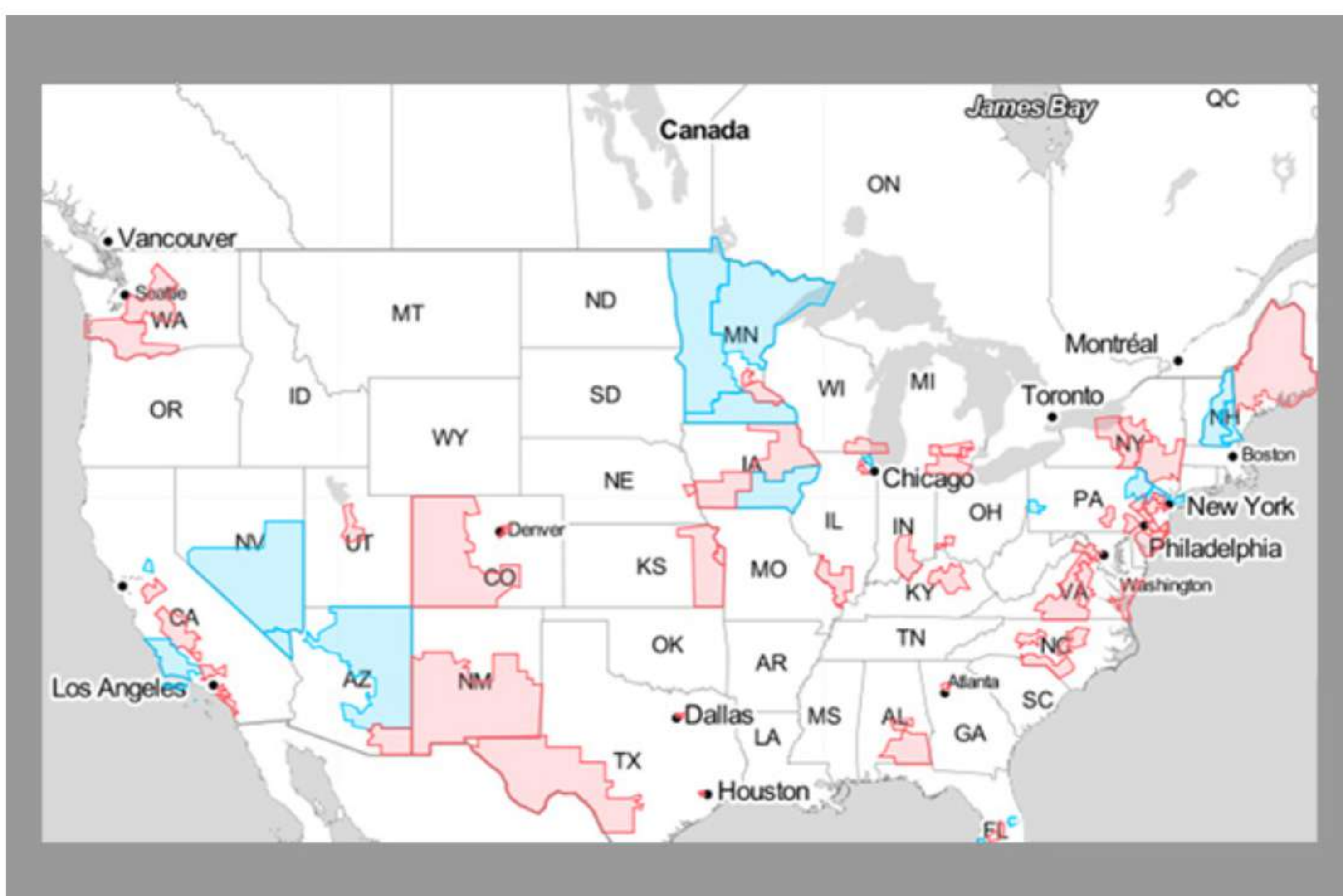


The Accidental Activist

Friday, February 2, 2018

Tufts alumnus Ethan Todras-Whitehill's career path took an unforeseen detour following the 2016 presidential election



By Dan O'Sullivan

President Donald Trump's stunning defeat of Hillary Clinton left some Americans ecstatic and others devastated. Ethan Todras-Whitehill, B.A., '02, fell into the latter category. But his sense of despair didn't keep him down for long.

"It was 10 a.m. the day after the election that I had the idea," he said. "I'm someone who goes through phases of grief quickly, I guess. I was already onto acceptance and trying to figure out what I could do next."

