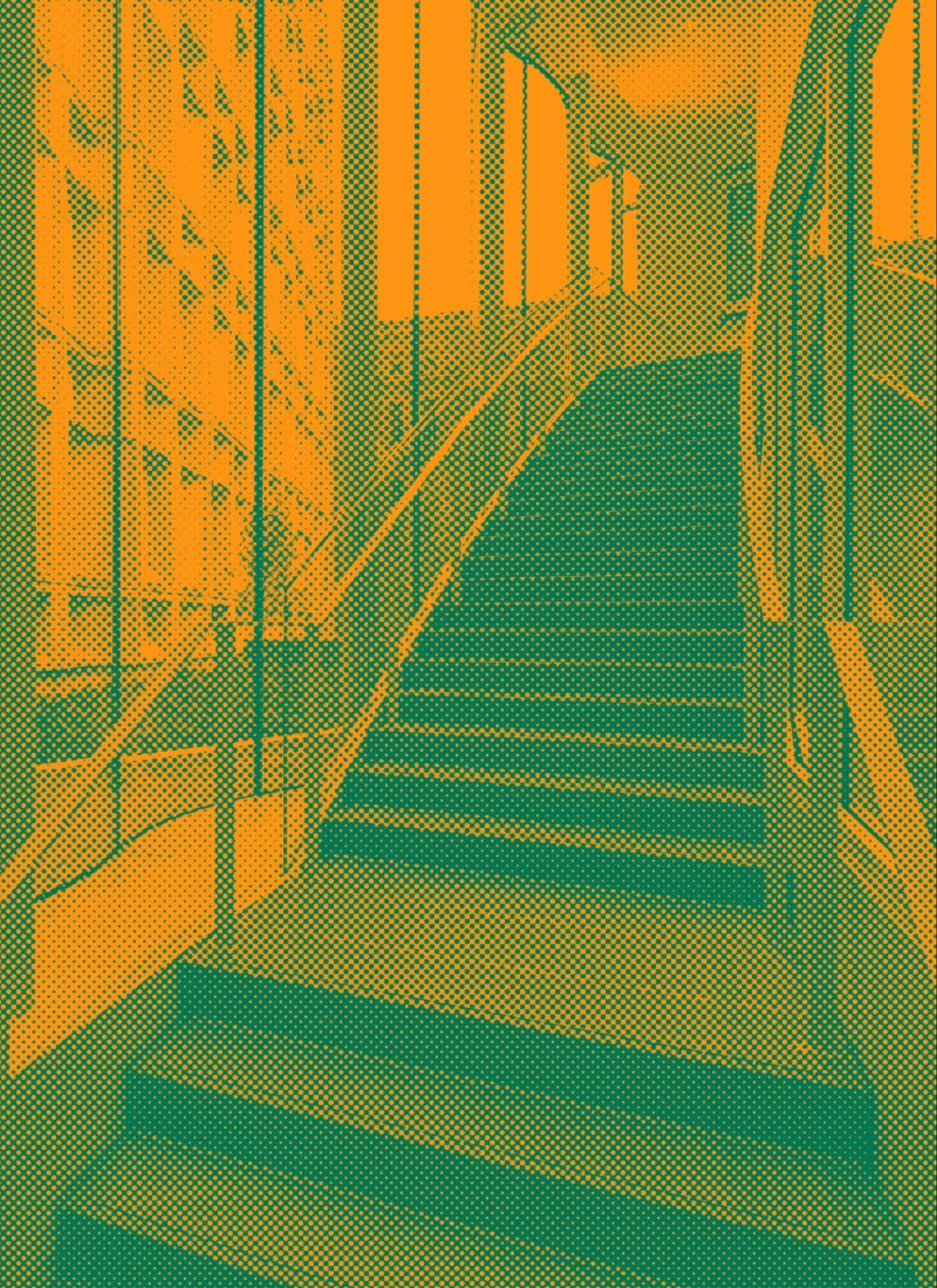


# 2019– 2020 ANNUAL REPORT

tsai center for  
innovative  
thinking

Yale





## **A Note from our Executive Director**

The full arc of the extraordinary 2019–2020 academic year provides much to reflect upon.

As it was for the rest of the world, the main challenge of 2020 for Tsai CITY has been coping with the repercussions of the global coronavirus pandemic. In March, our staff and students adapted rapidly, switching to remote experiential learning with a focus on maintaining content quality and human connection. While we all adjusted to the feeling of loss that accompanied the cessation of in-person gatherings, we also leveraged opportunities for greater exposure for Yale student innovators in a world gone virtual, permitting many more alumni and others to join in and see for themselves the creativity of Yalies.

It is Yale students' creativity, curiosity, and capacity for innovative problem-solving that continues to make our work with them such a privilege. In the past year, we have worked with students developing ideas that improve our planet's environment, advance human health and safety, and create products and services of value to users. We have also welcomed students exploring new topics in innovation and entrepreneurship through workshops, multi-session intensives, and office hours. These students engage with Tsai CITY's programming on their own time, not because it earns them a grade or checks a box, but because they want to build innovative thinking skills that they can apply in the world beyond Yale.

A milestone this year was the completion of a physical home for this active community. Our team moved into our new building at 17 Prospect Street in August, and we eagerly look forward to opening the doors to students when it is safer to do so. Our location along Yale's burgeoning innovation corridor affords new opportunities for collaboration with key partners like the Center for Engineering Innovation and Design and coincides with the addition of Anjelica Gonzalez, Associate Professor of Biomedical Engineering, as Tsai CITY's next faculty director.

