RISK AND REWARD

Customers expect companies to take a stand on sociopolitical issues, but those actions can have expensive consequences.
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On the cover: Yashoda Bhagwat, standing next to the “Man With a Briefcase” sculpture in downtown Fort Worth, has researched the risks and benefits of corporations taking a sociopolitical stand. Photo by Rodger Mallison
Welcome to Endeavors magazine.

The spring 2022 issue of Endeavors demonstrates the depth and breadth of research and creative activity that sets Texas Christian University apart as a world-class, values centered, comprehensive university. TCU remains committed to scholarship that serves our local and global communities, elevates society, and engages our students in research and projects with true impact. The articles contained within this issue demonstrate that our faculty, staff and student scholars remain inspired by this commitment and TCU’s mission.

Given the range of talented leaders and rich variety of scholarly pursuits at TCU — a university housing 10 schools and colleges, including a new School of Medicine — choosing which stories to highlight is our greatest challenge. In this magazine, we strive to show the impact of our scholastic inquiry on society and the human experience. Consequently, I urge you to take time to read and reflect; I’m sure your time will be rewarded, and you will walk away a better person, just as I have.

Thank you for the privilege of presenting TCU research and creative activity. We encourage you to learn more at research.tcu.edu. Our Horned Frog scholars are amazing people, and we invite you to join us as we “Endeavor” to do more.
HIGH-STAKES STANCES

Knowing customers helps firms assess the risk versus reward of speaking out, Yashoda Bhagwat says.

BY JASON ROBERSON
After a February 2018 school shooting left 17 people dead in Parkland, Florida, Delta Air Lines CEO Ed Bastian decided to end the carrier’s discounted airfare program for National Rifle Association members.

“When you make a decision like that, it’s partisan and it’s public,” said Yashoda Bhagwat, an associate professor of marketing at TCU. “It’s either going to really upset your stakeholders or really please your stakeholders.”

In the decision, Bastian satisfied some of the public outcry from people worried about gun ownership and its links to violence.

But then legislators in Georgia, the home state of Atlanta-based Delta, rescinded the carrier’s estimated $40 million tax break. NRA supporters threatened boycotts.

“I knew there would be backlash, but I didn’t anticipate the strength of the backlash from the NRA movement,” Bastian told Fortune magazine that August.

What if Delta’s corporate leaders had been able to predict investor and customer reaction — and its price tag — before making that decision on the discount program?

Bhagwat answered questions such as those in her award-winning paper “Corporate Sociopolitical Activism and Firm Value.” Her research is the first to examine the financial consequences of corporate sociopolitical activism, which she defines as the public demonstration of support or opposition to a partisan issue.

Take, for example, Nike’s support in fall 2017 for NFL players who knelt during the national anthem in protest of police brutality. In contrast, John Schnatter, CEO of Papa John’s Pizza, criticized NFL leadership for allowing the kneeling. The pizza chain found itself in the middle of a hot sociopolitical issue. A month later, Schnatter stepped down as chief executive of the company he founded.

“In the past, companies donated silently to political parties and then publicly participated in nonpartisan activities,” Bhagwat said. “But what’s the overall effect of them now publicly donating and getting involved in partisan issues? Investors, on average, don’t seem to like it.”

Leading a team of marketing researchers from around the country, Bhagwat analyzed 293 corporate sociopolitical actions initiated by 149 firms across 39 industries.

The scholars’ resulting Journal of Marketing paper won the 2020 H. Paul Root Award from the American Marketing Association and the Marketing Science Institute.

Awards are nice, but their research, if heeded, could help companies protect their brands and add shareholder value.

**OFF THE FENCE**

More than three years after the Parkland shooting, Bastian is reflective but unregretful. He represents a new breed of CEO who is somewhat forced to take a stand.

“We have found that consumers notice and react to firm silence when other firms in the same industry — competitors — engage in activism,” Bhagwat said. “They also notice when firms are silent on particular issues when they engage in activism on other related issues. In other words, consumers want consistency.”

Her ongoing research indicates that some consumers were angry at Nike for taking a stand on Black Lives Matter but remaining silent on protests in Hong Kong.

“Growing up in the business world, you’re generally taught to keep your head low and make sure you don’t land on the front page,” Bastian said in a 2021 Fast Company article. In the last five years, “the level of the divisiveness in our society has actually elevated corporate leaders to a higher position of credibility in the public’s eye.”

