



# 2021-2022 END-OF-YEAR REPORT



to the Harvard T.H. Chan  
School of Public Health  
community



## Dear members of the Harvard Chan School community,



This has been a year of challenge, opportunity, and growth.

Our faculty have taken leadership roles in addressing three towering threats to global public health: the ongoing COVID pandemic, the accelerating damages created by climate change, and persistent and pernicious structural racism. Through their research and publications, they have both sounded alarms and surfaced solutions. Through their op-eds, media appearances, and social media channels, they have provided authoritative and accessible information to the public. And through their work with lawmakers at every level of government, they have shaped public policy in significant ways.

This is how we build a healthier world.

And it's not the work of faculty alone. Our students, our researchers, our staff, our entire community is committed to advancing health and well-being for people everywhere.

For all our strengths, we also realize that we cannot tackle the world's greatest challenges on our own. So, in this past year, we have stepped up our global collaborations. We launched a collaboration in clinical research with Zhejiang University School of Medicine in Hangzhou, China, including educational exchanges for physicians and students. We committed to working with the Vanke School of Public Health in Beijing on collaborative educational and research initiatives. We accepted the first cohort of African students into our Global Nursing Leadership Program. And we assumed the global secretariat of the Reform for Resilience Commission, which brings together the private, public, and academic sectors to develop tools and metrics that will help us all build healthier, more resilient societies.

In the following pages, you'll see our commitment to building a healthier world come to life in the activities and accomplishments of our dynamic community. This report can't begin to cover the full breadth and depth of those efforts. Still, the snapshot it offers gives a clear sense of our vision, our values, and our progress.

It is my honor to serve as Dean for such an inspiring and brilliant community. I'm proud to look back on the successes of 2021-2022. And I'm excited for the progress to come.

A handwritten signature in cursive script that reads "Michelle A. Williams".

**Michelle A. Williams, ScD**

Dean of the Faculty, Harvard T.H. Chan School of Public Health  
Angelopoulos Professor in Public Health and International Development,  
Harvard T.H. Chan School of Public Health and Harvard Kennedy School

**CONTENTS**

---

01.

**COMMUNITY**

02.

**ACADEMICS**

03.

**PHILANTHROPY AND  
FINANCIAL HIGHLIGHTS**



COMMUNITY

# Office of Student Services

The Office for Student Services, which includes the Offices of Admissions, Financial Aid, Registrar, Student Affairs, and Career and Professional Development began the implementation of a strategic plan in the 2021-2022 academic year focused on supporting students' success through providing excellent student services. We are currently focusing on improving communication and customer service, student wellness, and remaining flexible to the changing needs of our diverse student body.

The following are some highlights of the support and programming the Office of Student Affairs provided students this academic year.

## ORIENTATION

The Office for Student Affairs and our many partner offices were thrilled to welcome students to campus at Fall 2021 Orientation. Orientation offered a hybrid experience of on-campus and remote programming.

## SHATTUCK INTERNATIONAL HOUSE

Shattuck International House reopened its doors in August 2021 after an extensive renovation and refresh.

## STUDENT SUPPORT & WELLNESS

There continues to be an increased effort to support students' health and wellness. The Counseling and Mental Health Services (CAMHS) launched their CAMHS Cares Line, a 24/7 support line for Harvard students who have mental health concerns. The Office for Student Affairs strategically developed

both virtual and in-person wellness programming in collaboration with CAMHS and the Center for Wellness and Health Promotion.

## HARVARD CHAN SPRING FLING

The annual formal was held in May after an absence of two years. Some 350 students attended the event, held in Cambridge.

## STUDENT ORGANIZATIONS

This year, Harvard Chan's 33 registered student organizations held close to 100 events. Highlights included multiple town halls to gather student feedback and answer questions; International Night, an annual event showcasing students' talents and culture; and a weekly Meet and Mingle, bringing together faculty and students.

LEFT: Students peruse items at a community freecycle event.  
BELOW: Limbo competition at this year's Spring Fling, May 2022



# Faculty and research appointments and promotions

## FACULTY

### Appointments and Promotions

This past academic year, we were delighted to welcome the following new primary faculty members to the School:

- **Lilian Cheung**, SD '78, Lecturer on Nutrition, Department of Nutrition
- **Christy Denckla**, Assistant Professor of Social and Behavioral Sciences, Department of Social and Behavioral Sciences
- **A. Heather Eliassen**, SM '01, SD '04, Professor of Nutrition and Epidemiology, Department of Nutrition
- **Stephanie Ferguson**, Professor of the Practice of Health Policy and Management, Department of Health Policy and Management
- **Alecia McGregor**, PhD '14, Assistant Professor of Health Policy and Politics, Department of Health Policy and Management
- **Adrianna McIntyre**, PhD '21, Assistant Professor of Health Policy and Politics, Department of Health Policy and Management

Alecia McGregor



In addition, we celebrated these well-deserved promotions:

- **Jorge Chavarro**, SM '03, SD '06, Professor of Nutrition and Epidemiology, Department of Nutrition
- **Sheila Isanaka**, SD '11, Associate Professor of Nutrition, Department of Nutrition
- **Tamarra James-Todd**, Mark and Catherine Winkler Associate Professor of Environmental Reproductive Epidemiology, Department of Environmental Health
- **Nicolas Menzies**, Associate Professor of Global Health, Department of Global Health and Population
- **Daniel Neafsey**, PhD '04, Associate Professor of Immunology and Infectious Diseases, Department of Immunology and Infectious Diseases
- **Vaughan Rees**, Senior Lecturer on Social and Behavioral Sciences, Department of Social and Behavioral Sciences
- **Christopher Sudfeld**, SD '13, Associate Professor of Global Health and Nutrition, Department of Global Health and Population
- **Stéphane Verguet**, Associate Professor of Global Health, Department of Global Health and Population

Nicolas Menzies



## RESEARCH SCIENTISTS Appointments and Promotions

This past academic year, we were delighted to welcome the following research scientists to the School:

- **Shafika Abrahams-Gessel**, Research Scientist, Center for Health Decision Science
- **Catherine Arsenault**, Research Scientist, Department of Global Health and Population
- **Kristin Baltusaitis**, Research Scientist, Center for Biostatistics in AIDS Research
- **Terence Cheng**, Research Scientist, Department of Global Health and Population
- **Patricia Geli**, Research Scientist, Department of Global Health and Population
- **Jacob Tennesen**, Research Scientist, Department of Immunology and Infectious Diseases
- **Mi-Sun Lee**, Research Scientist, Department of Environmental Health
- **Zilin Li, Research Scientist**, Department of Biostatistics
- **Timothy Lomas**, Research Scientist, Department of Epidemiology
- **Yuan Ma, Research Scientist**, Department of Epidemiology
- **Megan Marx Delaney**, Research Scientist, Department of Health Policy and Management
- **Aditya Paul**, Research Scientist, Department of Nutrition
- **Susan Peters**, Research Scientist, Department of Social and Behavioral Sciences
- **Minttu Roenn**, Research Scientist, Department of Global Health and Population
- **Kristen Skillman**, Research Scientist, Department of Immunology and Infectious Diseases
- **Konrad Stopsack**, Research Scientist, Department of Epidemiology
- **Victoria Wang**, Senior Research Scientist, Department of Biostatistics
- **Isabelle Weir**, Research Scientist, Department of Biostatistics
- **Amber Weiseth**, Research Scientist, Department of Health Policy and Management

In addition, we celebrated these well-deserved promotions:

- **Kjetil Bjørnevik**, Senior Research Scientist, Department of Nutrition
- **Austin Frakt**, Principal Research Scientist, Department of Health Policy and Management
- **Marta Guasch-Ferre**, Senior Research Scientist, Department of Nutrition
- **Natalia Linos**, SM '07, SD '12, Senior Research Scientist, Department of Social and Behavioral Sciences
- **Grace Montepiedra**, Senior Research Scientist, Center for Biostatistics in AIDS Research
- **Carlee Moser**, Senior Research Scientist, Department of Biostatistics
- **Elena Savoia**, MPH '04, Principal Research Scientist, Department of Biostatistics

# Human Resources

The second year of the pandemic proved to be as challenging as the first and the Office of Human Resources continued to shift focus to address changing employee needs.

## MENTAL HEALTH AND BURNOUT

Programming this year emphasized alleviating employee anxiety, stress, and burnout. Offerings included: 10-week Intuitive Eating Program; Mental Health First Aid for Managers; Managing in the Moment for Managers: Supporting Employees' Emotional Wellbeing; Navigating Emotional Wellbeing for Employees. A Virtual Health Fair held in February offered programs ranging from yoga to a benefits overview.

Communications to managers focused on attending to employee stress, prioritizing mission critical work, minimizing off-hour work, and encouraging vacation use.

## FLEXIBLE WORK AND RETURN TO CAMPUS

During the pandemic, many employees gained more flexibility in where, when, and how they do their work. To accommodate flexibility, there were a number of educational sessions for managers and staff to increase awareness and comfort levels with flexible work options. Communications to managers focused on providing tools and resources for reviewing flexwork and encouraging flexible and creative work options.

In partnership with Operations, three of the busiest lactation rooms were renovated. Each room was enhanced with new furniture, paint, decor, and appliances to create a more welcoming space for new parents returning to campus.

## INCLUSIVE RECRUITMENT SERIES

Focusing on attracting and retaining top talent, managers were offered the Inclusive Recruitment Series in a closed-caption, on-demand recording format. Topics included Job Descriptions & Advertising, Resume Review & Interviewing, and Onboarding

Sebastian's Café executive chef Arlene Richburg and manager Paul Doherty show off a Daily Dollar Deal, the healthy and inexpensive meals offered at the cafe for breakfast and lunch.