Although the new academic year is now underway during a time of ongoing global uncertainty, Tsai CITY is continuing to offer a full set of programs, mentoring, and funding opportunities for students. As our community connects and creates virtually, we invite you to see how this community has shaped our past year. Explore 2019–2020 at Tsai CITY.

**Clare Leinweber,**  
**October 2020**



**The Tsai Center for Innovative Thinking at Yale (Tsai CITY) aims to inspire students from diverse backgrounds and disciplines to seek innovative ways to solve real-world problems.**

**Tsai CITY serves students from across Yale's campus through programs, mentorship, and funding.**

2020 marks an important moment for Tsai CITY: in August, we moved into our newly completed building, establishing a permanent home for our community. Since Tsai CITY's launch in 2017, we have been working to pilot and test the slate of programs and resources that will fill this building with new ideas. In our first three years, we have experimented with a wide range of programs, developed partnerships with collaborators across and beyond the university, and cultivated a diverse, engaged student community.

This year, we have focused on synthesizing the lessons of these early years, using these insights to refine our offerings and operations. Sometimes these refinements have been big, like adding new funding opportunities or identifying key areas for mentor recruitment. Other times, we've made small changes that have an outsized impact on student experiences, from adjusting the schedule of our Accelerator sessions to simplifying the language on a program application.

A key element of this refinement has been the continuing development of pathways through our programs. This year, we've seen teams progress from our Accelerator to our Summer Fellowship, growing with each step. We've met students who first engaged with us through a one-time event and promptly applied for one of our cohort programs. We've also started to see some of our first Tsai CITY alumni come back and share their insights with current students in guest talks, product critiques, and more.

Of course, 2020 has also posed unique challenges. This spring, we rapidly

transitioned to all-virtual programming in response to COVID-19, conducting everything from large events to one-on-one office hours sessions over Zoom. We advised student ventures facing unexpected challenges and started sharing practical resources through channels like Instagram. During a difficult summer, we sought new ways to support our cohort of Summer Fellows and to foster meaningful innovation on systemic problems across our community.

Throughout this year, we have found that our four core objectives—interdisciplinary collaboration, inclusivity across all dimensions of diversity, skills and practices of effective action, and resilience—have been especially relevant. These core objectives have guided us as we have worked to foster a supportive, adaptable environment for innovation in a continuously shifting context.

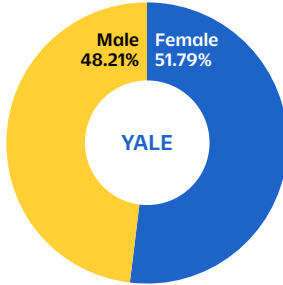
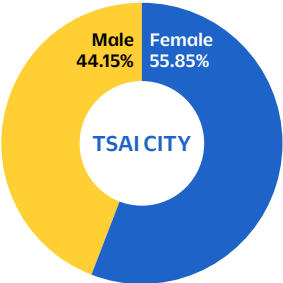
As we move into Tsai CITY's next phase, we will be taking these insights from our early years—and particularly this year, which challenged us to think deeply about the role and capacity of an innovation center—with us. In helping students realize their ideas, we'll be learning and growing alongside an extraordinary community. We can't wait.

**In the following pages, you'll find student ideas, lessons learned, stories that stuck with us, and more. We hope you'll discover not just what we did this year, but also what we learned.**

# Building a Student Community

## Tsai CITY's Student Body

	TSAI CITY	YALE
White	29.02%	41.63%
International Students	25.37%	21%
Asian	19.76%	15.25%
Hispanic or Latino of any race	10.24%	10.51%
Black or African American	8.78%	6.08%
Two or more races	5.37%	5.14%
Unknown	0.73%	0.79%
American Indian/Alaska Native	0.49%	0.32%
Native Hawaiian or other Pacific Islander	0.24%	0.08%



14  
SCHOOLS REPRESENTED

70+  
MAJORS/PROGRAMS REPRESENTED

100+  
PROJECTS CATALYZED THIS YEAR

Over Tsai CITY's first three years, one of our biggest successes has been the growth of a robust student community. This community includes students from diverse backgrounds and from all 14 of Yale's schools: from drama to divinity, medicine to management.

By providing gathering points for this cross-section of the Yale community, we empower students to learn from each other. Participants in our events and cohort programs often tell us that the most valuable element of these experiences is the connections they form with peers they might not have met otherwise. One group of students, for example, met at a Tsai CITY orientation and went on to form a venture team. Our Summer Fellowship and Accelerator teams relish unstructured opportunities to get to know each other and swap ideas, while workshops and intensives often buzz with small-group discussions and offers of collaboration or support.

To support this community, we have taken a student-centric approach to developing our lineup of programs and resources. As we build pathways for students to explore, we seek to provide multiple entry points, fill gaps, and meet real student needs.

*Note: Graphs above are drawn from engagements for which data was available; this data is not exhaustive.*



**ONYEKA OBIOCHA**  
Managing Director

During a recent Tsai CITY fireside chat, Tsai CITY benefactor Joe Tsai remarked, "The foundation of excellence is diversity." This quote serves as a guiding statement in our approach to building a welcoming student community. From day one, the entire Tsai CITY team has been intentional in developing and modeling practices that allow students to show up as their full selves, whether through establishing organizational norms or allocating time in our programs for icebreakers and personal check-ins. By embedding this heart-work into the DNA of our organization, we are able to frame inclusivity as a competitive advantage and unleash the true potential and power of the students we help guide.



# Summer Fellowship

11 TEAMS      25 MENTORS      200+ NYU PITCHOFF AUDIENCE

Tsai CITY’s highly selective Summer Fellowship is an eight-week, full-time accelerator for teams to launch and grow new ventures, nonprofits, and projects. The Fellowship provides \$15,000 per team and a rigorous series of workshops, sprints, mentor meetings, coaching sessions, and pitch opportunities.

