

HMS/HSDM Faculty Council

Faculty Council Minutes January 11, 2023

Present: Adelman, Agudo, Astley, Bauer, Becker, Biddinger, Caradonna, Chang, Chen, Daley, D'Amico, De Girolami, del Carmen, Desrosiers, Fregni, Gaufberg, Giannobile, Goldstein, Greenberg, Haigis, Hatfield, Hedt-Gauthier, Henske, Huang, Ingelfinger, Irani, Landrum, Meyerson, Molina, Murray, Nayak, Okereke, Parangi, Rosen, Spring, Subramanian, Treister, Wagers

Guests: Drs. Basu, Bates, Garber, Golan, Hundert, Lensch, Muto, Stock, Westlund; Mss. Bittinger, DeCoste, Eck, Mr. Maiorisi

Staff: Mss. Hecht, Ryan, Spearman; Dr. Ivins

This Faculty Council meeting was held virtually, via Zoom.

Dr. Rose Molina called the meeting to order at 4:03pm. Dr. Molina asked for and received approval for the December 14, 2022, meeting minutes. Dr. Molina mentions that the Docket Committee will assume the responsibilities of the Faculty Council Subcommittee on Standing Committees (FCSSC) because it currently has no members, however interested parties should reach out to Jen Ryan, or Lorien Hecht. Dr. Molina also gives a brief preview of the February Faculty Council meeting which will be focused on DEI work and anti-racism work across the HMS affiliates. The Docket Committee is currently identifying potential speakers for the February meeting and is open to suggestions from respective institutions.

While waiting for Provost Alan Garber's arrival, Dr. Molina invited the Council to give feedback on content and speakers for the remainder of this academic year's Faculty Council meetings. Dr. Erica Greenberg volunteers a specific thought about engagement. She would like to learn about other ways for the Council to be more relevant, helpful, and involved. Dr. Matthew Meyerson posed a question regarding chatter from MGB physicians, academic physicians, about what is happening with the merger and the academic environment at those hospitals. This is one of his top concerns about what is going on at HMS today. He would love to have this on our docket. Dr. Greenberg speaks up and agrees that she would like to discuss concerns and the practical implications of the MGB merger. Dean Daley responded and explained that this has been front and center on the agenda of many folks across HMS. He mentioned that Provost Alan Garber may also be able to speak about these issues if the Council is interested. Dean Daley agreed that this is a very important and meaningful topic for the Council to explore, especially with Dean Anne Becker and Grace C. Huang weighing in.

Next, Dr. Molina introduced Provost Alan Garber, MD, PhD, for his annual conversation with the Council.

Provost Garber stated that this is a time of great change for Harvard University peer institutions. Provost Garber touched on a few highlights. A new president was announced last year which will be unlike previous transitions because Claudine Gay is a sitting Dean at the University. Dean Gay is scheduled to be the Dean of Faculty of Arts and Sciences (FAS) on June 30th and the president of Harvard University on July 1st. Additionally, decanal searches for four Harvard schools: Harvard Divinity School, Harvard T.H. Chan School of Public Health, the Harvard John A. Paulson School of Engineering and Applied Sciences as well as the FAS will commence shortly. Additionally, there is

turnover for many upper-level administrative roles as well, such as the CFO for the University. Provost Garber mentions that Dean Daley will be very helpful in enabling Dean Gay and the rest of the team to make a successful transition at the Presidency level.

Provost Garber hopes that the decanal search at the School of Public Health will be a time when we can improve and build upon the gains we have already made in coordination between HMS, HSDM and the School of Public Health. Provost Garber explains that the search for a new dean is a time to take full stock of the school, to cement ties further, to talk about challenges, opportunities, and ways in which the school needs to invest further. Provost Garber mentions specifically that the School of Public Health department chairs brought up that they would like to ensure that the next Dean makes ties between the various schools as well as the affiliated hospitals.

Dean Daley adds that the Longwood Medical Area (LMA) will operate best if we have extensive collaboration across the schools and that HMS values the opportunity to work closely together, specifically on the areas of health care policy, inflammation, immunology and infectious disease, and global health. Community centered medical education creates natural ways for HMS and the School of Public Health to collaborate. Dean Giannobile echoes Dean Daley's sentiment and adds that HSDM also has strong interest in these areas. Dean Hundert connects the discussion to our next topic of climate change initiative and mentions Kari Nadeau, the new Chair of the Department of Environmental Health at the School of Public Health, effective January 16, 2023. Nadeau is an HMS, MD, PhD, alum who is excited to make linkages between climate change and health, and environmental health with HMS, another great opportunity for more collaboration between HMS and the School of Public Health.

Provost Garber mentions connections across the river, a few include the collaboration at the Kempner Institute for Natural and Artificial Intelligence, as well as through the Wyss Institute, and in Neuroscience.

