



George Q. Daley, M.D., Ph.D., Dean of the Faculty of Medicine, called the meeting to order, welcomed members and guests, and requested approval of the minutes of the Faculty of Medicine meeting of May 11, 2020, which were provided in advance of the meeting. The minutes were approved, as submitted.

Dean Daley called on Jules L. Dienstag, M.D., the Carl W. Walter Professor of Medicine and the Interim Dean for Faculty Affairs, to read the memorial minute on Dr. Kurt J. Isselbacher.

I am privileged today to honor the memory of Mallinckrodt Professor of Medicine Kurt Isselbacher, who passed away on July 18, 2019, at age 93, the final curtain on his six-decade career as the premier academic gastroenterologist of his generation. His family lost a loving patriarch; his patients lost an empathetic master clinician; his trainees and colleagues lost the ultimate teacher, mentor, and role model; and the academic community lost one of the leading physician-scientists and most influential giants of his generation.

The events of Kurt's childhood cast a shadow over his life and career. He was born on September 12, 1925 in Wirges, Germany. In 1933, when Kurt was 7, Nazi SS stormed his home, lined up his family against a wall, threatened their lives by training rifles at their heads, burned their belongings, and looted their clothing store. Following the Nazi beating to death of his paternal grandfather and Nazi Germany's spiral into an abyss of brutal antisemitic atrocities, Kurt (at age 10), his parents, and maternal grandfather, fled to America in 1936, settling in Portsmouth, NH. Everyone else in his extended family perished in the Holocaust. As he recounted in his memoir, "I believe medicine became my calling in order to justify my survival," a dedication that colored all his life's activities and accomplishments. Remarkably, the early-childhood terrors he experienced did not rob him of his characteristic optimism.

Kurt graduated with honors from Harvard College in 1946 and HMS in 1950, did an MGH medical residency, and trained in biochemistry at the NIH. There, he discovered the first hereditary disease to have its enzymatic defect identified, galactosemia—catapulting him to the attention of the scientific community. In 1955, while at the NIH, Kurt met and married Rhoda Solin, who became his strategist, coach, and advocate. During their propitious, 6-decade partnership, Rhoda's guidance and encouragement to embrace opportunities and challenges were instrumental to Kurt's academic success.

A year after returning to the MGH, when Kurt was 31 and only seven years out of medical school, Walter Bauer, legendary MGH chief of medicine, offered Kurt the opportunity to head either the Endocrine Unit or Gastrointestinal Unit. Although endocrinology aligned more closely with his biochemistry background, Kurt felt he could have a larger impact on the uncharted scientific frontier of gastroenterology. Thus, Kurt dismissed the straightforward route to stretch beyond his comfort zone, and the rest is history. He brought biochemistry to the study of gastroenterology, becoming a principal architect of its transformation from an observational to a science-based discipline.

As would remain his recurring signature, Kurt embraced challenge and reinvention. In a 1970 sabbatical, he studied membrane transport in normal and malignant cells, changing the trajectory of his research for the next 15 years. During a second sabbatical, in 1984, he tacked in a new direction, applying the tools of molecular biology to the study of cancer.

Shortly thereafter, in 1987, after three decades as head of the MGH GI Unit, Kurt became director of the new MGH Cancer Center, thriving as "a changemaker who understood what was needed to achieve a vision and then navigate the course, no matter how complex or how many obstacles." With visionary leadership, Kurt "built the Center from the ground up into one of the premier cancer research institutes in the nation." Once again, he listened to the siren song of challenge and change. Inventing and reinventing himself, intellectually restless, he sought innovative approaches to unsolved clinical and research problems. With imagination and half a century of continuous NIH funding, Kurt deployed cutting-edge, basic-science tools to illuminate derangements underlying the gamut of GI and malignant disorders—prodigious scientific achievements chronicled in more than 400 publications. Among these, he will be remembered for elucidating intestinal fat and sugar absorption, other genetic disorders, bilirubin

metabolic pathways, increased sugar uptake by cancer cells, and how cancer cell surface changes evade immunologic containment, timely now for checkpoint inhibitor therapy.

His impact was amplified by the remarkable record of the 115 GI and 35 cancer-center physicians and scientists he trained. Of his GI fellows, two thirds became full-time academic faculty, a third became GI division chiefs, and an extraordinary number became full professors, department heads, center or lab directors, medical school deans, university and academic medical center presidents, journal editors, and leading clinicians.