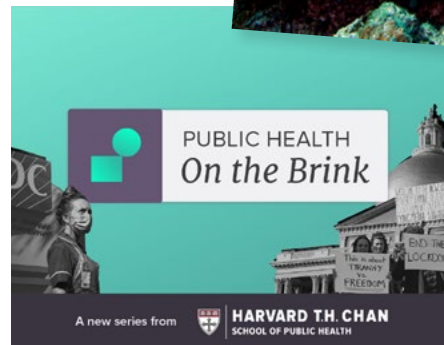
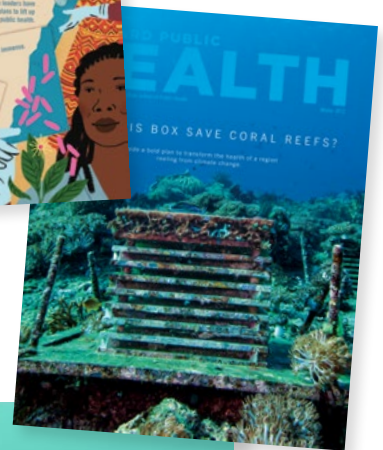




## Office of Communications

The Office of Communications expanded this year and launched several new initiatives. The team continued to meet the demands of a global media eager for authoritative information about the COVID pandemic, connecting media with researchers, hosting press calls, writing press releases, and providing media training for faculty in the spotlight. We also continued to produce multiple news stories each week for the website, highlighting faculty research, student stories, and new programs across the School. And we supported Dean Williams in her internal and external communications. In addition, new initiatives included:

- Transforming *Harvard Public Health* magazine from an alumni-focused publication to a platform for global conversations about public health, with a new website, advisory board, and audience development strategy
- Bringing event production into the Office of Communications, unifying premiere events under the Harvard Chan Studio brand, and launching a high-profile new series, *Public Health on the Brink*
- Expanding the School's color palette to enable more versatile visual communication
- Expanding our use of video and narrative storytelling on social media
- Launching a Web Governance Committee with the IT Department to draft policies that will protect the School's brand, ensure accessibility, allocate resources effectively, and lay a strong foundation for a new School website
- Building closer ties with the Office of External Relations to develop a strong message platform that will resonate with donors as well as other stakeholders



## Dean's Office

This is a crucial moment for public health in the United States and around the world, and the Harvard Chan School has an obligation both to serve and to lead. The Dean's Office seeks to shape and support that work, driving with singular focus toward the goal of building a healthier world for all.

To that end, we have advanced several priority initiatives this academic year. Among them:

- Breaking down academic and institutional silos
- Integrating equity, diversity, and inclusion work into every facet of School life
- Strengthening support for our junior faculty
- Deepening our experiential learning opportunities for students
- Collaborating with colleagues around the globe to tackle the world's biggest public health challenges

We have worked to break down barriers and encourage faculty to team up across departments, disciplines, and institutions to work on global health imperatives, from adapting to the warming climate to advancing health equity in the face of structural racism. We are proud to have increased support for junior faculty, expanded pedagogical training, and supported new efforts to give students real-world learning opportunities.

Through our outstanding Office of Diversity, Inclusion, and Belonging, we have brought important training and educational opportunities to our entire community, again working to cut through traditional silos. Among its many well-received programs, ODI has trained faculty to be aware of unconscious bias in reviews of student admissions applications and teamed up with our Office of Education to lead a workshop in establishing an inclusive classroom environment.



Dean Michelle Williams (Zoom inset) and Margaret Chan, dean of Tsinghua Vanke School, on December 1, 2021

On the global front, we launched educational and research initiatives with Tsinghua Vanke School of Public Health in Beijing and Zhejiang University School of Medicine in Hangzhou, China. And we have accepted the first cohort of African nursing and midwifery leaders into a new academic nursing leadership program, which will begin in September with intensive coursework in Kenya. We are also shaping global public health policy through our leadership of the Secretariat of the Reform for Resilience Commission. In addition, we are working closely with the World Economic Forum to gather stakeholders across sectors to advance health equity and improve the lives and health of girls and women.

The Dean's Office is committed to supporting our outstanding community, enabling our first-rate scholarship, and providing the infrastructure our team needs to make a difference in the world.

RIGHT: Students participated in an outdoor yoga session on the Harvard Medical School quad in October 2021.



## 2021 Harvard Chan School Alumni Award winners



**ALUMNI AWARD OF MERIT**  
Paula Johnson, AB '80, MD '84,  
MPH '85



**ALUMNI AWARD OF MERIT**  
Lois Travis, SM '82, SD '94



**ALUMNI AWARD OF MERIT**  
Stefan Willich, MPH '90

### EMERGING PUBLIC HEALTH PROFESSIONAL AWARD

Hilary Marston, MPH '13



### LEADERSHIP AWARD IN PUBLIC HEALTH PRACTICE

Kezevino Aram, MPH '00



### PUBLIC HEALTH INNOVATOR AWARD

Jocelyn Lehrer, SM '01, SD '04



## Alumni Affairs

### ALUMNI & VOLUNTEER ENGAGEMENT

The Harvard Chan School is grateful for the dedicated leadership of our nearly 300 volunteers who serve as Council officers, School ambassadors, advocates, advisors, and donors across 15 committees and groups. These volunteers strengthen our community by creating and maintaining meaningful connections with alumni, students, and friends.

Alumni Week 2021, “Public Health through the Life Course,” held in late September was virtual, with over 230 alumni from 27 countries participating. The diverse array of online activities included faculty panels, alumni lightning talks, and the annual recognition of the recipients of the Harvard Chan School Alumni Association Awards.

In April, Harvard Chan School held our second annual all-Volunteer Leadership Summit with a week of exclusive virtual programming. The Summit included presentations by faculty and students focused on a variety of timely public health issues ranging from the impact of the pandemic on mental health to the benefits and risks of aquatic food consumption. The event offered volunteer committee members the opportunity to learn, strengthen their connections to each other, and be celebrated for their myriad impactful roles.