Ed Stewart, assistant vice president for communications and marketing at DFW International Airport, knows Bastian well.

From 2008 to 2010, Stewart was Delta’s managing director of external corporate communications.

Stewart cited examples of how his leadership team responded to airport employees after the disturbing video of George Floyd’s 2020 murder. Those efforts included the leaders holding listening sessions on race relations.

**RISKING CONTROVERSY**

_“WE HAVE FOUND THAT CONSUMERS NOTICE AND REACT TO FIRM SILENCE WHEN OTHER FIRMS IN THE SAME INDUSTRY — COMPETITORS — ENGAGE IN ACTIVISM.”_ Yashoda Bhagwat

“It’s hard to tell your eyes you didn’t see what you thought you saw,” Stewart said. “Now you’re in a situation where you have to address the obvious elephant in the room that’s always been there. And you can’t sugarcoat it; you can only call it what it is.”

**INHERENT RISK**

Corporate sociopolitical activism involves potentially offending the personal values of at least some of a company’s customers, employees and lawmakers. On the flip side, Bhagwat said, activism can boost sales and build a brand by reflecting buyers’ core values.

Bhagwat’s team found that investors generally see corporate sociopolitical activism as risky; investors said outspoken, politically charged stances can jeopardize cash flows and may divert the firm’s efforts from activities that maximize shareholder value.

The researchers also found that it matters if a company’s actions deviate from the values held by customers, employees and lawmakers as well as from the firm’s brand image.

For example, Starbucks tends to attract customers on the progressive side, whereas Chick-fil-A customers lean toward the conservative. If those corporate leaders take a stand that goes against brand image, customers likely will penalize them.

Consider the backlash that Target Corp.
faced when the retail giant announced an inclusive restroom policy for its 1,800 stores in support of transgender individuals. Target’s decision was spurred by a North Carolina law requiring people to use the restroom corresponding to their gender assigned at birth. Target announced in April 2016 that it would be sympathetic to transgender concerns.

Within months, the American Family Association, a conservative Christian advocacy group, collected over 1 million online signatures in a pledge to boycott Target. Target faced an immediate dip in sales revenue in second quarter 2016.

In response, Target announced it would spend $20 million to build more single-stall restrooms that can be locked for privacy.

**COMMITMENT LEVEL**

Bhagwat’s research found that investors watch a company’s commitment of time, capital and attention devoted to speaking out on politically charged issues, such as racial injustice, gun rights and gender identity. After former President Donald Trump placed a hold on allowing refugees from Syria and six other Muslim-majority countries into the United States, Starbucks CEO Howard Schultz announced that the company would hire 10,000 refugees within five years.

While most corporate bosses stayed silent on the issue, Starbucks’ sociopolitical activism went beyond a statement to an actual hiring commitment. The world’s largest coffee chain quickly faced a firestorm on social media. In response, Schultz said the company would speed up a previous commitment to hire more veterans and military spouses.

Investors also watch whether the stance promotes a business interest and whether the company is going it alone versus joining a chorus of other businesses.

If a company is the lone voice on an issue, offended customers are more likely to switch to competitors. But there is safety in numbers. Some corporate activism events proved harder to classify, Bhagwat’s research revealed. Overlapping factors sometimes create a public relations quagmire. For example, a manager of a company such as Whole Foods might feel pressured to engage in liberal-oriented activism to appease a liberal-leaning customer base but also fear retaliation from a conservative legislature like Texas’.

Bhagwat’s team found that investor reaction is generally adverse when a sociopolitical action offends at least two key stakeholder groups. Her research could be used for predictive modeling to determine whether a proposed sociopolitical action is worth the likely downfall.

The linchpin to keeping investors calm about a particular sociopolitical move is to make certain the decision aligns with customers’ values, Bhagwat said. “Investors are inclined to punish [activism] that highly deviates from customers, and customers are inclined to reward [activism] that closely aligns with their values.”

Bhagwat said the tension between shareholder value maximization and social responsibility is not new. Investors want to make money. Any deviation from a plan to get them the most return — no matter how noble the cause — raises eyebrows.

**BUILDING A COMPASS**

Julie O’Neil, professor and associate dean for graduate studies and administration in the Bob Schieffer College of Communication, has spent years studying the impact of corporate social responsibility efforts. Over the last 10 years, she said, customers have increasingly demanded that brands do more than just make profits.

“People expect companies to get involved,” O’Neil said. “They’re saying that it’s not just the role of government to solve some of our big societal issues and problems.”