- AgriCORE**  
**Nat Irwin (YC)**  
AgriCORE aims to encourage more sustainable agricultural land management by offering affordable, efficient, and accessible tools for soil sampling and soil carbon content analysis.
- Bild**  
**Pradyut Paul (SOM)**  
Bild is a platform for small-medium businesses (SMBs) that integrates automation and AI into sourcing manufacturers and suppliers.
- Brio**  
**Daisy Rosales (SOM)**  
Brio creates tailored, multi-year partnership programs with community leaders in Latin America to design and implement lasting community-owned mental health solutions.



For the first time, the 2020 Summer Fellowship took place entirely virtually. Working in locations from New Haven to New Mexico, our cohort connected in Slack channels and remote brainstorming sessions. Events both small (like team coaching sessions and workshops) and big (like our annual pitch-off with NYU, which drew hundreds of attendees) took place on Zoom. As we navigated the summer of 2020 together, we took an iterative approach, learning from real-time feedback to improve digital experiences and find ways to thoughtfully connect.



Like pretty much everyone in summer 2020, our teams had to get comfortable with pivoting. Despite this, many teams saw wins over the summer. A few examples: Cambium Carbon received major funding to run a pilot, with an eye toward building local resilience in the face of climate change and job losses. Grantas Cosmetics and Bild launched their products online. Navi Health connected with students and universities ahead of a uniquely challenging semester, while Brio launched a mental health toolkit for community leaders.



- Cambium Carbon**  
**Ben Christensen (YSE), Marisa Repka (YSE)**  
This reforestation hub concept aims to help cities meet their climate targets by investing in urban mill infrastructure, building nursery capacity, and channeling revenues to scale new planting.
- Hublete**  
**Cristina Bermudez (YC), Lochlainn Renfrow, Sebastian Connelly**  
Hublete is a directory for accredited businesses offering personalized fitness and recovery services.
- Navi Health**  
**Nitya Kanuri (SOM), Salina Hum (SOM), Agnieszka Matyja-Sanetra (SOM)**  
Navi Health is a technology platform that can help college counseling centers manage the mental healthcare of their student population.
- FreshAir Wristband**  
**Elizabeth Lin (YSPH)**  
This low-cost wearable air monitor detects hundreds of environmental contaminants.
- Juno**  
**Phyllis Mugadza (YC)**  
Juno is creating a reusable menstrual hygiene product that can also be used as a diaphragm that treats pain associated with dysmenorrhea.
- ReRent**  
**Alikiah Barclay (SOM)**  
ReRent is a service that makes home-sharing feasible for anyone by providing sheets, towels, insurance, and professional cleaning — while also assisting guests and managing the process end-to-end.
- Grantas Cosmetics**  
**Lillian Childress (YSE)**  
Grantas produces all-natural, vegan cosmetics with packaging that is 100% biodegradable and recyclable.
- Lynwood Films**  
**Lily Weisberg (YC), Matt Nadel (YC)**  
This filmmaking collective makes films that contribute nuance to discussions about women and gender and provides filmmaking opportunities for female and queer filmmakers.



# Accelerator

Tsai CITY’s Accelerator runs every fall and spring semester. The program guides students with innovative ideas through the process of building effective organizations, projects, and ventures through workshops, mentorship, and funding.

29  
TEAMS

41  
MENTORS

1K+  
VOTES IN OUR  
FIRST-EVER  
INSTAGRAM PITCH-OFF



**4 Beez International**  
**Martine Bruno (YDS)**  
4 Beez teaches a curriculum in sustainable living, fosters community building, and provides eco-alternative solutions.

**Abode Co**  
**Nicole Ratajczak (YSOA), Sean Yang (YSOA)**  
This team is creating a turnkey solution for a custom backyard home.

**Agrivengers**  
**Beamlak Ashenafi (YC), Daniel Lin (YC)**  
Building a global network of healthy food supplies with nanotechnology.

**Andamia**  
**Alberto Munoz Najar (SOM)**  
Andamia offers digital training content in Spanish.

**Barista**  
**Keon Azar (YC), Ben Kany (YC), Adam Rothman (YC), Billy Schroeder (YC), Jordan Weitz (YC)**  
A subscription coffee service that enables members to save money while also building relationships with local cafes.

**Bezef**  
**Reed Miller (SEAS)**  
The credit-card sized solution to public restroom stalls that just won't close and don't have a hook for your bag or jacket.

**CtrlTrial**  
**Guannan Gong (GSAS), Chris Keegan, Feimei Liu, Weiyu Wang**  
Improving patient identification for clinical trials with data science and AI.

**Cambium Carbon**  
**Ben Christensen (YSE)**  
Mitigating climate change and supporting communities by restoring tree cover.



**ZOE HUNTER**  
Director of Student Programming

Feedback is important to us at Tsai CITY, and it being my first year running the Accelerator, it was necessary for me to look at feedback from years past to shape the curriculum and refine our offerings. However, one thing I wanted to make sure of was that I wasn't only relying on feedback

from past cohorts, but that I was actively listening to the students we were serving at the time. I wanted to remain open enough to suggestions from the current cohort so we could iterate in real time. This was critical for ensuring we were meeting such a diverse set of needs. Not only did I want the teams to feel supported, I wanted them to feel heard.

**Developh**  
**Chiara Amisola (YC)**  
Investing in youth-led innovation for social impact across developing countries.