Todras-Whitehill's idea? [Swing Left](#), a political organization that's mobilizing progressive voters to take back the U.S. House of Representatives in the 2018 midterm elections and thus thwart the Trump/Republican agenda.



Ethan Todras-Whitehill, B.A., '02, founded the organization [Swing Left](#).

Of the 435 seats in the House, [Swing Left](#) considers 70 to be competitive. The organization is seeking a net gain of 24 seats from this group to enable the Democrats to regain control of the House. Visitors to [swingleft.org](#) can support progressive candidates in these so-called "swing districts" by volunteering time and donating money.

Just over a year since its launch, [Swing Left](#) is making a big splash. The question is, will it see its mission fulfilled this November?

A Sudden Change in Direction

Todras-Whitehill didn't grow up aspiring to a career in politics. At Tufts, he majored in English and political science, but the latter studies consisted primarily of political philosophy courses. "I didn't take a single class in the type of political science I'm doing now—nothing about elections," he noted.

In 2010, Todras-Whitehill married Jennifer Mendel Whitehill, B.S., '04, now a professor at the University of Massachusetts Amherst. They have two children and live in Shutesbury, Mass. As of 2016, Todras-Whitehill was working as a fiction writer, journalist and GMAT instructor. Political activism still wasn't on his radar.

Trump's longshot victory instantly changed Todras-Whitehill's priorities. After a long search that post-election morning, he realized there should be a tool for citizens to find their nearest swing district. Two of his friends, one a developer and the other a brand strategist, signed on to the idea. Together, they built the [Swing Left](#) website in December 2016 and then launched it the day before Trump's inauguration.

The response far exceeded Todras-Whitehill's expectations. "Through Google Analytics, I could see the number of users on the site at any given moment," he explained. "At first, it would be 20 or 30. Then a celebrity like Sarah Silverman or Chelsea Handler would tweet about us, and it'd go to a few thousand people. Pretty soon, we had 300,000 volunteers expecting us to tell them how to take back the House. I remember thinking, 'What are we going to do with all these people?'"

In true grassroots fashion, [Swing Left](#) has sparked the formation of self-organized teams around the country. Their collective focus, according to Todras-Whitehill, is on producing tangible results, not just doing something that "feels good."

"Two things that we know make a difference are raising money for a candidate and knocking on doors and talking to voters on behalf of a candidate," he said. "Those activities are critical, especially with midterm elections."

On the fundraising front, [Swing Left](#) has come up with an innovative way to support Democrats running for the House. Through an initiative called [District Funds](#), donors can give to a pot of money that will go to the eventual Democratic nominee in a swing district. (Democratic incumbents receive the money right away, while Democratic challengers need to win their primary first.) As of late January, [Swing Left](#) had raised nearly \$4 million for this purpose.

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No Time for Complacency

Although Todras-Whitehill didn't study election politics at Tufts, he feels his education prepared him well for what has become a full-time role with [Swing Left](#).

"It wasn't so much about any particular subject matter I learned there. It was about developing pathways in my brain," he said. "I gained different perspectives through exploring different disciplines, and that's something I bring to my current work. I like exploring new ideas and trying them out. The spirit of experimentation and interdisciplinary connections are things you develop as part of a liberal arts education."

Looking ahead to November, Todras-Whitehill is optimistic about the Democrats' chances of taking back the House. After all, the party of the sitting president has historically lost seats during midterm elections, and Trump's approval rating remains mired around 40 percent.

"Generally, the odds look good," he offered. "We could win 24, 30, 40 seats—nobody knows. But we have to put our nose to the grindstone and get to work. Because if 2016 taught us anything, it's that we can't sit back and wait for progress to happen. It's up to us to make it happen."

Stigma No More

Tuesday, January 22, 2019

SMFA at Tufts alumna and visual artist Lynda Michaud Cutrell has focused her career on changing perceptions about mental health.



By Dan O'Sullivan

Lynda Michaud Cutrell (SMFA Post-Baccalaureate '07, Studio Diploma '08, Fifth Year '11) spent 25 years working in finance. All the while, she dabbled in art on the side, with the aim of capturing beauty in painting landscapes and traditional art.

Then, Cutrell quit her job to study painting at the School of the Museum of Fine Arts at Tufts University (SMFA). The experience changed her approach to her art practice in radical ways.

"I never used to think about the meaning of my art; I was only concerned with making it aesthetically pleasing. SMFA challenged me to think conceptually and spark dialogue," recalled Cutrell, now a visual artist at SOWA Artist Studios at 450 Harrison Ave. in Boston's South End. "Then, when someone in my family was diagnosed with psychosis, I just couldn't paint meaningless landscapes anymore. I wanted to use art to express what was going on and see if I could start a discourse about mental illnesses."