The School's third annual Giving Day, held on March 2, 2022, brought in 293 gifts and raised a record \$130,000 for student financial aid and departmental research. The 40% increase in funding over last year included successfully unlocking the Next Generation Challenge, which contributed \$75,000 in financial aid. A successful social media campaign on the School's flagship channels enjoyed robust community participation with a 50% increase in engagement over last year's Giving Day.

# Department of Information Technology

## TEACHING AND LEARNING

To accommodate flexibility in the classrooms, Zoom carts were built and deployed in all locations. Additionally, a record number of courses were streamed and/or recorded using our Panopto courses capture system and delivered via Canvas. Zoom usage among the entire School community averaged more than 16,000 sessions each month and 15.8 million participant minutes over the past year.

## REMOTE WORK AND CUSTOMER SERVICE

More than 70 hoteling stations were established at 90 Smith, 401 Park, and other locations to provide technology for hybrid work pilots. IT provided flexible support options on campus, via phone, and other technologies. Despite the additional logistical challenges of COVID, more than 1,200 tickets were closed on average each month with a customer satisfaction rating of 4.9 of 5. New customer service methods were piloted, including the addition of chat-based support and utilization of IBM's Watson AI to improve workflows.

## INFRASTRUCTURE

With continued low occupancy on campus, many infrastructure improvements were made, including upgrades to the wireless network, technology at Shattuck House, and infrastructure to make many conference rooms "Zoom-ready."

## OTHER SERVICES

Partnering with the Office of Communications, IT supported an average of six high-profile events per month that were streamed to thousands of viewers. A new email marketing and analytics software platform called Emma began rolling out to offices and nearly 10 million emails were sent. IT partnered with Executive and Continuing Professional Education to upgrade ECPE's business system to the latest Salesforce technology. Finally, IT worked with faculty and researchers to provide consultation and security reviews for 45 data-use agreements each month in FY22.

Students in a classroom tune into a panel discussion on Zoom.



## Office of Diversity, Inclusion and Belonging

In Fall 2022, we introduced our *Foundations for Sustainable Progress & Transformation: An Inclusive Excellence Strategic Plan for Harvard Chan School*, highlighting three priority areas: *Leadership & Institutional Systems*, *Learning Culture at Harvard Chan School*, and *Diversity of Our People & Their Success*.

Key steps were taken to integrate equity, diversity, inclusion, and belonging across the School via new hires in ODI and partnering offices; increased communications and transparent reporting; regular engagement with School leadership and departmental Equity, Diversity, Inclusion and Belonging committees; and collaborations with diversity offices across Harvard.

This year we expanded educational activities to include a new course on *Unconscious Bias for Student Application Review* and *Cross Cultural Engagement Workshops for Senior Leaders*. Additional activities included seminars with URM faculty, a Lunch 'n' Learn Program for staff of color and allies, and monthly student affinity programs for Black,

Indigenous, or People of Color (BIPOC), LGBTQ+, and First-Generation students.

In efforts to engage undergraduate students from communities under-represented in the biomedical sciences, we re-instituted the six-week Fostering Advancement & Careers through Enrichment Training in Science (FACETS) program in June 2022. ODI also worked to increase access into FACETS for students from Historically Black Colleges and Universities and Hispanic Serving Institutions. Similarly, our Donald Hopkins Predoctoral Scholars Program, and our Yerby Fellowship Program provided cohort experiences geared toward increasing representation and success of under-represented and communities of color in public health, for students and postdocs respectively.

Lastly, our eight-week Leaders in Health program brought together a cohort of community leaders from multiple local organizations to explore the fundamentals of community-based participatory research, program planning, and evaluation practices.



LEFT: Equity, Diversity, and Inclusion Fellows socialize at Lucky Strike Fenway. RIGHT: Students perform a traditional dance at I-Night in April.



# Office of Research Strategy and Development

## CONTINUED INVESTMENTS IN COVID WORK

In 2021, ORSD continued to help the School's faculty respond to public health needs with timely research relevant to the current phase of the pandemic. ORSD launched the COVID-19 Award Project Supplement (CAPS) and funded three projects to enable faculty already engaged in COVID-19-related research to expand and scale their work. In addition, the Dean's Emergency Response Fund funded a critically important and time-sensitive project to implement efforts to achieve COVID-19 pediatric vaccine equity.

## DEAN'S FUND FOR SCIENTIFIC ADVANCEMENT

The Dean's Fund for Scientific Advancement (DFSA) continues to enable novel research and target investment to advance the interdisciplinary strengths of the School. In 2021, nine awards totaling over \$565,000 were made to support research within the School's five frontier areas (Reimagining Aging; Overcoming Violence; Confronting Climate Change; Cultivating Well-being and Nutrition; Conquering Epidemics).

## RESEARCH DEVELOPMENT AND STRATEGIC INITIATIVES

ORSD worked to secure and expand extramural funding, facilitating research proposals totaling over \$40 million in requested funds to support activities focused on health equity, pandemic response and preparedness, climate change, and workforce diversity, among others. In addition, ORSD recently launched the Harvard Chan School Diversity Supplement Matching Initiative, a program to support and expand the use of NIH-funded supplements to promote diversity. Through Communications Coaching, ORSD has been working with individuals and groups of faculty to develop their skills in communicating the importance and impact of their work to diverse audiences. ORSD also partnered with IT, the Office of Faculty Affairs, and the Office of Communications to develop the Global Research map to provide the Harvard Chan community with an updated resource for identifying geographic targets of faculty research.