Before engaging in a social project seemingly unrelated to the core business, companies should conduct an accountability and authenticity gut check, she said. “The CEO or someone in the company needs to ask, ‘Does this issue — whether it’s racism, the environment or women’s rights — does it align with the mission, purpose or values?’”

She cited Patagonia, the designer of outdoor clothing and related gear, as an example of a brand whose environmental activism matches its mission, purpose and values. Patagonia sponsored an online petition opposing the Dakota Access Pipeline, pointing to climate concerns and harm to working-class communities near the pipeline.

Daniel Pullin, John V. Roach dean of the Neeley School of Business, said the topic of corporate sociopolitical action is motivating students. Today’s business students are in a position to shape how corporate leaders respond to social issues, he said.

“As a society, we haven’t seen this type of enthusiasm among students since probably the late 1960s,” Pullin said. “Students are coming to classes believing they can make a difference beyond themselves and be a force for good.”

Those business students soon will be at the helm, navigating tomorrow’s complicated seas of moral obligations, societal pressures and fiduciary responsibilities. Bhagwat’s research is an award-winning guide to creating those capable leaders.
PUTTING STOCK IN A CEO

Extrovert or introvert? Joseph Harrison finds personality traits often matter to investors.

BY BARRY SHLACHTER

WHETHER QUIET AND CONSCIENTIOUS OR EXTROVERTED AND EGOTISTICAL, a CEO’s personality influences investor confidence.

Joseph Harrison, assistant professor of strategy in the management and leadership department at TCU’s Neeley School of Business, theorizes that a CEO’s personality traits are linked to stock performance. He was lead author on a related study first featured in the Harvard Business Review and later published in the Academy of Management Journal. “We’re not saying there’s a direct relationship between personality and stock price,” Harrison said. “All we’re saying is there’s a relationship between how the market perceives an executive’s ability to translate risk into value and actual shareholder returns.”

Harrison cited Elon Musk, the eccentric Tesla CEO who has spoken of nuking Mars. While responses to Musk’s outlandish statements might not have anything to do with Tesla’s electric cars, but they could prompt investors to wonder if his actions create value for the company. “I think it can be a deterrent to investors: ‘Hey, this guy’s a little unstable. Maybe we shouldn’t be investing right now,’” Harrison said.

Jon Maietta, founder of CEO Rater, agreed. “The key takeaway from Joseph’s study is that it is another data-supported effort that demonstrates that a given CEO’s personality affects company performance,” said Maietta, whose platform allows people to anonymously assess companies and their chief executives.

Harrison said traditional economic theory tended to ignore the human aspect of running companies.

He and his co-authors, Gary Thurgood of Utah State University, Steven Boivie of Texas A&M University and Michael Pfarrer of the University of Georgia, focused on the five big personality traits: Conscientiousness refers to the degree to which a leader exhibits dependability and cautiousness. Neuroticism includes emotional instability and impulsiveness. Extraversion means a person tends to be gregarious, ambitious and dominant. To a lesser extent, they evaluated a CEO’s openness to experience as well as agreeableness.

To quantify their ideas, the researchers enlisted psychology doctoral students to rate about 200 CEOs on the five traits by watching videos of the CEOs in interviews or other public exchanges using the International Personality Item Pool, a well-established survey instrument. The validated scores were used to train an algorithm to assess those traits based on the CEOs’ spoken language during quarterly earnings calls with stock analysts. The algorithm analyzed more than 100,000 transcripts of CEOs speaking with equity analysts between 1993 and 2015.

The researchers then linked those personality assessments to shareholder returns.

On average, the firms of relatively more conscientious CEOs experienced 2.59 percent lower stock risk. Publicly traded corporations of more neurotic (relative to more emotionally stable) CEOs had 2.04 percent higher stock risk on average, and this increasing risk did not yield any returns, while returns of emotionally stable CEOs were 2.68 percent greater.

And the more extroverted CEOs saw their firms experience 2.4 percent higher stock risk, with returns reduced 3.3 percent. At firms of their introverted counterparts, returns rose 5.43 percent when compared with companies led by those with extroverted traits.

“In financial markets, where every percentage point matters, the fact that any given trait on its own is associated with such a bump could be very meaningful for firms and investors,” Harrison and his co-authors wrote in the Harvard Business Review.

For an average firm in their sample — with a market capitalization of about $7 billion — a 2 percent to 5 percent change in return could mean $140 million to $350 million in value created or destroyed, they wrote.