Cutrell has since pursued this direction in her work with considerable success. Now she is bringing a collection of neuroscience-informed sculptures, large-scale portraits, paintings, and videos on the subject of mental health and stigma to Tufts University. *The Many Faces of Our Mental Health*, an installation at the Collaborative Learning & Innovation Complex (CLIC) at 574 Boston Ave. in Medford, is on view until March 25, 2019.

Cutrell's exhibit is part of *Stigma Unstuck: A Mental Health Arts Series at Tufts*. This multi-event art and film series is aimed at enhancing awareness and understanding of mental health issues to facilitate shifts in attitudes that perpetuate stigma and discrimination. *Stigma Unstuck* is being coordinated by the Department of Community Health at Tufts and the Community Health Improvement Department at the Cambridge Health Alliance. Additional arts events focused on mental health are planned or in development for the rest of the 2018-2019 academic year.

An opening reception for the exhibit and the *Stigma Unstuck* initiative will take place at CLIC from 5 to 7:30 p.m. on Thursday, Jan. 24, 2019.

Engaging Students Through the Arts

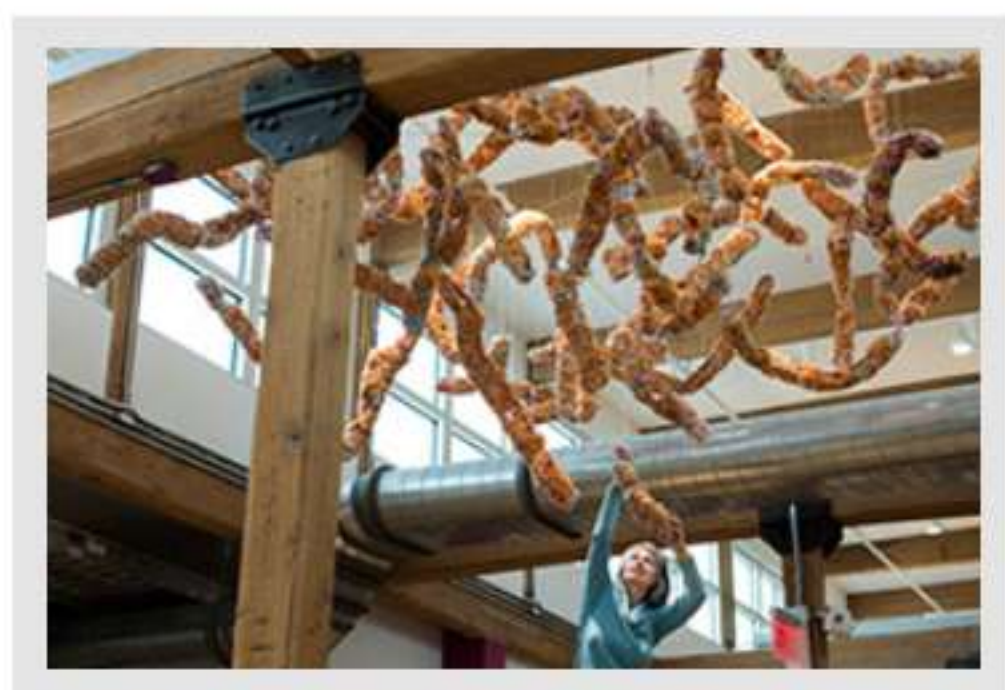
Tufts has identified mental health and stress as important public health problems, as evidenced by the 2016 launch of the [Mental Health Task Force](#). As Jennifer Allen, professor and chair of the Department of Community Health, points out, rates of depression, anxiety, and suicidal thoughts are soaring among college students nationwide. She believes art can be part of the solution.

"It's been a dream of mine to bring students into difficult conversations through the arts," Allen said. "In the past, our department has partnered with the theatre, dance, and performance studies programs to talk about issues like homelessness. *Stigma Unstuck* is a much broader, multifaceted, multi-event initiative. And we have much more planned to bring in more artists and explore how to integrate the mission of *Stigma Unstuck* into the classroom."

Cutrell teamed with Bruce Cohen, M.D., Ph.D., a neuroscientist and former president of McLean Hospital, and Rae Simpson, Ph.D., a science journalist, to create *The Many Faces of Our Mental Health*. Her goal is to both educate visitors about mental illness from a scientific perspective and provide inspiration by highlighting people who have had success in dealing with the challenges of mental illness.