## Research Strategy Optimization (RSO)

Last year, the School launched a Research Strategy Optimization Process, designed to optimize our strategy and fine-tune our short-term strategic posture, focus, and investments. Through the RSO process, we have crystallized a five-year institutional plan for advancing and amplifying the School's research in three key priority areas:

- Health inequalities
- Climate change
- Pandemics

Through a highly faculty-engaged process, including faculty experts, think tanks, input from the School's Research Platforms Advisory Group, and key administrative groups from across the School, the Research Strategy Optimization process has yielded five key recommendations to advance the School's work in these priorities areas and enable innovation across the School's research portfolio broadly. Briefly, these include:

- Creating a data support hub to increase data access, sharing and analytical capacity
- Increasing external visibility of work at the Harvard Chan School in the priority research areas
- Providing increased support for collaboration through case-managed planning grants,
- Providing specialized proposal development support for large, grand challenge level grants
- Deploying a workforce strategy to increase the number of faculty working in the priority research areas

These recommendations are intended to elevate the priority research areas, as well advance the research mission of the School as a whole.



## Office of Education

### INVESTING IN EDUCATION

#### The new Harvard MPH Online

After a successful launch in the 2021–2022 academic year, the new Harvard MPH Online degree began accepting applicants for 2022–2023. The two-year, part-time degree program combines asynchronous lectures and homework with optional synchronous online learning opportunities.

### ALUMNI CURRICULAR EFFECTIVENESS SURVEY

In February, the Office of Educational Programs launched the inaugural Alumni Curricular Effectiveness Survey in which Class of 2019 graduates provided insight into how effectively their degree program prepared them for public health careers. Survey feedback will be used to both improve program competencies and meet accreditation requirements for the Council on Education for Public Health (CEPH).

### FACULTY DEDICATION

This year, strong faculty instruction continued with the Office of Education’s support for teaching and learning, including new education governance and

teacher-training models, regular faculty development workshops, and new public health cases to support case-based teaching.

### A new award for distinguished teaching

Established through the generosity of Dr. Srinivas Sastry, the new Sastry Award for Outstanding Teaching in Public Health recognizes up to two faculty members each academic year for their significant impact on students and the ways they have, through excellent teaching, inspired students to reach their public health goals. The award’s first recipients were announced at the School’s Graduation ceremony in May.

### STUDENT SUPPORT

#### Sharing student stories

Communications staff members teamed up to bolster student coverage on the School’s channels by launching an online form for academic administrators, faculty, and other staff to submit information about students with unique backgrounds and impactful work. These stories will be used for recruitment and fundraising purposes.

Jie Sun, SM '22, and Amber Nigam, SM '23, created an easy-to-use app that helps diabetes patients manage their disease.



# COMMENCEMENT

Harvard Chan School celebrated the accomplishments of 633 graduates at Convocation on May 25. The ceremony at the Reggie Lewis Center in Roxbury Crossing was the first graduation to be held in person since 2019 due to the COVID-19 pandemic.



**633**

TOTAL NUMBER OF GRADUATES  
RECEIVING DEGREES

US STUDENTS FROM

**39 states**

INCLUDING THE DISTRICT OF COLUMBIA

**232**

INTERNATIONAL STUDENTS

**46**

COUNTRIES REPRESENTED

“Our actions as a human race have brought the multiple planetary emergencies we are experiencing upon ourselves.”

—South African activist, doctor, academic, business leader, and political thought leader Mamphela Ramphele, at Convocation





**ACADEMICS**

## Biostatistics

*Advancing health science research, education, and practice by turning data into knowledge to address the greatest public health challenges of the 21st century*

The 2021–2022 academic year was one marked by perseverance. We returned to in-person instruction, while welcoming new cohorts of 14 PhD students and 66 SM students to our department. Our programs are more popular than ever, attracting just under 900 applicants this year, a 24% increase over 2020–21. Our faculty, researchers, and students continued their cutting-edge research unabated by the pandemic, many addressing issues directly relevant to understanding and combatting the SARS-CoV-2 virus. Our work included analyzing the viral genome, looking at the ways in which environmental factors influence disease risk and severity, and exploring population dynamics and disease spread—as well as advising local, state, and national governments,

schools, and other groups about scientifically sound practices to mitigate COVID risk. Our research also tackled other urgent issues, including climate change and social determinants of health. The continued use of virtual technology allowed us to expand the reach of our academic and social opportunities, including our three annual summer pipeline programs, award lectures, lightning talks, and symposia. The department has also made progress in addressing our goals related to equity, diversity, inclusion, and belonging (EDIB) that were formed from key feedback from our 2021 department culture and climate assessment. Our 2021–2022 academic year EDIB goals included improving communications and transparency, recruiting and retaining a more diverse community of postdocs, and organizing ongoing EDIB seminars and trainings. We remain committed to leading in the field of quantitative health sciences and working toward a brighter future.