Publicly traded companies should avoid selecting highly neurotic individuals as a CEO, and they should also pay attention to extroverted candidates, who tend to be promoted to higher positions more than introverted rivals, the Review article concluded.

Harrison’s findings suggest that introverts may manage risks better, which in turn inspires investor confidence.

Key to the study was the Open Language Chief Executive Personality Tool, which Harrison developed with Alexander Gedranovich, a Belarusian machine-learning expert and programmer. The test crunches an executive’s spoken language that is observable to market participants.

Harrison had long suspected that some type of quantifiable explanation was missing in the quest to evaluate corporate performance. By linking CEO personality traits to shareholder returns, he is shedding new light on factors that might be moving the invisible hand in the market economy.
Healing Through History

Benjamin Ireland sheds light on a little-known WWII tragedy and reunites a family in the process.

By Lisa Martin

Benjamin Hiramatsu Ireland's passion for history changed the destiny of a family across the world.

The story began the day after Pearl Harbor on a small archipelago roughly 900 miles east of Australia, when the lives of more than 1,000 Japanese migrant workers and their families forever changed.

The men had come to New Caledonia to work in the nickel mines. Fearing they were enemy spies, Henri Sautot, governor of the French territory, sent a fateful telegram on Dec. 8, 1941. In it, he directed New Caledonia's French authorities to arrest all of the Japanese people on the island.

Government officials deported more than 1,000 men to Australia, where they lived in concentration camps until 1946.

Left behind, the Indigenous wives of the Japanese laborers struggled to make ends meet.

Additionally, French authorities revoked the French citizenship of their half-Japanese children. Stateless and powerless, these children were also dispossessed of their fathers' inheritances.

The men suffered in Australia, particularly toward the end of their internment when false rumors circulated that the French had killed mixed-race Japanese in New Caledonia or sent them to prison camps where they subsequently died from malnutrition.

After the war, the Australian government deported the detainees not to New Caledonia but to their native Japan.

Ireland, an assistant professor of French, grew up listening to stories about the Japanese military from his grandfather. As a sergeant major in the Imperial Japanese Army, Kaoru Hiramatsu had taught seamen deployed to New Caledonia, which has a 21st-century population of almost 289,000.

As a student of military history, Ireland became enthralled with New Caledonia, at first because of the archipelago's key geopolitical role on account of its proximity to Australia and its wealth of minerals. His interest increased once he learned about the role of Japanese citizens in the island's economy.

"As there are more than 8,000 descendants of Japanese living in New Caledonia today — descendants whose heritages are a product of mixed sociocultural and biological presences of Native, Asian and French populations — the country manifests an incredibly unique French-Asian-Indigenous sociocultural fabric," said Ireland, who began learning French and Japanese simultaneously at age 7.

As he struggled to find out more about the Japanese workers and their fates, an idea struck.

What if many second-generation family members in Japan had no idea they have relatives residing in a French territory 4,300 miles to the southeast?

Humanitarian Aide

Ireland received grants from TCU in 2018 and 2019 that helped fund research trips to New Caledonia.

"This kind of research is crucial to foreground DEI [diversity, equity and inclusion] within the modern language studies classroom," Ireland said. "We show our students how faculty research enriches the diversity of the curricula while advancing why studying the languages and histories of those marginalized and persecuted, like the Japanese in New Caledonia, is so transformative."

He also stresses to students that the true nature of research should be humanitarian and offer new visions for futures that contribute to the greater good.

In June 2018, Ireland traveled to the Australian capital of Canberra to conduct research at a branch of the National Archives of Australia. Those archives house more than 40 million records. He had a single day there before heading to New Caledonia for two weeks of ethnographic fieldwork.

Ireland searched through thousands of pages of military intelligence but encountered nothing about the Japanese in New Caledonia or sent them to prison camps where they subsequently died from malnutrition.

"My foreign language skills have allowed me to apply critical thinking across three languages, traversing cultural interstices with nuances," Ireland said.

Toward the end of this marathon session, a single piece of paper drifted from the binder.
“It has been only recently that the history of the Japanese in New Caledonia has been told by researchers and historians. It has remained for decades a very taboo subject to talk about even within families.”

Benjamin Ireland, assistant professor of French

and landed in his lap. As he'd done all day, he snapped a photo of the page before wrapping up his work.

Days later in New Caledonia, Ireland, armed with his computer, camera and Clif Bars, negotiated local buses to get into the mountainous interior of the main island.