Provost Garber then switched to the topic of partnerships more broadly and stated that partnerships within the University, across the schools has grown. This is a positive and necessary sign because of the way science, in particular, is changing. One thing that has become clear in life sciences, as well as physical sciences, is that the level of resources needed to be at the cutting edge has generally increased. Many people believe that it is the large institutions that have sufficient critical mass and diversity in the types of resources available to them that are going to disproportionately account for the discoveries and the translational advances in the future. One example Provost Garber mentioned was the creation of the HMS cryo-electron microscopy facility which was done with the support of the university and the participation of multiple hospitals. Access to cryo-electron microscopy has contributed to Harvard's ability to carry out leading-edge scientific research, namely the development of our understanding of the SARS-CoV-2 structure. Provost Garber stated that shared facilities lead to progress and that this is not only about the equipment, but about having the kinds of people who are at the cutting edge of utilizing the equipment effectively and contributing to ongoing innovation in the technology.

Provost Garber then discussed broader collaboration with MassCPR as an area-wide collaboration and a way to bring together multiple universities, medical schools, and companies to address a huge range of challenges regarding the COVID-19 pandemic.

Dean Daley then adds that the cryo-electron microscopy facility is a great model for multiinstitutional collaboration. Dean Daley also touched on a conference he attended this past week celebrating the tremendous progress that has been made in the sectors of cell and gene therapy. Many of these breakthroughs have emerged from the Boston Biomedical community.

Dr. Anthony D'Amico asks Provost Garber if the multi-institutional construct is brought up as a strength when requesting funds from donors with large capacities. Provost Garber explains that it is a strength. The multi-institutional arrangements are always tricky and often require care at a different level. However, Provost Garber agrees that the better your network the greater you can make up for any gaps in in capabilities.

Dr. Felipe Fregni asked Provost Garber to elaborate on how the Harvard Innovation Lab helped to foster collaboration between HMS and the School of Public Health and to speak to how faculty can become more involved. Provost Garber explains that the Harvard Innovation Laboratory in Allston, opened in the Fall 2011. This is a creative space for entrepreneurial-minded students, postdocs, and faculty that has been wildly popular. The Harvard Innovation Lab is not unrelated to the Kempner Institute. Provost Garber hopes to make sure that the HMS faculty knows the right entry points to support students and get involved. Provost Garber also mentioned other programs separate from the Harvard Innovation Lab, such as the Blavatnik Biomedical Accelerator and the Blavatnik Fellows in Life Science Entrepreneurship to help with the innovation pipeline. Dean Daley thanked Provost Garber for his tremendous partnership at HMS and HSDM and turned the meeting back over to Dr. Molina.

Next, Dr. Molina introduced Dr. Megan Murray, Ronda Stryker and William Johnston Professor of Global Health at HMS, for a summary of previous Faculty Council Climate Change Subcommittee in terms of what they accomplished and their recommendations.

Dr. Murray gave an overview of the material that was presented previously by the Faculty Council Climate Change Subcommittee in 2021, namely the Subcommittee's accomplishments and recommendations. Dr. Caren Solomon led this Subcommittee when it was an active group participating in the development of an agenda around climate. Dr. Murray also mentioned that this Subcommittee was motivated by the fact that climate change is a global health emergency that disproportionately affects poor communities. Dr. Murray also explained that there is a lot of work taking place at HMS regarding climate change and health, however the work is disjointed due to the size of the medical school and its complex organizational structure. At HMS, there are many people publishing in this area and interested in teaching in this area, however many don't know about all the efforts that are taking place. Dr. Murray explained that a centralized structure would help facilitate the efforts at HMS and would underscore the medical school's commitment to addressing climate.

To address climate change and health, the Subcommittee developed a proposal to create and umbrella structure at HMS which consisted of soliciting input from diverse HMS stakeholders, drafting a proposal addressing Medical Education, research, hospital sustainability practices, as well as reaching out to the HMS community and HMS leaders (Richard McCullough, PhD, former Vice Provost for Research at Harvard, Gretchen Brodnicki, former Dean for Academic and Research Integrity and HMS Initiatives, Programs, Centers and Institutes (IPCI), Dr. Willy Lensch, Associate Provost for Research, and Dean Daley). Dr. Murray stated that progress has taken place with regards to Medical Education. For example, Dr. Gaurab Basu has received approval on medical school curriculum development and EPCC. There are new climate health funding opportunities at the Harvard Global Health Institute, as well as fellowships in climate and health at the Beth Israel

Deaconess Medical Center led by Satchit S. Balsari, MD, and Caleb Dresser, MD. Dr. Murray also mentioned fellowships from the Harvard University Center for the Environment (HUCE), specifically increasing numbers of fellowship applications in the health sector. The fellowships have been very productive from a scholarly perspective in the medical sector, namely through advocacy pieces and emergency response.

Dr. Murray mentions that IPCI was approached for a joint structure across HMS. IPCI reviews proposals for centers, initiatives, institutes that facilitate interdisciplinary and interinstitutional collaboration across HMS. The mission and activities should not duplicate existing departments of centers, and there should be a financially dependent department that serves as a home base run by 1-3 senior faculty members with a 3-year term.