## Environmental Health

*Addressing the biggest challenges of our time: air pollution, climate change, environmental justice, and COVID-19*

The health consequences of climate change are the largest issue we face today. We quantified the health effects of heat and pollution in the U.S. and extreme heat conditions in the Middle East. We showed that air pollution from fossil fuels leads to shorter life expectancy, and those living downwind of fracking sites have a higher risk of early death. With other departments, we reframed climate change to include sustainable food, healthy buildings, infectious disease, population displacement, and planetary health.

We continue to recognize the importance of our local environment. Disparities in environmental and social factors are important in the urban environment.

Messerlian Lab, Spring 2022



## Environmental Health (cont.)

We created a web resource documenting environmental racism in Boston. We offered a boot camp, new course, and concentration in Environmental Justice. We demonstrated that green space has positive impacts on health and that improved indoor air quality leads to enhanced productivity and health in workplaces and schools.

We provided guidance for controlling COVID-19 airborne transmission through ventilation, filtration, and masking. We examined the combined effects of air pollution and COVID-19 and our faculty served on numerous policy advisory committees.

Understanding the mechanisms of environmental toxicants remains a priority. As a primary exposure route, we examined the protective role of the airway epithelium in health and disease. We have shown that apoptosis is important not only for cancer, but also our response to environmental challenges and COVID-19.

From the planetary to the cellular scale, the department continues to innovate environmental health research and translate those findings into actions.

---

## Epidemiology

*Examining the frequency, distribution, and determinants of disease in humans—a fundamental science of public health*

This academic year the department welcomed students back on campus and the return to in-person classes. Our 133 students across the various degree programs joined us from 27 different countries and six continents. The Center for Communicable Disease Dynamics (CCDD), which has been at the forefront of the COVID-19 response, continued to be a key center for research and policy analysis on the SARS-CoV-2 virus. Members of the department worked in many areas to address the pandemic, including vaccine safety, hesitancy, and acceptance, as well as mental health. The department was also thrilled to announce the newly created CAUSALab. The center combines sound methodology and AI with high-quality data to produce actionable causal

inference with real-world impact. In 2021 we started a bilateral exchange program in clinical research with the Second Affiliated Hospital, Zhejiang University School of Medicine in Hangzhou, China. Our Equity, Diversity, Inclusion, and Belonging committee launched two surveys this year, one to look at the department climate and the other to diversify the speakers considered for the seminar series. On December 10, 2021, we celebrated the 173rd Cutter Lecture on Preventive Medicine with Anthony Fauci as guest speaker. Once again there were higher-than-average application submissions across most of our programs in this year's admissions cycle, with 253 applications for our PhD (epidemiology), 244 for our 80-credit master of science, 60 for our 42.5-credit master of science program, 163 for our MPH in epidemiology, 76 for MPH in clinical effectiveness, and 72 applicants for our MPH in quantitative methods.

## Global Health and Population

*Improving global health through education, research, and service from a population-based perspective*

As the pandemic continues to impact public health worldwide, the department continues its work in response to COVID-19 developments. Over the past year, faculty have engaged in research resulting in publications, media appearances, and public engagements that have guided policymakers through the pandemic. Select COVID-19-related projects include: providing real-time COVID-19 tracking for over 3,000 counties in the United States (the Covidestim project); analyzing spatial and temporal spread of COVID-19 in South Korea and Brazil; estimating declines in life expectancy in Brazil due to COVID-19; and examining availability of health services during the pandemic. Beyond COVID-19,

the department has expanded projects in health systems, maternal health, mental health, and nutrition globally. Department faculty have advised the Indonesian government on their planned performance-based financing program and evaluated the role of food systems and their impact on Tanzania's nutrition and health. Randomized controlled trials in Kenya have assessed maternal and newborn health, examining the impact of maternal health care intervention and impact of nurse mentorship and digital health platforms on maternal and newborn health. The QuEST Network continues to grow, collaborating with QuEST centers globally to develop new health systems quality measures and testing strategies for redesigning health systems for the 21st century. The FirstRespondersFirst initiative continues to progress in strengthening mental health support and resources for frontline workers.

Winnie Yip, Department of Global Health and Population, teaching a class in Spring 2022



## Health Policy and Management

*Improving health care delivery systems and mitigating public health risks in the United States and abroad*

The department maintained a prominent voice throughout the pandemic, leading a broad range of research and policy discussions focused on vaccination, telemedicine, response communications and media messaging, cost of care and hospitalization, health disparities/health equity, challenges in skilled nursing facilities, Medicare and Medicaid, access to care, opioid abuse, homelessness, and more.

The department continues to promote major research aiming to improve and support the overall mission of public health. In 2021, the Design Laboratory (D-Lab) at Harvard Chan School was launched to expand the ability of public health to

address the complexity of human behavior using design knowledge. HPM faculty have maintained a national and international presence in policy discussions, including Senate testimony and key health policy roles in the Biden administration. Research has included examination of structural racism in U.S. health care policies, international comparisons of high-need/high-cost patients, a public poll on policy priorities among Americans, evidence-based strategies for health care leaders on guiding teams in the post-pandemic world, understanding how norms and interpersonal relationships matter for health system integration, the toll of individual health systems in racial inequality, prescription opioid receipt, and other important topics. At the departmental level, HPM also continues to prioritize equity, diversity, and inclusion, particularly focusing efforts on curriculum and education.