The former honorary Japanese consul had connected Ireland with descendants of the nickel mine workers. Ireland said he spent weeks “out in the middle of nowhere listening to second-generation children, most of whom were in their 80s, talk about their lost fathers and family history.”

One of his guides asked if the professor had spoken with Aimé Terada Arawa, who lived in a commune in the South Province of New Caledonia. Arawa’s name was not on Ireland’s list.

The man explained that Arawa’s Indigenous mother had died giving birth to him, so his father’s internment in Australia rendered him an orphan. But he warned that Arawa wasn’t likely to share details of his difficult childhood.

Undeterred, Ireland tracked Arawa down and persuaded him to discuss his past in the company of his granddaughter.

“Aimé had held a great mistrust toward researchers and was heavily against all things Japanese: the culture, the language, as well as his Japanese heritage,” Ireland said. “Aimé felt this way precisely because he thought his father had abandoned him.

“It has been only recently that the history of the Japanese in New Caledonia has been told by researchers and historians. It has remained for decades a very taboo subject to talk about even within families.”

Wrenched from his only living parent when he was 4 or 5, Arawa had no memories of his father. Arawa was raised by his mother’s family, who were Kanak, New Caledonia’s Indigenous inhabitants.

Arawa’s family would hide the fact that he was half-Japanese, which reinforced his belief that his father had abandoned him, something most children in Arawa’s situation also believed. For most of his life, Arawa grew visibly upset when someone asked him if he was part Japanese.

His Japanese heritage was a source of shame, he told Ireland through his granddaughter, Aurélie Filimoehala, who translated the Indigenous language of Kanaky into French. Like most of those living in New Caledonia, Filimoehala also speaks French.

“As I was talking with Aimé, I heard a voice in Japanese in my head say, ‘the paper,’ “ Ireland said. “ ‘What paper?’ I kept thinking.”

Ireland paused in the middle of the interview to look at the page he'd photographed in the Australian archive, the one that had fluttered onto his lap.

ANSWERS AND QUESTIONS

Ireland stared at the photo. He asked Arawa and Filimoehala to look as well.

The page was the will of Tatsuji Terada. The document stated that he was a shop owner who had left everything he had to his beloved son, Aimé.

“Along with the sum of money that he was left was a Japanese flag and a parchment that outlined his Japanese family’s lineage so that one day Aimé would know whom his father was,” Ireland said. Ireland later learned a family friend had burned both in fear of anything that looked pro-Japanese.

Tears flowed. This handwritten piece of paper, lost for more than 70 years, would wind up reshaping Arawa’s perspective on his life.

Upon returning to Texas, Ireland contacted a newspaper in Kumamoto, Japan, the Kumamoto Nichinichi Shim bun, and asked the editors to run a front-page story on Arawa to see if any descendants might emerge. Based on Terada’s prisoner-of-war card, which he located with the help of archivists in New Caledonia, he knew Arawa’s father hailed from the region.

No one replied to the article.

So Ireland turned to the government. At his request, the current director of the Yatsushiro branch of the Kumamoto City Hall went from door to door in the village where Terada had lived. Up on a mountaintop, the official found an elderly man named Mr. Nakano, whom Terada had effectively adopted upon his repatriation to Japan.

“Terada was so heartbroken to have been separated from his son Aimé that he affectionately cared for Nakano like his own biological son,” Ireland said.

The director and the professor also found a man claiming direct biological connection to Terada named Mr. Shimokado.

“We'd found literally one person claiming connection amidst a population of 126 million people in Japan,” Ireland said.

On May 30, 2019, the professor from Texas stood in the rural mountains of a southern Japanese prefecture, FaceTiming Arawa and his granddaughter sitting in a South Pacific home.

From Shimokado, the phone was passed to Nakano. The first words Nakano said were “Dad, Dad!” Arawa resembled their father, something he never knew.

Ireland showed Arawa the family mausoleum near Shimokado’s house, in front of which was an urn. In the urn surrounded by flowers were Terada’s cremated remains.

More tears.

With Ireland interpreting, Nakano said that Terada always spoke lovingly of the boy he thought had been murdered by the French.

Following the virtual reunion, one missing piece still nagged at the edges of Ireland’s mind: No one, Shimokado and Nakano included, could produce any photos of Tatsuji Terada.