**Elekron Sustainability, Ltd.**  
**Hemdeep Dulthummon (SOM)**  
Elekron is transforming existing buildings in Mauritius toward net zero carbon emissions.

**Grantas Cosmetics**  
**Lillian Childress (YSE)**  
Grantas makes cosmetics with natural ingredients and biodegradable packaging.

**Green Retirement Initiative**  
**Gabriel Malek (YC), Katrina White (YC)**  
A toolkit for young professionals to advocate for environmentally-friendly 401(k) plans.

**Hadrut Summer Educational Camp**  
**Knar Abrahamyan (GSAS)**  
A free educational summer camp for children in the Nagorno-Karabakh region.

**Hallow, Inc.**  
**Bryan Enriquez (SOM)**  
Hallow, Inc.'s app provides contemplative and meditative audio guided prayer sessions.

**Hublete**  
**Cristina Bermudez (YC)**  
Hublete helps you find the best personal trainers, nutritionists, and more near you.

**Jollity**  
**Diana Toma (SOM), Spandan Saha (SOM)**  
Jollity will be a positivity-enhancing platform that bridges online social interactions with the real world using augmented reality.

**Juno**  
**Phyllis Mugadza (YC)**  
A reusable menstrual hygiene product that contains a discharging mechanism and reduces dysmenorrhea.

**Justice Impact Movement**  
**Dieter Tejada, Mike Ogego (YC)**  
Reforming the criminal justice system by empowering justice-impacted individuals.

**Librex**  
**Daria Kozeko (YC), Ryan Schiller (YC)**  
A political discussion platform tailored to college students.

**Mesa Foods Inc.**  
**Tony Cisneros (YSE)**  
Vegetable-forward dehydrated meals for adventurers on the go.

**Myst Energy**  
**Gannon Connor (GSAS), Brandon Peterson (YC)**  
Developing an all-natural sparkling water energy drink.

**Navi**  
**Salina Hum (SOM), Nitya Kanuri (SOM), Agnieszka Matyja-Sanetra (SOM)**  
A platform that helps college counseling centers manage student mental health.

**Outlaws Inc.**  
**Jon Miller (SOM)**  
Outlaws Inc. aims to prepare and place veterans into skilled trade jobs.

**Scibuildr**  
**Dana Joseph (YC)**  
Connecting professors and students seeking research positions.

**SNUGS**  
**Sydney Closs (YC), Megan Sardis (YC)**  
Providing swim lessons free of charge to local special needs children.

**Sweet**  
**Bryce Bjork (YC), Ting Gao (YC)**  
This team is building an online marketplace and end-to-end booking platform for event planners and venues.

**Teaf**  
**Tiffany Leong (SOM)**  
Bringing traditional Chinese medicinal superfoods to the Western market.

**The Spinwheel**  
**Elise Bullock (GSAS), Emily Kuhn (GSAS), Rebecca Lacroix (GSAS), Samantha Pagan (GSAS)**  
A wearable electronics device for STEM exploration.

**The Climbing Initiative**  
**Veronica Baker (GSAS)**  
The Climbing Initiative supports individuals and communities globally using rock climbing for positive change.



## MOVING THROUGH A PATHWAY

The Accelerator is a key component of our network of pathways for student teams here at Tsai CITY. In one sign of the growing strength of this pathway, 8 of the 11 teams in our Summer Fellowship cohort were Accelerator alumni. "I found one of the best parts

[of the Accelerator] was getting to be in the room with other founders who are experiencing similar things, and really just being able to learn from that peer group," reflected Cambium Carbon founder Ben Christensen.



# Intensives & Bootcamps

Intensives and bootcamps offer hands-on learning experiences that go deep on specific themes and topics. These programs bring together students from across campus to build skills in a weekend bootcamp, or over a series of sessions as part of an intensive cohort.

4  
INTENSIVES

**Art Tech Bootcamps**  
This short series of bootcamps, a collaboration with the Yale Center for Collaborative Arts and Media (CCAM), introduced students to 360-degree video, immersive film, and virtual reality. Students heard from experts before creating media of their own.

**Climate Change Solutions Generator**  
Students from diverse disciplines gathered in this intensive (held in partnership with the Yale Center for Business and the Environment, or CBEY) to develop ideas for climate solutions, learning from cross-sector leaders and from each other in the process.

**Financing Innovative Ideas**  
This Tsai CITY/CBEY intensive offered an introduction to financial modeling and the process of raising and directing capital toward innovation that improves the world.

**Food Product Development**  
Students working on food-focused ventures and projects, from healthier snacks for backpackers to a beverage inspired by family recipes, explored the process of taking a food product to market in this intensive. The program was offered with the Yale Landscape Lab and the Yale Sustainable Food Program.

1  
BOOTCAMP SERIES

**Paper to Prototype: App Design**  
This program, offered in partnership with CCAM, introduced students to the basics of app design, from wireframing to visual design. Each participant worked on an original app idea as they learned key lessons and heard from experts.



80  
PARTICIPANTS



## AN ALUMNI COMMUNITY

Several of this year's intensives provided a chance for students to learn from people who were recently in their shoes: Yale alumni, including alumni of Tsai CITY programs. The Paper to Prototype intensive, for example, welcomed back 2018-2019 intensive participant (and Tsai CITY Summer Fellow) Marina Marmolejo for a critique and discussion. Participants in the Food Product Development intensive, meanwhile, heard from Yalies developing products like healthy frozen meals, ice cream, and creative, fast-casual Chinese food. Students spoke highly of their time with these guests — pointing to the value of Tsai CITY's growing alumni community.

# Workshops

Tsai CITY holds a range of open workshops with expert practitioners, entrepreneurs, and Yale staff and faculty, helping students develop innovative mindsets and essential practical skills.



