SCI-TECH

"Thanksgiving, man. Not a good day to be my pants."
KEVIN JAMES AMERICAN COMEDIAN

Yale delegations arrive to Brazil for annual UN climate conference

BY MICHELLE SO
STAFF REPORTER

Yale representatives recently arrived in Belém, Brazil, for the 30th annual United Nations climate change conference, also called the 30th Conference of the Parties, or COP30.

COP30 began last Monday and will run until Friday. The two-week event involves climate negotiations, speaker panels and dialogues between different organizations.

According to Melanie Quigley, the School of the Environment's associate dean of strategic initiatives, Yale has been sending students to the Conference of Parties for the last 30 years. The 17 School of the Environment representatives are graduate students selected from the Yale COP Delegate Program. Many will be supporting deliberations and negotiations for countries, including the Republic of Vanuatu, Pakistan, Bhutan, Nigeria, Montenegro, Ghana and more.

"These graduate and professional students, they're looking for internships, they're looking for future job prospects and they're also trying to pursue their kind of academic and research interests," Quigley said in an interview. "So we try to help them get to the point where all of this makes complete sense for what they're trying to do, and that's why it's been so successful."



COURTESY OF MARC BRACKETT
Students from Yale College and the School of the Environment are attending COP30 — the 30th annual United Nations climate change conference.

Umer Vaqar ENV '26 will be a party delegate for the Pakistan Ministry of Climate Change and Environmental Coordination.

In addition to coordinating the COP30 Pakistan Youth and Expert Support Network, his work will focus on adaptation, climate finance and the Global Goal on Adaptation areas critical to countries most exposed to climate risks.

"For Pakistan and other nations of the Global South, it's not just about representation but about redefining resilience as measurable, fundable and just. Being part of this process as both a student and a practitioner is a rare opportunity to translate academic research into policy action," Vaqar wrote in an email to the News. "I hope to bring that experience back to Yale to strengthen our community's understanding of what equitable implementation looks like in practice."

Camila Young '26 is the head of the five-member undergraduate delegation representing the Yale Student Environmental Coalition. Young is a climate artist whose work promotes climate justice and the impact of climate change on islanders.

One of her exhibition pieces titled "Babel" features a city crumbling under crashing waves, held up by the back of a woman.

"We are in this era where we need to have humility that these things are happening around us, but we can be receptive to it and move forward if our leadership is willing to kind of take on this mantle of sacrifice and build with us on behalf of the community that is being affected the most," Young said.

Young pointed out that this year's conference will be held in the remote forests of Belém, in contrast to previous conferences, which have been held in major city centers. The choice in location has resulted in both praise and controversy.

In March, BBC reported that tens of thousands of acres of protected Amazon forest were felled to make way for a four-lane highway into the heart of the secluded city.

The conference has tried to spotlight more indigenous voices, with over 900 indigenous participants registered. On Friday, about 100 indigenous Munduruku people blocked the main entrance in a peaceful demonstration, forming a human chain that required attendees to take a side door, AP reported.

"It can be seen in two different lenses. One is that the Amazon, this small place, might not have the capacity to accommodate so many people coming, but at the same time, it kind of puts us in a setting that gets to the heart of why we're talking about climate change in the first place," Young said. "The Amazon is one of the places going to get destroyed with the oncoming changing climate."

Phoenix Boggs '26, a political science major, is another undergraduate representative attending COP30 alongside Young. Boggs came into environmental justice advocacy by way of insect conservation and will be representing Xerces, an invertebrate conservation organization.

"The most important part of COP30 is to demonstrate to the international field that the United States still cares and that Americans still care about climate change and environment movement and the green transition," Boggs said in a phone interview from Rio de Janeiro.

This year marks the first time since 1995 that the United States will not be officially represented at the annual conference. However, in addition to individual delegations like Yale, the U.S. Climate Alliance will be sending 100 local leaders to the conference, the group announced in a press release.

While climate change is often at the center of discussions, Boggs says discussion of biodiversity is often lacking. She will be speaking on panels about both higher education and climate, as well as how insect population decline will broadly affect the world, she said.

"The ecological damage and the downstream effects that will be caused as a result of insect population decline will be felt first in the Global South and in developing countries," Boggs said.