In November 2020, Ireland was studying images he’d photographed from a catalog of prisoners in an Australian concentration camp. He came across a name he recognized but knew was filed incorrectly. Someone had listed the man’s last name first.
“My mouth dropped,” he said.
Ireland immediately asked an archivist in New Caledonia to track down the prisoner catalog from Terada’s camp. The same mistake had been made.
He soon shared with Arawa what’s in all likelihood the only extant image of Tatsuji Terada.

INTERNATIONAL RELATIONS

In response to the revelations, the honorary Japanese consul in New Caledonia sent Teresa Abi-Nader Dahlberg, TCU’s provost and vice chancellor for academic affairs, a letter of thanks and an official government letter recognizing TCU. With Ireland’s help, the university also established a sister program with the University of New Caledonia.

The goal of the program is to enable New Caledonian students to come to TCU as exchange students and serve as student directors of TCU’s on-campus French-language immersion house while taking classes.

“This exchange opens new doors and more expansive horizons toward diversity and inclusion, especially in regard to Pacific Islanders, who have long remained invisible in higher education,” Ireland said.

TCU awarded a full scholarship to the first exchange student. Melissa Saminadin came to TCU the year after graduating from college in August 2019 with a bachelor’s in English. She served for two semesters as the French House coordinator while taking classes in creative writing and creative nonfiction.

Ireland, who had contacted the University of New Caledonia about the project and helped select Saminadin to come to TCU, discovered that her family also had a relative who had been sent to a detention camp.

During a dinner with Saminadin and her parents, who were visiting Fort Worth, Saminadin’s mother shared her maiden name. Ireland recognized it from his interviews in New Caledonia and was able to establish that a relative of her mother’s had been among those rounded up and deported to Australia.

Remarkably, there was a connection to Arawa. Saminadin’s relative and Arawa’s father were sent to the same camp aboard the same ship. Because both of their last names started with “T,” it is likely that they were next to each other on the ship, Ireland said.

Ireland subsequently worked to reunite Saminadin’s family with long-lost relatives in Hiroshima, Japan.

Saminadin said she’d learned nothing about the Japanese internment during her years in school in New Caledonia.

“Everyone should know this part of history, how poorly Japanese people were treated and how heartbroken their families were,” Saminadin said. “These people should never be forgotten, and I wish that in the future, these stories will be taught in New Caledonian schools.”

For Arawa, the knowledge of his father’s history altered his perspective on his life. “You know, after all these years I had many questions,” Arawa told Ireland in November 2020.

“Now I can rest in peace knowing that my dad didn’t abandon me. I was loved.”

Hearing that was a full-circle moment for Ireland. “I had to smile,” he said, “because the name Aimé in French means ‘loved.’”

WATCH A VIDEO featuring Benjamin Ireland at endeavors.tcu.edu

From top: Benjamin Ireland tracked down what is likely the only extant photo of Tatsuji Terada; an urn holds Terada’s remains outside a mausoleum in Japan; Benjamin Ireland (right), Terada’s son Aimé Terada Arawa and Aimé’s granddaughter, Aurélie Filimoehala, who translated for her grandfather in conversations with Ireland, meet in New Caledonia.
TCU’s College of Education is integrating the science of learning into undergraduate teacher education.

In 2020, TCU joined Deans for Impact, a national organization that aims to improve student learning by transforming the way educators teach. In 2021, College of Education faculty implemented the organization’s Learning by Scientific Design program, which disseminates evidence-based teaching strategies aimed at upgrading the ways universities prepare future teachers.

To begin, TCU faculty gauged their students’ knowledge of the principles of how people learn by analyzing results of assessments given to students pursuing careers in education. The professors then integrated these principles into junior- and senior-level teacher education classes. The improved pedagogy allows students preparing to be teachers themselves to practice research-based methods of delivering information to their own students.

**GOAL:** Equip future teachers with a deep understanding of science-based principles of how the brain learns and an ability to design rich instructional experiences for students.
TCU IS FOCUSING ON TWO PRINCIPLES OF LEARNING BY DESIGN:

DEEPENING MEANING AND LEARNING

ceourages students to think about meaning when they encounter new material.

After showing students a photo of civil rights leaders marching in Selma, the teacher asks them to consider questions such as: Why might marching have been necessary in Alabama? How might the scene have looked different if the government had supported the march? Why did the marchers link arms? The idea is for the questions to inspire deep processing of new information. The teacher asks the students to think about the answers and then share their ideas out loud and in writing, helping ensure all students participate in the processing and effortful thinking.