## MIT Space Exploration Initiative (SEI) Workshops

This initiative supports 40+ research projects, regular zero-g parabolic flights, suborbital and orbital launch research deployments, and a team of 50+ students, staff, and faculty. The SEI came to Yale in fall 2019 to lead workshops in four of core research areas, offering playful explorations of space performance, space food, and more in collaboration with Tsai CITY, CEID, and CCAM.

**Wix website workshops**  
These free, 90-minute workshops, offered in partnership with Wix and CCAM, gave students a kickstart for creating their own websites.

**The Innovator's Toolkit**  
Our signature series, the Innovator's Toolkit, offers free workshops on key skills for innovation, with a focus on tangible skills and takeaways that can be implemented immediately. This year's topics ranged from design thinking and fundraising to personal branding and working with impostor syndrome. All Innovator's Toolkit workshops are open to the public, drawing a diverse audience.

**From Purpose to Performance**  
Led by Peter Boyd, From Purpose to Performance is a portfolio of workshops and programs that empower aspiring changemakers to unlock their potential.

These programs provide tangible tools for clarifying purpose and translating this insight into next-level performance. Exploring topics from making a business plan to finding the right job opportunity, the series aims to equip students to do their best work at Yale and beyond.

**Clinical Redesign**  
These workshops offered a snapshot of how Yale New Haven Hospital's Clinical Redesign team approaches challenges facing frontline healthcare providers. Participants got an orientation to the team's work, explored a sample clinical challenge, and learned about opportunities to get involved.

30  
WORKSHOPS

12+  
CORE INNOVATION SKILLS



## LEARNING FROM OUR STUDENTS

As student teams move through our programs, they often become our partners as well. This fall, for example, Tsai CITY mentor Peter Boyd collaborated with the student team behind Thinkspaces (a 2018-2019 Accelerator participant) to offer a workshop called The Match. In this workshop, participants heard from Peter on the art of finding good teammates and co-founders. They then took part in networking supported by Thinkspaces's platform for connecting Yale project/venture leaders with Yalies looking to contribute.



# Community Events

Community events provide low-stakes entry points to Tsai CITY and spark connections among innovators of all kinds. Take a look at a few events we hosted this year.

12+  
IDEAS PITCHED  
AT YALE PITCH SLAM

5  
MONTHS IN RUN  
OF YALE INNOVATION  
REMIXED EXHIBIT



**Yale Pitch Slam**

This annual event, a community favorite, offers a chance for students to pitch any idea in a risk-free space. Roughly a dozen students pitched ideas from a superfood beverage to new space technology, before connecting with the audience to swap insights at a lively reception.

**Yale Innovation Remixed**

Tsai CITY partnered with the Marx Social Science Library to present a media exhibit that traced connections across Yale’s rich history of cross-disciplinary innovation. To mark the exhibit’s opening, we hosted a panel discussion with student innovators and a community reception.

**Yale Foodie Meetup**

This event brought together food innovation enthusiasts — from experimental home cooks to aspiring food entrepreneurs — to talk and, most importantly, eat.

**Black Innovator Talks**

In partnership with Echoing Green, Tsai CITY co-hosted a panel discussion on creating diverse funding streams for Black women entrepreneurs.

“I loved having people support each other’s ideas... I feel like there’s a real community.”

— Pitch Slam participant

# Student Advisory Board

Tsai CITY’s Student Advisory Board (SAB), composed of students from across Yale’s campus, plays a key role in shaping our work. Collectively representing a diversity of Yale experiences, these students offer insight and feedback on Tsai CITY programs, policies, and priorities.



**A Foundation of Student Leadership**

Since Tsai CITY’s launch, we have put student leadership at the core of our work. SAB members offer first-person perspectives on student needs, consider and refine program proposals, and help spread the word about Tsai CITY to their communities on campus.

This year, SAB members also proposed and executed a portfolio of special projects, forming teams to take on ideas they saw as especially pressing or promising. The teams’ contributions included conducting on-the-ground research on graduate student experiences, conceptualizing a student-run event, gathering and documenting insights and lessons learned from Yale entrepreneurs, and more.



**LAURA MITCHELL TULLY**  
Communications & Creative Director

One of the things I’m often encouraging our students to do is to invest time and energy in deeply understanding and learning from their core audiences. Working with the SAB has been an exercise in taking my own advice — and one of the most rewarding elements of building a communications

and outreach strategy in Tsai CITY’s early years. From website features to the nuances of campus event marketing, SAB members have directly shaped many elements of this strategy, and their ability to synthesize an on-the-ground view of the student experience with their belief in how Tsai CITY might enhance this experience has been invaluable.



# Startup Yale

827

UNIQUE ATTENDEES

\$70K+

TOTAL PRIZE FUNDING AWARDED

Startup Yale brings together Yale’s biggest entrepreneurship awards in two days packed with pitches, prizes, and world-changing ideas. This year, a rapid pivot allowed the April event to go on in the form of five live pitch-offs—attracting a record audience in the process.

“This year, as the finalists boldly pioneered a virtual pitch format...I was immensely proud to see everyone involved in the event rise to the challenge.”

— Ben Soltoff, Tsai CITY/ CBEY Innovation Fellow

Sabin Sustainable Venture Prize: Finalist Showcase

Given this year’s constraints, the organizers of this \$25,000 prize chose to hold a finalist showcase during Startup Yale, with the final pitch-off to follow in the fall. At this event, four finalist teams each received \$2500 and feedback as they pitched ideas for better soil sampling, a new urban forest economy, preventing damage from ice buildup, and a sustainably produced, nutrient-rich oatmilk.