Dr. Murray then focused on the next steps of the Faculty Council Subcommittee on Climate. First, to consider the merits of having an umbrella structure to coordinate climate activities across the hospitals and the quad, and to promote integration with other Harvard climate activities. Next is to identify optimal leadership and governance structure for such an initiative. Lastly, to identify and pursue possible sources of funding for initiative. Dr. Murray explained that a lot of progress has been made, including the creation of Dr. Jim Stock's roll as well as the Salata Institute, and a renewed vigor and focus in the Dean's Office on climate.

Dr. Murray introduced Dr. Gaurab Basu, Instructor of Medicine at Cambridge Health Alliance, to give a summary of the HMS climate change curriculum.

Dr. Basu opened his presentation by explaining that climate is now a formal curricular theme with a four-year longitudinal curriculum. Dr. Basu also applauded the students at HMS for their excitement and fabulous collaboration.

Dr. Basu then moved on to explain how climate change is an issue of human health and that we are uniquely positioned/responsible to make this a human issue. Dr. Basu listed 9 ways that climate change and burning fossil fuels impact human health, including: infectious diseases, heat related diseases, air pollution/allergens, extreme weather (wildfires, flooding, hurricanes, etc.), food insecurity, water scarcity, mental health, forced migration and political conflict. The role of medical education includes teaching our students how to provide care on a warming planet, bringing people to despair to hope and from paralysis to action. Dr. Basu explained that physicians are a critical part of the public discourse and have a trusted voice to counsel patients about how climate change impacts their health. Dr. Basu briefly mentioned the national landscape on climate curriculum, stating that it informs their work and that they are building off of it. Specifically, Dr. Basu mentioned Columbia's Global Consortium on Climate and Health Education, learning objectives at Emory School of Medicine, and a few other climate resources for health education at Columbia, MGH, BWH, UCSF, and Emory.

There are 5 areas of focus for the HMS curriculum. Focus 1 is to define the pathophysiological mechanisms by which climate change, air pollution, and ecological degradation impact human health. Focus 2 is to apply knowledge of climate change on human health to the clinical care of patients including prevention, diagnosis, and risk reduction counseling. Focus 3 is to analyze the historical and structural causes of climate change, air pollution and ecological degradation and describe the ways in which it creates/ exacerbates health inequities. Focus 4 is to describe the ways in which the healthcare system contributes to climate change and how healthcare delivery is vulnerable to climate-related events. Finally, focus 5 is to explore roles that physicians and

healthcare institutions can play in climate solutions. Two keys to success that Dr. Basu mentioned were significant interest/partnership from course directors and integration into the existing curriculum. Dr. Basu closed by thanking both Dean Hundert and Dean Daley for their partnership and leadership.

Dr. Murray introduced Dr. Jim Stock, Vice Provost for Climate and Sustainability at Harvard University, to give overview remarks about the Salata Institute and university-wide climate change efforts.

Dr. Stock gave a summary of climate at Harvard, including Climate Science (warming/glaciers melting), human impacts (hurricanes/floods), adaptation and mitigation. Stating that we must make sure that the health care system can deliver. He then discussed general plans for climate at Harvard starting with the long-term goal. Dr. Stock explained that the focus is about the tons of emissions we've managed to abate and lives that we've managed to improve. One of the intermediate steps are increasing the amount of impactful work that we have at Harvard and ultimately making impactful work and impactful education. How are we going to create the climate leaders in the future and how are we going to create the research that is really going to have substantial impact? We can all think of ways to have impact, but we want to actually have the most impact that we possibility can on the climate problem. Short term plans are doing things like having a climate education committee and they're going to do the best they can to get the schools to make progress and in some cases that's like pushing the schools in the direction of more climate education.

Dr. Murray then led a fireside chat between Dr. Basu and Dr. Stock. Dr. Murray touched on the two approaches to addressing climate change: adaptation and mitigation and the question what will health related research will do to interrupt global warming?

Dr. Murray posed the question: Do you see the reach of the Salata Institute extending outside of the U.S. domestic policy to involve work in the Global South? Dr. Stock said that it must and explained that this must be a bottom-up faculty driven activity and that we have funding for it.

Dr. Murray then posed a tough question: HMS is complex with a complex governance structure and does not own its hospitals, which creates administrative problems and confusion within the Med School faculty about how the Salata Institute might connect to this larger group. How can you involve this big group of people and how we can organize as to work well with the Salata Institute? Dr. Stock responded that HMS should have some sort of umbrella structure that would incorporate the hospitals, but that it is HMS's responsibility to organize.

Dr. Murray then opened the floor to questions and comments, and a discussion ensued.

Dr. Molina thanked everyone for their participation. Dr. Molina adjourned the meeting at approximately 5:32pm.