CONNECTING THE DOTS

empowers students to grasp new ideas while referencing concepts they already know.

A teacher conducts a reading lesson as part of a study on endangered species. After reading a text, the instructor shows students a map from a previous lesson that illustrates where the extinction of a particular species has occurred. The teacher then asks students where they might prioritize lobbying for new animal-protection policies and why. The association of text with a visual element helps students cement the geography of extinction in long-term memory while teaching them new concepts about policy and activism.

“As our teacher candidates transition to their roles as teachers of record, they will make hundreds of micro- and macro-instructional decisions about student learning. It’s critical that those instructional decisions are grounded and informed by the best scientific understanding of how we learn. We also believe that our teacher candidates will design more successful learning experiences for their own students if they incorporate principles of learning science into their instructional decisions.”

Frank Hernandez, dean of TCU’s College of Education
COMING TO TERMS
WITH COMING OUT

Tee Tyler explores the family dynamics between LGBTQ children and their parents.

BY KRISTIN BAIRD RATTINI

When LGBTQ children come out to their parents, the experience is not a single revelation but a complex process. The nature of the family relationship can strongly influence how that process unfolds and affect the health of the child.

“The relationship is a third character in the story,” said Tee Tyler, assistant professor of social work.

Since 2013, Tyler has explored the development of these unique family relationships. Through meta-analysis of existing literature and interviews with queer children and their parents, Tyler has learned more about how children and parents can grow and find acceptance together.

“There are so many moving parts to this process,” he said, “and two subjective stories—one told by the child, one told by the parent.”

Tyler’s insights into these family relationships resonate far beyond the academic realm. “I want my research to benefit families,” he said. “I also want my research to inform health care providers serving LGBTQ families and health profession students preparing to work with this population.”

A CREATIVE CONVERSATION

After earning a master’s degree in social work in 2008, Tyler, then a new mental health therapist, needed to help a client navigate the coming-out process. “My client, a gay young man, told me he wanted to come out to his mother during their next family therapy call,” he said. “That was in one week’s time.”

Tyler scoured books and online resources for information to help him prepare for the critical call. “I didn’t feel like I found anything with a clear, evidence-based practice strategy I could use,” he said.

He felt ill-prepared when the call began. “What surprised me was how creative the conversation was,” he said. “It became a constructive process of them deciding: Is this significant to our relationship? Does it matter? How will it change things? … That conversation opened my mind.”

That family dialogue sparked questions for Tyler about parent-queer child relationships, and the existing research in the field offered few answers. “I really became interested in how current societal and cultural views about LGBTQ identities impact a parent’s response to the child,” he said, “which ultimately impacts how they get along.”

Available research revealed that parental rejection of gay and nonbinary children is linked with health risks including depression, substance abuse and suicidal ideation. In contrast, parental acceptance serves as a protective factor, he said. “I wanted to know, ‘What do these parental responses look like?’”

AN ONGOING PROCESS

To find answers, Tyler conducted 11 pairs of interviews, each set with an LGBTQ individual and their parent. Those 22 conversations affirmed that coming out is an ongoing process for both. In a 2020 Journal of Family Studies paper, he identified three critical relational turning points.

The first is the child’s initial disclosure to the parents, Tyler said. “It’s the gold standard of what you would assume to be a turning point.”

Tyler found that parents’ prior exposure to gay or nonbinary individuals can influence their response. “The more LGBTQ individuals that parents knew personally,” he said, “the more accepting they were.”

For example, Whitney Neumeyer Roach, a fifth-year PhD candidate in the College of Education’s curriculum studies program, was raised in the Los Angeles area and lived in neighborhoods with sizable LGBTQ populations.

So when Roach came out as a lesbian at 14, “my family knew a lot of queer people, so there was never any discussion about my identity as a queer person at that point,” she said.

The second turning point is the child’s first date or romantic relationship after the disclosure. For some parents, that milestone “represented the first time that their child went public, increasing the number of people outside of the parent-child relationship who discovered the child’s LGBTQ identity,” Tyler wrote in the 2020 paper.

The third turning point represents a coming-out moment for the parents: When they become the parent of an LGBTQ child. “The parent experiences a transition in identity as well,” Tyler said. “They shift from ‘I’m accepting’ to ‘I’m now identifying publicly’ as a parent of an LGBTQ person.”

This transition can lead to active advocacy, such as attending Pride events or pressing for LGBTQ-inclusive policies and legislation.