Audience Choice Award Winner: Floe

David Dellal (GSAS), Hector Castillo, Mitchell Guillaume

Floe is an automated, safe, and energy-efficient solution to prevent the extensive water damage caused by ice buildup on roofs and similar infrastructure in the winter. Compared to the benchmark product, their sustainable solution offers customers significant cost savings and produces 1% of the emissions.

Rothberg Catalyzer Prize @ Yale: \$15,000 for AI or hardware solutions to medical challenges

Finalist teams pitched medical technologies collectively aimed at improving common processes like the patient customer journey and clinical trial selection, quickly and affordably diagnosing blood diseases, and empowering people to control their thermal comfort.

Prize winner: CtrlTrial

Guannan Gong (GSAS), Feimei Liu (GSAS), Weiyu Wang (SOM), Chris Keegan

Powered by AI and Natural Language Processing, CtrlTrial accelerates the patient screening process for clinical trials by automated scanning of trial protocols, patients’ electronic medical records, genomics data, and real-world data.

New Haven Civic Innovation Prize: \$10,000 to address New Haven community priorities

In its inaugural year, this new prize—a collaboration with the City of New Haven — drew an engaged audience and brought together students working in areas that include urban sustainability, youth homelessness, refugee support, and housing instability. Many of these teams touched on the impact of COVID-19 on

the communities they work with, and how they are working to respond to the crisis.

Prize winner: Havenly Treats

Ben Weiss (YC), Camila Guiza-Chavez (YC ’19), Caterina Passoni (YC ’18), Malak Nasr (YC ’19), Nieda Abbas

Havenly Treats is a food business and job and leadership training program for refugee women. Havenly is women-run and aims to become refugee-run by 2030.

Rita Wilson Prize Fund in Support of Innovation and Entrepreneurship: \$10,000 to address U.S. health disparities

This prize, also in its first year, featured finalists working to address problems like opioid overdose deaths, housing instability, and the need to monitor exposure to environmental contaminants.

Prize winner: KovaDx

Timothy Adamson (GSAS), Yaw Ansong Jr.

KovaDx is making the diagnosis of blood cellular morphological diseases quick and affordable by combining 3D Phase Imaging with Deep Learning.

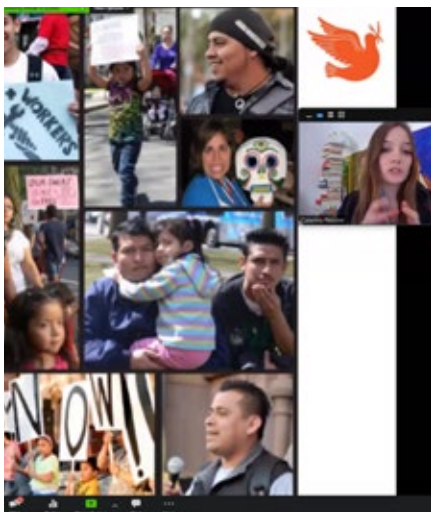
Thorne Prize for Social Innovation in Health or Education: \$25,000 for advancing public health or education

The Thorne Prize highlighted students working to increase access and equity in health and education, including teams working in fields that include rural development, refugee support, and the use of telemedicine and microinsurance.

Prize winner: ePharmHub

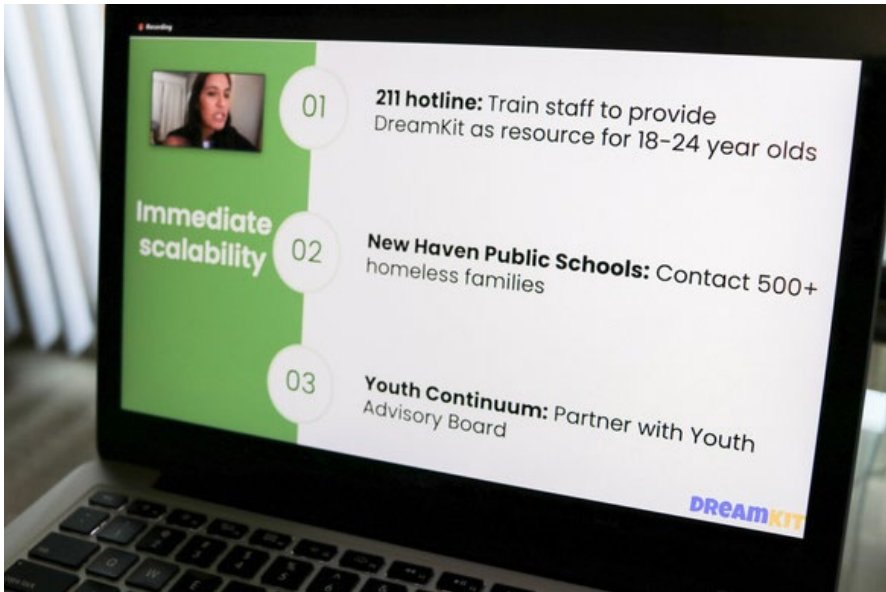
Leslie Asanga (YSPH), Leonardo Lizbinski (YSPH), Roger Loubafo Souke

ePharmHub offers a mobile application where patients can search medications and find pharmacies that have the medication in stock. For patients who cannot afford their medications, they can send a link to a relative abroad who can purchase the medication for them with just a few clicks.



“My biggest takeaway is how laser-focused Yale student entrepreneurs are on improving the world.”