---

## Immunology and Infectious Diseases

*Studying the biological, immunological, epidemiological, and ecological aspects of viral, bacterial, and protozoan diseases with a focus on major global infections*

The scale and impact of the SARS-CoV-2 pandemic has challenged the department to look more closely at the health challenges of the future. We see the risk of future pandemics, fueled by climate change and human displacement. We also see how these same pressures will continue to challenge our control over global pathogens like TB, HIV, and malaria. This year, we have made major advances in our efforts to integrate the use of cutting-edge mechanistic and population sciences to predict the impact of interventions for transmission of SARS-CoV-2 and malaria vaccine rollout. We have identified translatable

solutions to antibiotic resistance in *Neisseria* and *Mycobacterium tuberculosis* and new drug targets for non-tuberculous mycobacterial infections and vaginal dysbiosis; and tested therapies with the potential to treat or cure pediatric HIV. However, we have also set our sights on the future. We have invested in larger, cross-institutional efforts to build the tools and collaborative networks required to target root causes of future pandemics and improve pandemic preparedness. This work involves both the development and scaling of new technologies like population-level serologic surveillance integrated with pathogen detection and insect vector tracking tools. It also involves new collaborations with leading governmental agencies, like the CDC, and industry, as we learn to work in new ways to speed the cycle of discovery, translation, and implementation.

RIGHT: Kizzmekia Corbett (right), assistant professor of immunology and infectious diseases, with research assistant Maryam Ahmad





## Molecular Metabolism

*Discovering the root causes of the most common human diseases that adversely affect public health, including cardiometabolic diseases, cancer, and neurological disorders, which share metabolic dysfunction as an etiology*

Professor Brendan Manning was appointed as acting department chair as of January 2022. Faculty members received the Dean's Fund for Scientific Advancement Incubation Award, Damon Runyon-Rachleff Innovation Award, William F. Milton Fund Award, and Howard Hughes Medical Institute Investigator Award. Virtual lab tours were hosted in collaboration with the Boston Public Library and the department's Equity, Diversity, Inclusion, and Belonging Committee. Research findings and contributions included: Elucidating a structure for a key protein, seipin, involved in making lipid droplets in all cells, providing a new model for the mechanism of lipid droplet formation. Establishing an online resource, the Lipid Droplet Knowledge Portal, as a

resource for scientists studying lipid droplet biology. Insight into the mitochondrial dynamics factor FIS1 as an endogenous trigger of a protective integrated stress response in obesity. Reported a detailed characterization of the subcellular architecture in the liver and dynamic differences between both healthy and obese states. Discovered a new hormone named fabkin that helps regulate metabolism and may play an important role in the development of both type 1 and type 2 diabetes. Inhibition of translation increases expression of the ATF4 transcription factor, which mediates longevity under these conditions independently of the integrated stress response. Demonstrated that ATF4 and its metabolic gene targets are stimulated by mTORC1 signaling in the liver in response to feeding and in a hepatocyte-intrinsic manner by insulin. The activity of RNA splicing factors and the metabolic landscape early in life can modulate responsiveness to longevity interventions and may explain variance in intervention efficacy between individuals.

## Social and Behavioral Sciences

*Understanding and intervening on the social determinants of health and health equity across the life course*

In response to the COVID pandemic, faculty combined research with pedagogy by having students help translate their research into practical interventions related to the COVID pandemic. These include the development of a toolkit to assist schools across the country with a safe return to classes that is coupled with resources on social-emotional learning and mental health and in the design of interventions to improve vaccination rates in children. Building on the prior year's seminar series on the adverse effects of racism on public health, the department has initiated multiple programmatic initiatives to explicitly incorporate antiracism practices within

the department's research and pedagogy. These include the development of a new course on how to be an antiracist, a symposium on antiracism in collaboration with the FXB Center, and the implementation of a Culture Lab Innovation Fund grant from Harvard to develop sustainable mechanisms to help faculty incorporate antiracist content and competencies within their courses. The department welcomed a new junior faculty member whose work will enhance the department's expertise in developmental psychology and strengthen the department's commitment to research and practice in maternal and child health. Three faculty members were recognized as highly cited researchers and faculty received multiple mentorship, teaching and investigator awards, as well as election to national and international scientific boards and committees.

## Nutrition

*Understanding the relationships between nutrition, genomics, food systems, and health*

Heather Eliassen and Jorge Chavarro joined the tenured faculty. Josiemer Mattei received the Alice Hamilton Award. The department formed a Diversity, Inclusion, and Belonging Committee. The Dietary Biomarkers Development Center at Harvard University was funded. Research findings from large cohort studies included: Epstein-Barr viral infections were found to have a potential causal link to onset of multiple sclerosis; better scores for overall diet quality were related to lower risks of severe COVID-19; adherence to Mediterranean diet was found to be beneficial to cardiometabolic health and may promote growth of healthy bacteria in the gut; regular consumption of coffee and low consumption of sugar-sweetened beverages were associated with better survival after breast cancer; higher consumption of sugar-sweetened beverages during adolescence was associated with greater

risk of early-onset colorectal cancer; unrestrained eating related to greater risk of colorectal cancer; and frequent consumption of red and processed meat linked with a specific pattern of DNA damage in colorectal tumors. In addition, an interconnection between colonized food systems and type 2 diabetes risk was established in small islands settings. As part of the Blue Food Assessment Project, financing and innovating in the aquatic foods sector were found to benefit the environment and improve human health by potentially preventing 166 million micronutrient deficiencies worldwide. Faculty have developed a generalizable and scalable approach to stool and oral microbiome sample collection in large prospective studies of the microbiome and health outcomes. Global collaboration has been launched to create a roadmap around cost-efficient translational strategies to identify challenges and opportunities in improving healthspan and healthy aging, while also improving the health of the planet.