"It's a new approach," Cutrell said. "We have champions in every walk of life — amputees who have thrived despite their challenges, people with ALS who are champions of inspiration, people with cancer who are surviving and fighting. Although hidden, there are plenty of champions in the area of mental health, too, but the concept hasn't quite been revealed due to stigma. This exhibit opens that view of mental health champions."

The Diversity Is Intentional



Lynda Cutrell hangs her sculpture of the full human DNA sequence in the CLIC building.

several MBAs, and 22 veterans. All of this is intentional, as Cutrell wants every viewer to be able to identify with the faces they see.

A sculpture depicting the DNA strand in someone with mental illness symptoms is one of the most striking pieces in the exhibit. Cutrell incorporated four miles of fiber (representing the genes) to make it to scale, along with pearls and sequins (the proteins, histones, and amino acids) placed strategically on the twisted fibers. Twenty-five people, all of whom had had symptoms of schizophrenia or bipolar illness, helped assemble the work over a six-month period.

"I decided I'd break it open a bit, delve into the science, and use art as opposed to lectures or things like that to invoke some discussion," Cutrell said. "People can look at this piece and say, 'Mental illness can impact different people in different ways.' That's something I learned at SMFA — if you leave it open, people will figure out their own relationship to the piece. For someone in science, it might be all about the genetics. Someone who's into art may be wondering, 'What's that sculpture made of?' or 'How did you do that?'"

A trio of paintings featured in the exhibit has an interesting back story. In order to better understand her family member's illness, Cutrell met with neuroscientists at McLean Hospital who were studying it. They shared with her a dense research paper that took her three months to fully digest.

Cutrell translated what she learned into three paintings contrasting skin cells in people with schizophrenia, with bipolar illness, and those without any symptoms. "Art makes the paper accessible," she said. "I'm showing that mental illness isn't just behavioral thing, but rather is a systemic condition. It's not something that's caused by a family member; it's truly a biological symptom."

"As people understand more about the real science of our mental health, they can become comforted by it."

'Likable, Functional, and Valued'

Outside of her artwork, Cutrell has been a long-time advocate for people struggling with mental illness. She served on the National Alliance on Mental Illness (NAMI) Massachusetts board of directors for five years, including several as board president, and on the national NAMI board of directors.

In addition, Cutrell has been active in Massachusetts and nationally in pushing for training to teach police officers how to handle a crisis involving someone experiencing symptoms of mental illness. "If police officers and other first responders can appreciate how common this is and how to best deal with people in a mental health crisis, we'll have more success and fewer violent incidents," she said.

In 2018 *The Many Faces of Our Mental Health* had runs at Boston's Museum of Science as well as Salem State University and Gordon College. The next stop after Tufts is the Dartmouth-Hitchcock Medical Center, part of a health care system that trains nearly 400 medical residents and fellows a year and performs world-class psychiatric research. Cutrell believes she can make the biggest impact by educating young people on how to get treatment for mental illness and how to support their friends who are struggling.

"The biggest obstacle to treatment is self-stigma," she said. "People are less likely to reach out to get treatment because they're afraid; they think it's equivalent to some kind of worthlessness. This exhibit shows people who are likable, functional, and valued regardless of symptoms."



From Tufts to STEM Advocate

Tufts Ph.D. candidate Amanda Strawhacker is helping to develop a tool to foster a love for science, technology, engineering and math in young children

By Dan O'Sullivan

Can a four-year-old actually learn core concepts of bioengineering? The answer is a resounding "yes," according to Amanda Strawhacker, a "Double Jumbo" now working toward her Ph.D. at Tufts' Graduate School of Arts and Sciences.

Strawhacker is a doctoral research assistant in the Developmental Technologies (DevTech) Research Group, part of the Eliot-Pearson Department of Child Study and Human Development. She is leading DevTech's collaboration with the Human Computer Interaction Lab at Wellesley College on CRISPEE, a developmentally appropriate tool to teach K-2 students about genetics and biodesign.

Educating children on these topics at such a young age is critical, Strawhacker contended. "We know kids develop deep-seated stereotypes about who's able to participate in STEM (science, technology, engineering and math) professions very early on," she said. "Other Ph.D. students at Tufts have done pivotal work demonstrating that girls and minorities don't engage in STEM starting at age nine. They're driven away from it."

With CRISPEE, Strawhacker hopes to chip away at harmful stereotypes and show children that people of all genders and backgrounds can excel in bioengineering and other STEM fields. The tool is currently being piloted at Tufts, Wellesley College and Boston Children's Museum.