— Clare Leinweber





# Labs & Initiatives

12+

GLOBAL INNOVATION SPEAKERS

9+

OPEN CLIMATE COLLABATHON LOCATIONS

Beyond our core programs and resources, Tsai CITY has helped catalyze strategic innovation offerings at Yale. With a focus on partnerships, these initiatives have aimed to gather energy around timely topics and goals.



### WE@Yale

Women Entrepreneurs and Innovators at Yale (WE@Yale), a partnership with the Yale SOM Program on Entrepreneurship, continued to foster a supportive community this year. The initiative's signature program, the Yale Women Innovators Series, welcomed speakers in fields from fashion to health for informal conversations over breakfast, while offerings like skill-building sessions and mentoring boosted access to resources for students from across campus.

### Knowledge Equity Initiative (KEI)

This initiative focused on how we can meaningfully and equitably value the knowledge gathered through lived and learned experiences to drive innovation. After two years of incubation at Tsai CITY, initiative leader Baljeet Sandhu looked to expand this work globally. In partnership with the Yale World Fellows Program, the KEI brought together global leaders at Yale to share their perspectives at the Global Innovation Symposium in October, a fitting launch into KEI's next phase.



### Yale OpenLab

Incubated over two years at Tsai CITY, the Yale OpenLab advances projects that link radically collaborative methods with emerging technologies to tackle global challenges like climate change. In November, the OpenLab organized a "collabathon" focused on building open-source blockchain tools for climate accounting, which drew over 300 registrations. Teams from New Haven, Singapore, Paris, and at least five other locations took part, and the project was presented during the 2019 UN Climate Change Conference.

# Mentoring

Mentoring is a key resource for our students. We offer mentoring through two primary tracks: office hours (which invite any student to chat with our core team about new ideas, feedback, or whatever's on their mind) and more structured connections between project teams and our robust mentor network.

### A year of growth

This year saw major growth in our mentoring program. We expanded our network, continuing to cultivate a committed, diverse community of mentors from all fields. We partnered on Yale-wide efforts like the launch of Cross Campus, an online platform to connect students and alumni, building an active online group for Yale entrepreneurs and innovators. We also streamlined our mentor matching process and delivered new offerings, like pop-up support sessions on key topics such as legal basics or marketing, to our cohort program participants.



### POP-UP SUPPORT

There are some topics students always tell us they'd love more mentoring on, like navigating legal basics, getting a marketing campaign off the ground, or scaling operations.

This summer, we responded to this feedback by pioneering a new offering called Pop-Up Support Sessions. Drawing from our volunteer mentor network, we put together a lineup that allowed student teams to quickly book targeted conversations with mentors who could share specialized expertise. Based on positive student feedback, we'll be bringing this format to more programs.

1424

OFFICE HOURS SESSIONS

408

MENTORS IN NETWORK

82%

OF MENTORS ARE YALE ALUMNI



### VICTOR PADILLA-TAYLOR

Director of Mentor, Advisor, and Partner Networks

When I've watched hundreds of students receiving help from alumni and friends of Yale who volunteer their time in support of ventures, nonprofits, and projects through mentoring, I have been inspired by the generosity of our community of

innovators. I have learned that scaling up these interactions is more about setting up multiple entry points of engagement, and also varied forms of mentoring (like office hours, thematic, and peer mentoring). Implementing this agile mentoring program has required technology, clear interaction pathways, and lots of active listening to understand the evolving needs of our students and how we need to recruit the mentors who guide them.



# Funding

\$275,400

TOTAL FUNDING AWARDED

We help students realize ideas through several funding streams, from core funds that make small grants for projects of all kinds throughout the year to a number of more tailored funds focused on specific topics and partnerships.

**Student Innovation Fund | \$14,660 awarded**

The Student Innovation Fund, which offers grants of up to \$500 on a rolling basis, supports students looking to advance an early-stage idea or project.

**Student Catalyst Fund | \$21,000 awarded**

The Student Catalyst Fund is an opportunity for current Yale students to apply for up to \$3,000 to take their business, project, or intervention to the next level. This fund is designed for students who have a prototype or operational proof of concept and are invested in the long-term success of their endeavor.

**Student Event Fund | \$9,640 awarded**

This fund offers matching funding of up to \$500 for student events related to innovation, from film festivals to hackathons and talks from guest speakers.

**Arts & Media Innovation Awards | \$2,500 awarded**

This program, a partnership with Yale's Asian American Cultural Center, supports student projects that use arts and multimedia methods to explore Asian American identity. Reflecting Yale's

50/150 celebrations honoring major anniversaries for women at Yale, this year's call for proposals included a particular focus on projects exploring notions of gender equity, masculinity, and femininity.

**Rothberg Catalyzer Prototyping Fund | \$8,600 awarded**

With support from the Rothberg Catalyzer program, we offer grants of up to \$1,000 to kickstart student teams who are developing innovative hardware or AI solutions to healthcare issues. These small grants — offered through the newly created Rothberg Catalyzer Prototype Fund — aim to support the earlier stages of Yale's pipeline for student innovation in medical tech, helping students advance projects that might ultimately become candidates for the Rothberg Catalyzer Prize at Startup Yale.

**Startup Yale prizes | \$25,000 awarded**

Tsai CITY manages two of the five Startup Yale prizes: the New Haven Civic Innovation Prize and the Rothberg Catalyzer Prize @ Yale.

**Accelerator and Summer Fellowship | \$194,000 awarded**

Cohort participants receive grants as part of these programs.



**REVEIL: EVERYDAY INNOVATION**

ReVEIL, an exhibit supported in part by the Student Innovation Fund and previous Tsai CITY funding, "celebrates the subversive use of space that immigrants must enact in order to sustain their daily lives." The project was created by architecture students Michelle Badr, Alexandra Pineda, Limy F. Rocha, and Brenna Thompson. For Badr, working with Tsai CITY has helped make interdisciplinary collaboration a powerful element of her time at Yale. "People are doing really great things," she says of the ideas she's come across here, "and there are ways that designers or architects can be very relevant to those conversations."



