climate Ambassador with PSR

Physicians for Social Responsibility (PSR), a non-profit organization that mobilizes health professionals to advocate for climate change solutions and for the abolition of nuclear weapons, is currently recruiting for the Next Generation Climate & Health Ambassador Program. This program engages a diverse cohort of young and emerging healthcare professionals across the U.S., empowering them to become leaders in the climate justice movement, to advocate for climate and clean energy solutions, and to perform climate and health work in their local communities. More information and application forms can be found here.

Trainees

Journal Club - co-sponsored by Healthcare Without Harm, the Global Consortium for Climate and Health Education (GCCHE), and the Center for the Environment and Health

Life cycle assessment

December 14th, 6:30pm ET

Join the next journal club to discuss the use of life cycle assessments (LCA) in healthcare. Drs. Cassie Thiel and Jonathan Slutzman will provide a rapid review of the top healthcare LCAs and will answer any questions about the LCA Boot Camp for the Health Sector hosted by the Columbia School of Public Health.

Register here

Climate and health teaching resources

Climate Resources for Health Education is a free and publicly available repository of learning objectives, problem-based learning cases, and slide presentations on climate and health. These resources have been developed by hundreds of trainees and health professionals in collaboration with experts from the Global Consortium on Climate and Health Education, Massachusetts General Hospital, Brigham Women’s Hospital, University of California San Francisco, and Emory School of Medicine. Look here for the resources and for ways to get involved.
Sustainability in healthcare podcast

Have any colleagues who want to integrate sustainability into their health care system but don’t know where to start? Refer them to our newly launched podcast “Health Care SOS: Sharing on Sustainability” – a podcast series devoted to sharing the ways in which Mass General is integrating environmental sustainability into the clinical, research and educational activities of the hospital, and to providing tools and knowledge to support other health care institutions to do the same. Listen to our latest podcast "A Call to Action" where Dr. Melanie Haines shares how she transforms her passion into a project to address environmental injustice after a patient of hers is hospitalized after an extreme heat event.

ESG investment

Two ESG (environment, social, and governance) investment options are available through the Mass General Brigham Retirement Savings Plans for eligible employees. The plans include the Fidelity Sustainability Bond Index Fund (FNDSX) and The Vanguard FTSE Social Index Fund Admiral Shares (VFTAX). These funds consider ESG factors when choosing how to invest their assets. Find out more here (MGB intranet)

Solar rebates

Mass General Brigham is partnering with EnergySage to help you switch to solar power - whether you own your home or rent - and save thousands on your energy bills. As an added benefit, MGB employees who use EnergySage to install rooftop solar receive a $250 cash-back reward, and those who subscribe to community solar through EnergySage receive $100 cash-back. Learn more here and stay tuned for an MGB January 2023 webinar event for more information.

Publications

- Armand W., Slutzman J., Communication strategies targeting climate change action at a large academic medical center, The Journal of Climate Change and Health, Volume 7,
Brunn, M. Padget, M. Combining health system reforms and climate action. Le Monde October 9, 2022 Link