Among his academic honors and recognition, Kurt was promoted to HMS professor at age 41, held the HMS Mallinckrodt Professorship of Medicine, served as Chairman of the HMS Executive Committee of the Departments of Medicine for 30 years and as an editor for three decades and nine editions of Harrison's Principles of Internal Medicine. His name adorns two HMS endowed chairs and an MGH conference room and auditorium. He was president of the leading GI and hepatology societies as well as the Association of American Physicians. From the GI society and AAP, he received their highest honors, the Friedenwald Medal and the Kober Medal, respectively. He was a fellow of the American Academy of Arts and Sciences, Vice President of the American Society for Clinical Investigation, and a member of the National Academy of Sciences and the Institute of Medicine.

Kurt was also a loving, devoted husband and father. His son, Eric, "marveled at the near perfect symmetry between the qualities he displayed as a physician and scientist and those he displayed as a parent and grandparent." Actually, Kurt had two families, one personal and one professional, and he skimmed on neither. His "roles as physician and family man were inseparably intertwined. His keen interest and dedication as a mentor, his intensive listening, his gentle advising, and his compassionate care—were as evident at home as they were at work."

To those of us in the GI Unit, Kurt was a father figure and role model, with high standards and expectations not only for clinical and scientific excellence but also for character and integrity. Rhoda and Kurt treated us all as family and helped us navigate the celebrations and challenges of our personal lives. While Kurt's academic legacy is extraordinary, so, too, is his legacy of devoted children (Kate, Jody, Eric, and the late Lisa), their spouses, eight grandchildren, and two great granddaughters. He lives on in their hearts, countenances, accomplishments, and dignified bearing!

In his interactions with his adoring patients, Kurt was the epitome of compassion and empathy. As wrapped up as we were in the laboratory, we learned early, from Kurt's example, that we dropped everything when our patients needed us. As much as we revere him for his intellect, stature, pursuit of excellence, and accomplishments, we remember Kurt for inspiring us with his decency, humanity, humor, guidance, support, positivity, humility, and kindness.

Kurt shared his "substantial experience and eminent good sense" with anyone who wished to draw on his "wisdom and enormous good judgement"—an unheralded generosity of time and spirit not captured in his CV. Kurt maintained a keen ability to identify young people, invest in them, and rejoice in their success. That is Kurt's immortality—beyond his accomplishments and honors—the creation of a like spirit that endures in his disciples.

In the MGH death announcement, Kurt was remembered for his kindness, compassion, respect for all those around him, his enthusiasm, his spirit, and that sparkle in his eye."

As Kurt concluded in his memoir, "At the end, I hope it can be said that I succeeded, to some extent, in justifying my survival and existence." Succeed he did! He lived a life as rich in what it represented as in what he accomplished.

Respectfully submitted,

*Jules L. Dienstag, Chairperson
Eugene Braunwald, M.D.
Daniel K. Podolsky, M.D.
Lawrence S. Friedman, M.D.
Eric M. Isselbacher, M.D., M.Sc.*

Daniel A. Haber, M.D., Ph.D.
Anil K. Rustgi, M.D.
Ramnik Xavier, M.D.

Dean Daley requested that the memorial minute be inscribed in the permanent records of the Faculty of Medicine.

Dean Daley then turned to the introduction of the newly appointed professors. Dean Daley called upon Anne E. Becker, M.D., Ph.D., Dean for Clinical and Academic Affairs, to introduce those recently promoted, or appointed, to the rank of Professor.

Before introducing Harvard Medical School's newly appointed professors, Dean Becker shared that she wished we were able to meet in person to applaud each of the professors one by one, as is tradition at this meeting. With the meeting held virtual due to the COVID-19 pandemic, a brief virtual introduction was offered instead, but with no less pride, admiration, and gratitude for the faculty's remarkable achievements and contributions.

Dean Becker then introduced Harvard Medical School's newly appointed Professors.