The Amazon rainforest spans 6.7 million square-kilometers across eight countries.

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Professor's new initiative 'flipping the script' on hepatitis C care

BY NELLIE KENNEY
STAFF REPORTER

A new Yale-led study found that ambient artificial intelligence scribes, which document medical visits, significantly reduced physician burnout and increased focused attention on patients.

Ambient AI scribes listen to and transcribe patient-clinician conversations, generating visit notes and completing required documentation. The study, published online last month, collected data from 263 physicians and advanced practice practitioners across six health care systems that utilized the Abridge ambient AI scribe.

"Across our multicenter study and our internal research at UChicago Medicine, we are seeing converging evidence that ambient AI scribes meaningfully reduce documentation burden and improve the day-to-day work experience for front-line clinicians," Sachin Shah, the co-author of the study and the chief medical information officer at the Pritzker School of Medicine at the University of Chicago, wrote to the News in a statement.

"In the multicenter study, which included nearly 40% of clinicians from UChicago Medicine, burnout dropped from 51.9% to 38.8% after just 30 days of use, with substantial improvements in cognitive load and clinicians' ability to give patients their full attention," she wrote.

Kristine Olson, the study's first author and a national thought leader on professional worklife wellbeing, emphasized that the study was driven by a desire to give physicians more time and energy for patient care.

Olson said that with physician shortages growing and physician attrition rising, health systems cannot hire more clinicians to manage escalating documentation demands. Reducing administrative burden, she said, has become increasingly critical.

"It's been written about many times of the administrative complexity and the administrative load, and it said that healthcare medicine is strangling in red tape and paperwork," Olson said in an interview.

AI capabilities advanced rapidly during the pandemic, Olson added, enabling tools that can reliably record patient-doctor conversations and convert them into standard medical notes.

In turn, the team sought to test whether the technology could relieve the time pressure that keeps clinicians tethered to documentation instead of to their patients.

Tina Shah, the chief clinical officer at Abridge who also organized the use of Abridge in the six health care systems studied, said she first connected with Olson to explore ambient AI from a wellbeing perspective.

In their work, the team looked at physicians and advanced practice providers in ambulatory spaces — healthcare facilities that do not offer overnight hospital stay — and identified common pain points to relieve in clinical practice. After 30 days of deploying AI scribes, clinicians rated burnout, cognitive load, number of patients attended and undivided attention to patients on a ten-point scale.

Notably, intervention with Abridge AI scribes reduced burnout by 74 percent. Secondary analyses also showed improvements in cognitive task load associated with writing the after-visit note and in a clinician's ability to remain fully attentive to their patients.

"So most certainly, that makes a more lovely time in the clinic with your patients doing what you really love to do, taking care of them. So that makes sense, that it would also reduce burnout," Olson said.

While the study didn't measure patient satisfaction, Olson said the increased focus on patients could have potentially improved patient experiences in the clinic.

A Chicago-specific companion study led by Sachin Shah reinforced the findings from the paper, revealing that AI scribes saved clinicians about an hour of time each day.

For Olson, one of the keys towards achieving lower burnout rates and improved patient care is investment from organizations interested in solving the issue.

She credits the chief medical informatics officers and digital optimization leaders at the six organizations who collaborated in the study to push forward the AI scribe initiative.

"It wasn't the technology in search of a problem, it was really driven by pain points that we know we have, and so I wish that more AI companies would seek out input, especially from chief wellness officers and people who measure the pain points, to say, how can we use our our technology and our know how to solve problems that you have so that we can make a more human, centered, satisfying health care experience?" Olson said.

When asked about future directions for research, Vinh Nguyen, the chief medical information officer at Memorial Healthcare System, said that Memorial Care will continue investigating the impact of ambient AI scribes in healthcare.

Nguyen said that potential areas of research include further exploring clinician burden and productivity and "how patients feel about clinicians' use of ambient AI scribes during the visit and the ways in which it enhances the interaction."

The paper was published in Jama Network Open early last month.

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YULIN ZHEN / PHOTOGRAPHY EDITOR
COMPASS, an initiative that will bring care to patients in their communities rather than in clinics, will launch in five Connecticut cities: New Haven, Hartford, Bridgeport, New London and Waterbury.