Chris Golden (left), assistant professor of nutrition and planetary health, and graduate student Hervet Randriamady





**PHILANTHROPY  
AND FINANCIAL  
HIGHLIGHTS**

## Philanthropic Impact

Thanks to the generosity of more than 1,300 donors, the Office for External Relations has raised \$35m to date, a 265% increase over last year.

Highlights include:

- Pamela Dippel Choney, MBA '84, and her husband Jeffrey renewed their support of several priority areas, increasing current-use funding to Dean's priority funds. They also established an endowed student fellowship and gave lift to the Harvard Global Nursing Leadership Program, launching this fall.
- The Login5 Foundation made a significant gift to the Co-Benefits of the Built Environment Calculator (CoBE) Research Fund. Developed by associate professor Joseph Allen, the CoBE calculator is an open-access city-scale tool that shows the health impacts of energy reduction strategies.
- Longtime donor Roberta Cohn increased her support to the Dr. Lawrence H. and Roberta Cohn Forums Fund. Lawrence Cohn was the Hubbard Professor of Cardiac Surgery at Harvard Medical School and a physician at Brigham and Women's Hospital, and frequent attendee of The Forum (now The Studio) events. The couple established the fund in 2014 and Roberta Cohn recently renewed her pledge to support these convenings of global leaders in health policy, advocacy, industry, and research.
- Peggy Koenig and John Hayes, 2018 alums of the Advanced Leadership Institute (ALI), met Sidharth Kara as part of their ALI curriculum. Kara is a British Academy global scientist and visiting scholar at the FXB Center for Health & Human Rights, and an author, researcher, screenwriter, and activist on modern slavery. Their most recent gifts fund his efforts to stop forced child labor in the Republic of Congo.

## Financial highlights

### FISCAL YEAR 2021

July 1, 2020 – June 30, 2021

Despite pandemic restrictions, Harvard Chan School research activity remained robust, and the pivot to online education was successful. On-site laboratories were able to reopen on campus by adopting new protocols. The realized student enrollment was only marginally below the original pre-pandemic fiscal FY21 target, and the tuition rate was held at the same level as the prior year. In total, income from research, education, and other sources led to slight revenue growth to \$394 million during FY21. In addition, the School adhered closely to University-wide expense restrictions on discretionary spending and strict controls on

hiring and filling vacancies. Compensation costs grew by 3% versus FY20. Savings due to the hiring freeze were largely offset by a University-wide voluntary early retirement incentive program. However, pandemic-driven savings, particularly including the areas of travel and in-person events, helped to keep overall expense growth at a slight decrease year-over-year. Sustained revenues, expense controls, and savings resulted in a modest surplus at Harvard Chan School for FY21. To recognize their outstanding efforts during the pandemic, faculty and exempt staff were awarded a 5% merit raise for FY23.

LEFT: Financial aid and student support funds helped Tanat Chinbunchorn, MPH '22, lead initiatives for patient communities that often face stigma. He was featured in the Spring 2022 issue of *Harvard Public Health*.



**HARVARD T.H. CHAN | SCHOOL OF PUBLIC HEALTH**

**Powerful ideas for a healthier world**



“Though [public health] challenges are broad and deep, there have never been more tools to address these issues, from machine learning to a new science of teamwork. And yet the most important resource in the public health toolkit remains its people—you.”

— Trishan Panch, MPH '10

President of the Harvard Chan School Alumni Association,  
speaking at Class of 2022 Convocation

**PHOTOS:** All photos were taken by Kent Dayton / Harvard Chan School except for the following:  
**Cover:** Top row middle and third row middle: Ben Gebo; Second row, right: J.D. Levine;  
**Pg. 10:** Courtesy of alumni awardees; **Pg. 12:** Courtesy of ODI; **Pg 16.** J.D. Levine

HARVARD  
T.H. CHAN SCHOOL  
OF PUBLIC HEALTH



**HARVARD  
T.H. CHAN**  
SCHOOL OF PUBLIC HEALTH

The Harvard T.H. Chan School of Public Health brings together dedicated experts from many disciplines to educate new generations of global health leaders and produce powerful ideas that improve the lives and health of people everywhere. As a community of leading scientists, educators, and students, we work together to take innovative ideas from the laboratory to people's lives—not only making scientific breakthroughs but also working to change individual behaviors, public policies, and health care practices. Each year, more than 400 faculty members at Harvard Chan School teach 1,000-plus full-time students from around the world and train thousands more through online and executive education courses. Founded in 1913 as the Harvard-MIT School for Health Officers, the School is recognized as America's oldest professional training program in public health.

[hsph.harvard.edu](https://hsph.harvard.edu)