Maryam Asgari, Professor of Dermatology, Massachusetts General Hospital
Cenk Ayata, Professor of Neurology, Massachusetts General Hospital
Tracy Balboni, Professor of Radiation Oncology, Brigham and Women's Hospital
Shehzad Basaria, Professor of Medicine, Brigham and Women's Hospital
Ron Blankstein, Professor of Medicine, Brigham and Women's Hospital
Kathy Burns, Professor of Pathology, Dana-Farber Cancer Institute
Daniel Chung, Professor of Medicine, Massachusetts General Hospital
Joseph Cravero, Professor of Anaesthesia, Boston Children's Hospital
Brad Dickerson, Professor of Neurology, Massachusetts General Hospital
Christopher DiGiovanni, Professor of Orthopedic Surgery, Massachusetts General Hospital
David Friedman, Professor of Ophthalmology, Massachusetts Eye and Ear
Ingrid Holm, Professor of Pediatrics, Boston Children's Hospital
Louise Ivers, Professor of Medicine, Massachusetts General Hospital
Hadine Joffe, Professor of Psychiatry, Brigham and Women's Hospital
Kenneth Kaye, Professor of Medicine, Brigham and Women's Hospital
John Keaney, Professor of Medicine, Brigham and Women's Hospital
Andrew Kruse, Professor of Biological Chemistry and Molecular Pharmacology, Harvard Medical School
Shyamala Maheswaran, Professor of Surgery, Massachusetts General Hospital
Carole Mitnick, Professor of Global Health and Social Medicine, Harvard Medical School
Larissa Nekhlyudov, Professor of Medicine, Brigham and Women's Hospital
Bonnie Padwa, Professor of Oral and Maxillofacial Surgery, Boston Children's Hospital
Samir Parikh, Professor of Medicine, Beth Israel Deaconess Medical Center
Greg Petsko, Professor of Neurology, Brigham and Women's Hospital
Christine Ritchie, Professor of Medicine, Massachusetts General Hospital
Scott Rodig, Professor of Pathology, Brigham and Women's Hospital
Jean Schaffer, Professor of Medicine, Joslin Diabetes Center

Helen Shih, Professor of Radiation Oncology, Massachusetts General Hospital
Gyongyi Szabo, Professor of Medicine, Beth Israel Deaconess Medical Center
Yohannes Tesfaigzi, Professor of Medicine, Brigham and Women's Hospital
Christopher Thompson, Professor of Medicine, Brigham and Women's Hospital
Yu-Hua Tseng, Professor of Medicine, Joslin Diabetes Center
Nadine Tung, Professor of Medicine, Beth Israel Deaconess Medical Center

Dean Daley then introduced the Barbara J. McNeil Faculty Award for Exceptional Institutional Excellence. The McNeil Award was established to recognize faculty for exceptional institutional engagement and service in supporting the missions of Harvard Medical School and Harvard School of Dental Medicine. The award was named in honor of Dr. Barbara J. McNeil, Ridley Watts Professor of Health Care Policy and Professor of Radiology.

Dean Daley introduced Joan Y. Reede, MD, MS, MPH, MBA, Dean for Diversity and Community Partnership, to present this year's award recipients.

Dean Reede announced the first award recipient is Dr. Maryam Asgari, Professor of Dermatology at Massachusetts General Hospital. Dean Reede invited Dr. Asgari to give brief remarks.

Dr. Asgari had her father, Dr. Manouchehr Asgari, a former Dean of an academic medical center, present her with the 2020 Barbara McNeil Award for Exceptional Institutional Service. Dr. Asgari expressed her gratitude for receiving the award, with special thanks to her family, who joined her on Zoom.

Dean Reede announced that the second award recipient is Dr. John Flanagan, Professor of Cell Biology at Harvard Medical School. Dean Reede invited him to give brief remarks. Dr. Flanagan acknowledged that developing the Advanced Integrated Science Courses (AISCs) was a team effort and thanked Deans Hundert, Daley and Flier, his department chair, Dr. Wade Harper, and core members of the AISC leadership team, Eli Miloslavsky and Henrike Besche.

Next, Dean Reede announced the final award recipient, Dr. Frederick Lovejoy, William Berenberg Distinguished Professor of Pediatrics at Boston Children's Hospital. Dr. Lovejoy received the Lifetime Achievement Award. Dr. Lovejoy thanked his wife, Jill, and Drs. Janeway, Avery, Nathan, Braunwald, Potts and Deans Federman, Adelstein, Shore, Clark, Connolly, Dienstag, Flier and Daley.

Next, Dean Daley introduced the faculty co-leaders of the Massachusetts Consortium on Pathogen Readiness (MassCPR). Dr. Arlene Sharpe, the George Fabyan Professor of Comparative Pathology, Chair of the Department of Immunology at Harvard Medical School, and Dr. Bruce Walker, the Phillip T. and Susan M. Ragon Professor of Medicine at MGH, Professor of Medicine at Harvard Medical School.

Dr. Sharpe discussed the history and activities of the MassCPR, a Harvard-based consortium of researchers and clinicians representing 17 institutions across the entire state that is dedicated to turning the tide against COVID-19.