Overcoming Negative Preconceptions

Strawhacker, a Delaware native, has personal experience dealing with gender-based stereotypes. In fourth grade, a teacher told her it was fine if she wasn't strong in math because "most girls aren't."

"It's a systemic issue," she said. "As a society, we have a lot of preconceived notions about what boys and girls are good at."

While researching colleges years later, Strawhacker became interested in Tufts because of its strong international identity and diverse student body. She applied early decision to the undergraduate program and was accepted for the 2007-2008 school year.

After taking a course on biological anthropology her first year, Strawhacker decided to major in anthropology. She wrote a paper during her final semester on how children experience emerging tools and technologies. In doing the research, she came across the Eliot-Pearson Department for the first time. Pleasantly surprised to find a department on campus that was doing work so closely related to her paper topic, she subsequently applied and was accepted to its Child Study and Human Development master's program.

Learn more about [Child Study and Human Development graduate programs at Tufts](#).

[Child Study and Human Development Graduate Programs](#)

Sticking at Tufts

Strawhacker graduated with a Master of Arts in Child Study and Human Development in 2013 and then spent two years at DevTech working on ScratchJr, a research project to develop a tablet-based programming environment for young children. She chose to pursue her doctoral studies at Tufts based on her fondness for DevTech and her close relationship with her advisor for her master's program, Marina Umaschi Bers, professor and chair, Eliot-Pearson Department of Child Study and Human Development. ("No matter how busy she is or how crazy her workload," Strawhacker said, "she still takes the time to ask how my family's doing or about my program. I owe her so much.")

In 2017, Strawhacker began working as the lead student researcher on a collaborative project between Tufts and Wellesley College. The goal is to design a suite of tools to introduce bioengineering to a range of ages, starting in kindergarten to second grade.

CRISPEE is a tangible tool designed for this early age range. It's modeled on the CRISPR/Cas9 platform, which "edits genes by precisely cutting DNA and then letting natural DNA repair processes to take over," according to the CRISPR Therapeutics website. CRISPR enables gene scientists to cut and paste sections of genes as easily as we change typos in an email or a piece of code in a program.

For CRISPEE, Strawhacker said, the research team borrowed the notion of DNA as a coding language to illustrate how bioluminescence works. Using the tool, which looks a bit like a cash register, students first build a program that consists of genes that code for colors — red, green and blue — and can be mixed to create a unique color. (Bioluminescent animals, such as fireflies and jellyfish, have some of these genes in different combinations, resulting in different colors for their naturally glowing parts.)

Students build their colorful programs on the CRISPEE tool and physically mix their edited gene programs into an animal's genome — a process that simulates CRISPR's centrifuge process. Finally, by pressing a button, they express their gene code as a new-colored light on their choice of bioluminescent animal, allowing the animal to glow in their selected color.

In addition, students can work with genes that trigger animal senses. For example, a child can make a firefly that glows green until it smells toxic air pollution, at which point it glows red as a kind of natural alarm system. All of these ideas are based on real-world projects that professional bioengineers are currently experimenting with.



Amanda Strawhacker conducts a research study with local children at the Eliot-Pearson Children's School at Tufts

A Most Timely Topic

CRISPEE incorporates elements of physics, chemistry and natural science, but the main focus is introducing children to the world of bioengineering. The topic, Strawhacker said, couldn't be timelier.

"Bioengineering already impacts our lives in really subtle and nuanced ways," she explained. "You probably ate genetically modified food today. You almost certainly have had medicines that were genetically engineered. There's also a huge debate about things like 'designer babies'."

"This kind of innovation is happening at a pace that's beyond the scope of what we can even understand. I don't think in a hundred years we've had the same level of a technology that is at once so powerful and so destructive since the atom bomb. There's nothing that compares with it. We can now change human evolution — period."

For this reason, the CRISPEE project has a strong ethical component.

"We bake in every step of the way that when we do bioengineering, we need to think about why we're doing it, who it's benefitting and whom it could be harming," Strawhacker said. "What are the consequences? We're changing an animal's DNA. Is that okay, or not okay?"

Ultimately, Strawhacker isn't looking to cultivate the next generation of bioengineers. Rather, she's aiming to instill in young children a more nuanced understanding of life — and how the meaning thereof has changed with the advent of technologies like CRISPR.

"'Nature versus nurture' — that's totally out the window now, but we still have to think about the difference between a technology and a creature," she noted. "I want to give kids a tool to think about that because they're born into a world where biology and technology are already fusing. And if you don't have a framework to understand the differences, it will be really difficult to understand who you are."