**INVISIBLE HANDS DELIVER**

As the COVID-19 pandemic spread in spring 2020, Yale College student Liam Elkind and his co-founders launched Invisible Hands Deliver, a community-based group of volunteers who safely deliver necessities (like groceries and medicine) free of charge to those most vulnerable in the New York City area. The grassroots network quickly took off, growing to over 12,000 volunteers by late spring. A Student Catalyst Fund grant enabled the team to scale their operations accordingly. "Thanks to your support, we can make sure that we're remaining as accessible as possible to people in need during this crisis," said Elkind in a May interview with Tsai CITY.



**A PIPELINE FOR MEDTECH**

In its first year, the Rothberg Catalyzer Prototyping Fund supported teams addressing medical challenges such as arthritis, opioid overdose, and lung cancer. After using the prototyping grants to further develop their ideas, several funding recipients were selected as finalists for Startup Yale prizes, and one funding recipient, KovaDX, ultimately won the \$10,000 Wilson Prize.



# A Growing Ecosystem

As we have refined and scaled our offerings this year, we have also prioritized partnerships across and beyond Yale, with an eye toward collective impact.

### The Yale Entrepreneurship Collaborative

Tsai CITY plays a lead role in catalyzing innovation and entrepreneurship across Yale’s campus. We work in close partnership with a range of sector-specific innovation centers across campus, who collectively represent fields from the arts and the environment to medicine and public health.

To foster strategic collaboration across this diverse group, we help lead the Yale Entrepreneurship Collaborative (YEC). This year, YEC achievements included launching entrepreneurship.yale.edu (a one-stop shop to explore innovation resources across Yale) and successfully launching a YEC-powered, fully virtual iteration of Startup Yale.

### A Growing Yale Network

We also work closely with the broader Yale community, including alumni and other friends of Yale. This year, we took part in the launch of Yale Angels, a new angel-investing initiative created by the alumni group Accelerate Yale. Boosting our virtual presence, we built one of the most active groups on the newly launched Cross Campus platform, which connects Yale students

**“We believe that [Tsai CITY] is a leader among I&E programs nationwide for strategies and practices that support diversity, equity, and inclusion.”**

— Quality Evaluation Designs

and alumni for networking, advice, and more. These efforts help build an infrastructure of support for Yale innovators and entrepreneurs, both during and after their time on campus.

### Impact Beyond Campus

Beyond the Yale community, we hope to help shape emerging conversations and practices that foster inclusive innovation. This year, we received a strong affirmation from a study for VentureWell, which found Tsai CITY to be a diversity, equity, and inclusion (DEI) leader among nationwide innovation and entrepreneurship programs. We have also shared lessons learned, elements of our organizational culture (such as our community norms or our staff meeting rituals), and other ideas with a variety of partners, several of whom have reported integrating these practices into their own work.



# Looking Ahead

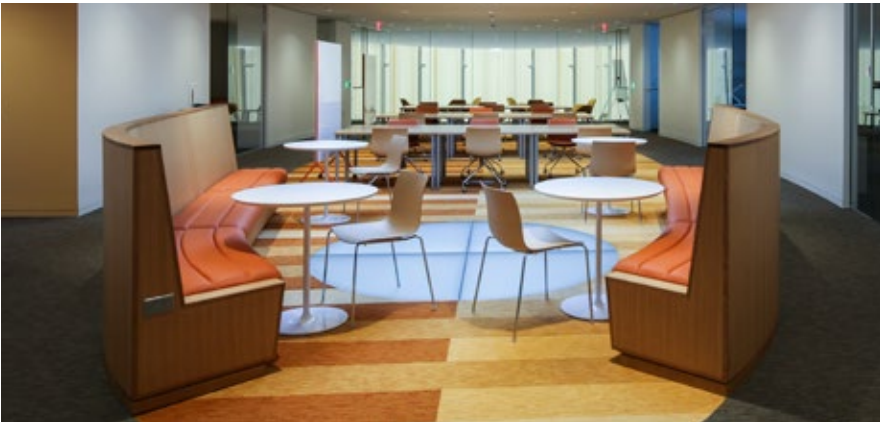
We are moving into Tsai CITY’s new home equipped with a wealth of lessons, insights, and inspirations from our first three years. As we launch this next phase, we are excited to advance our mission—and to continue to learn alongside our community of Yale innovators.

### What’s next

In August, we reached a milestone: the completion of construction on our new home, a 12,500-square-foot space on Becton Plaza. Although COVID-19 has delayed our ability to welcome students to the building, our team is eagerly preparing to welcome students once possible.

This fall, we also welcomed a new faculty director: Anjelica Gonzalez, associate professor of biomedical engineering. Bringing deep expertise in interdisciplinary research, mentoring, and diversity and inclusion, Gonzalez is an ideal faculty voice to help guide Tsai CITY’s next phase.

As we move into a new home, we’re excited to see how our community of innovators, entrepreneurs, creators, and leaders will fill the space with ideas. We can’t wait to help them turn those ideas into realities.



**ANJELICA GONZALEZ**  
Faculty Director

I am honored and excited to become the new Faculty Director for Tsai CITY. Yale is home to an extremely rich network of innovative and driven students, each of whom brings a unique perspective to creation and to diverse thinking. I am looking forward to helping guide the center and its students into a new and exciting programming year.





tsai center for  
innovative  
thinking

Yale