She shared that at the end of January 2020, Chairman Hui of the China Evergrande Group reached out to Harvard's President Larry Bacow with a request for assistance. Evergrande is a real estate holding company with long ties to Harvard including through the Evergrande Center for Immunologic Diseases, which Dr. Sharpe directs along with Dr. Vijay Kuchroo. Four days later, Dean Daley, Bruce Walker, and Arlene Sharpe joined a video call with Dr. Zhong Nanshan, a hero in China for his role in managing the SARS outbreak there in 2003. At that time, Dr. Zhong and his colleagues were asking for assistance as they wrestled with the challenges of COVID-19 within China. Dean Daley, Dr. Walker, Dr. Sharpe, and Dr. David Golan quickly mobilized researchers and clinicians across the entire community to gather on the HMS campus on March 2, 2020, which is believed to be the same day that the first case was announced in Massachusetts. This was the birth of the MassCPR.

Dr. Sharpe described the centerpiece of MassCPR, the six major working groups, directed by faculty co-leaders and broken down by thematic areas of:

- Therapeutics
- Clinical Management and Outcomes Research
- Epidemiology
- Vaccine development
- Diagnostics
- Pathogenesis

The working groups convene virtually on a weekly or bi-weekly basis in order to share best practices, their latest data, and to problem-solve together.

Dr. Sharpe highlight some successes coming out of MassCPR

- MassCPR contributed funding, early on, to the PCR-based diagnostic testing. This operation, led by Deb Hung at the Broad, is now responsible for 100,000 COVID tests per day, roughly 10% of the testing capacity in the US.
- MassCPR contributed funding to the development of rapid point-of-care diagnostics including the CRISPR-based approach from Feng Zhang's lab at MIT
- MassCPR has supported COVID-19 biobanks at multiple locations, including at the Ragon/MGH via Xu Yu, BWH with Jonathan Li, Boston Medical Center under Karen Jacobson, Tufts Medical Center under Michael Jordan, and BIDMC under Dan Barouch.
- The MassCPR Sample Access Accelerator Committee, chaired by Drs. David Walt and Howard Heller, has developed a fair and rapid approach to evaluating requests for precious clinical specimens and then distributing them to researchers
- MassCPR faculty have contributed enormously to the development of national clinical guidelines for the treatment of COVID-19 patients, including MassCPR

Clinical Management Working Group Co-Leads Drs. Raj Gandhi of MGH and Lindsey Baden of the Brigham.

- MassCPR member have led the charge in the development of vaccines including Dr. Dan Barouch at BIDMC, whose single-shot, temperature-stable, adenoviral-based vaccine is nearing the completion of its Phase III clinical trial and will be manufactured and distributed by Janssen/J&J. That vaccine is joined by the mRNA-based platform from Massachusetts-based Moderna. Andrea Carfi from Moderna is Co-Lead of the Vaccines Working Group along with Dan Barouch. Clinical Management Co-Lead Lindsey Baden is one of the national co-principal investigators for the Moderna trial

MassCPR has engaged colleagues around the world, including Dr. Zhong in China and Fabio Ciceri in Milano. Fabio is a heme/onc transplant who has played an important role in managing the COVID crisis in Northern Italy and who has joined MassCPR for multiple online seminars and public briefings. While initially, MassCPR was in the position of sharing expertise, it soon was in the position of receiving expertise from Dr. Ciceri and Dr. Zhong as they gained control over the outbreak in Italy and China respectively and the pandemic began to spread in the United States.

While academics can effectively communicate with one another, however, it was quickly realized that the COVID-related information available to the public was neither authoritative or well-researched. To fill this void, MassCPR offers Public Briefings and scientific symposia. To date, MassCPR has hosted more than a dozen briefings on topics ranging from COVID diagnostics and how they work, to health care disparities in COVID, and vaccines reaching people from 69 countries who have signed on to these virtual talks. Speakers have ranged from those within the HMS community along with special guests including Tony Fauci, director of the U.S. National Institute of Allergy and Infectious Diseases (NIAID), and former FDA Commissioner and HMS alumna Peggy Hamburg.

Next, Dean Daley provided a brief overview of the state of the school.

RESEARCH

Over the past nine months, HMS not only successfully ramped down its research, but also ramped it back up again when conditions allowed. This required no small amount of planning, coordination and flexibility. The school enacted safety protocols in concert with the University for those who needed to access campus including COVID-19 training, on-campus testing, travel restrictions, use of the Crimson Clear app, and contact tracing and quarantining procedures.

As of December 2020, COVID-19 cases are once again surging and public health guidelines continue to limit capacity of physical spaces, which HMS is prioritizing for required, in-person activities going forward, such as wet lab research and some clinical education. For the spring '21 semester, the MD, DMD and dental advanced graduate education programs will follow a hybrid model, with didactic material taught and learned via Zoom. Physical exams, clinical skills, hands-on lab exercises and research, and certain other course content

will be conducted in person but on a scaled-down level compared to normal years. All master's and PhD classes will continue to be offered online only with the exception of lab, clinical research and other integral components that must take place in person. External Ed programs, courses, workshops and events held at HMS will continue remotely. Other HMS faculty, staff and postdocs who have been working productively from home will continue to do so through June 2021.

Next, Dean Daley acknowledge one of the school's own alumnae, Jennifer Doudna, was a co-recipient of the Nobel Prize in Chemistry for her pioneering work — along with Emmanuelle Charpentier — in elucidating the CRISPR/Cas9 molecular mechanism. Dr. Doudna received her PhD in biological chemistry and molecular pharmacology from the Harvard Biological and Biomedical Sciences program, working in the laboratory of Professor Jack Szostak, himself a Nobel laureate.

Dean Daley congratulated the nine HMS faculty members elected to the National Academy of Medicine, six elected to the American Academy of Arts and Sciences, and five elected to the National Academy of Sciences as well as the seven HMS faculty who received NIH Director's Awards.

Dean Daley shared that the new Therapeutics Initiative has been a key contributor in the HMS COVID-19 response. Led by Mark Namchuk, it is a sweeping, school-wide endeavor aimed at advancing fundamental scientific discovery and helping to translate promising discoveries into new medicines. It also involves devising new educational paradigms for therapeutics education to train the next generation of leaders in therapeutics research in industry and academia.

Within the Therapeutics, Initiative, the new Ideation Hub, or iHub, launched. Along with the new Translator program, they together support the efforts of HMS researchers across the entire breadth of the translational process- from the generation of an idea to actually moving new therapeutics to the clinic.

HMS also launched the Foundry to further develop and support the research infrastructure and invested \$11 million to enhance core facilities and bring additional innovative technology to the Quad. The Innovation Awards program granted more than \$18 million dollars to 76 projects involving 146 investigators across the HMS community, catalyzing collaborations in fundamental, curiosity-driven research. More than a quarter of the projects involve co-investigators at HMS affiliated hospitals and research institutions.

In July 2020, Robert Gentleman agreed to become the founding director of the new Center for Computational Biomedicine. An accomplished statistician and computational scientist with extensive experience in academia and industry. He most recently served as vice president of computational biology at the genetic testing company 23andMe.

EDUCATION

Throughout the past nine months, the HMS teaching faculty have done heroic work in the face of constantly shifting targets and new daily demands. In the spring, they moved swiftly to develop innovative, online courses that have allowed our students to continue learning and meeting their educational requirements remotely. For example, faculty quickly converted most of the OSCE experience to an online, virtual format. This fall, first-year medical and dental students embarked on their studies remotely, from all over the country and places around the globe like London, Seoul, Paris and Taipei. They began their medical educations at HMS without missing a beat, thanks to the creativity and dedication of faculty and staff.

SOCIAL JUSTICE

The pandemic has intensified the structural deficiencies in the U.S. health care system, causing the poor, the elderly, and people of color to bear the brunt of this devastating crisis. HMS can make a difference, and the dean is greatly encouraged by the progress made this year.

The majority of both the medical and dental students in the entering class (class of 2024) were female. In the medical school, 21 percent of those admitted were from groups underrepresented in medicine and 14 percent self-reported as LGBTQ. In the HSDM entering class, 36 percent were from groups underrepresented in medicine. HMS is working to address overall structural racism in the health care system, has developing an antiracism longitudinal curriculum and launched a Program in Medical Education Task Force to Address Racism which hopes to issue its recommendations in the spring of 2021.

In the summer of 2020, the Dean accepted the recommendation of the HMS Faculty Council Subcommittee on Artwork and Cultural Representations task force, whose members include faculty, students and staff, to rename the Oliver Wendell Holmes academic society in honor of Dr. William Augustus Hinton, the University's first full black professor and an internationally recognized infectious disease expert. The final report from the Task Force on Diversity and Inclusion along with the school's Better Together plan articulates the vision for increased representation of underrepresented, historically marginalized individuals at all levels, but particularly among senior faculty, department administrators, and leaders.

Dean Daley expressed his deepest appreciation to all of the HMS faculty and adjourned the meeting at approximately 5:00pm.