Richard Allen, a professor of film, television and digital media at TCU, is a strong public advocate for queer rights in support of his three children.

“Now that my children are adults and successfully navigating their own paths as proud members of the LGBTQ community,” he said, “I feel compelled to do
everything I can to help make the world a safe and welcoming place for people of all backgrounds, ethnicities, and gender and sexual orientations.”

For other parents, that transition takes on the form of more reserved support. Tyler interviewed a mother of a gay son who felt compelled to speak up when her co-workers expressed support for a restaurant that opposed same-sex marriage.

“It’s not like she asked for that note in her inbox,” he said, “but it happened, so now what does she do?”

Despite feeling nervous, the woman responded to her co-workers that her son is gay and she would not patronize the restaurant. “She didn’t know if she wanted to come out that day,” Tyler said. “But of the two options, that was the one she felt better about.”

INHERENT TENSIONS

Not all families enjoy a relationship that allows them to navigate the coming-out process. “My parents are both older, both baby boomers, and they have negative perceptions of being gay,” said TCU student Zoey, who chose not to publicly share her full name.

Because of her parents’ perspective, “I didn’t straight up come out,” Zoey said. Her father doesn’t know she is a lesbian. Her mom found out accidentally and doesn’t like to talk about it, Zoey said. “When my mom found out, she said, ‘No parent has a kid and expects them to be gay or would want that for their child.’”

The mother’s reaction is not uncommon. Tyler found that some parents struggle with the loss of previous expectations for their child, which often include heterosexual marriage and biological children.

“I completely know where that sense of loss is coming from,” Allen said. But he took a different approach with his children. “It’s not your life, but your child’s life,” he said. “Your dreams of some white picket fence or whatever it was going to be doesn’t matter anything compared to your kids’ happiness.”

Zoey’s experience with her parents reflects a common tension that Tyler found in his research: the struggle between authenticity and acceptance. Queer children want to be true to their authentic selves while also seeking to maintain good family relationships.

For families who find themselves embarking on the coming-out process, Tee Tyler offered some of the same advice he gives to the social work students: “Just listen. Pause, remain present and listen.”

Zoey self-censors her phone calls and posts on Facebook, where she communicates with family. But she is open about her personal life on other social media outlets and is an active member of Spectrum, a TCU club that provides a supportive social setting for anyone who identifies as part of the LGBTQ+ community.

“There are other Spectrum members who are completely closeted to their parents,” she said. “It’s nice because we feel like we could freely be ourselves here. But on the other hand, there has been some issues with visibility, with certain members not wanting to be in a picture for the TCU website, because there’s the feeling of, ‘What if my parents find out?’”

GROWING ACCEPTANCE

As government policies have changed over the past decade — particularly the 2015 Supreme Court ruling that legalized same-sex marriage — younger LGBTQ individuals like Zoey are coming out and coming into their own in an atmosphere of increasing societal acceptance and awareness of queer issues.

A growing movement exists among health care professionals to develop sensitive, well-informed standards of practice for addressing the unique needs of gay and gender nonconforming individuals.

Modest steps, such as asking patients which pronouns they use, go a long way toward making people feel comfortable, Tyler said. “Those simple steps matter,” he said. “It’s not only about being well-versed in health care strategies for LGBTQ individuals, but also simple interpersonal skills.”

Tyler created a client simulation for undergraduate social work students at TCU to improve their ability to serve queer clients. Students conducted a 15-minute initial client interview with two actors portraying a parent and an individual who identified as transgender or bisexual.

The students reported struggling to balance the needs of both the child and parent, especially those parents who appeared hesitant to accept their children’s sexual identity. Their experiences reflect challenges faced by people in health care fields, Tyler said. “Is the health care provider effectively trained and prepared to address the parent-child pair in a manner that affirms the LGBTQ child and supports their parent? What can the provider say or do to promote long-term positive outcomes for the parent-child relationship?”

“I’d like to see more focus on the relationship,” he said. “Health care providers will benefit from developing interpersonal skills to address the child, the parent and the relational bond between them. I think it could really make a difference in terms of providers becoming more supportive of LGBTQ individuals and their families.”

As for families who find themselves embarking on the coming-out process, Tyler offered some of the same advice he gives to the social work students. “Just listen,” he said. “Pause, remain present and listen.”
WHEN EMILY LUND HEARD HER 3-YEAR-OLD SAY THE WORDS KINETIC ENERGY — a topic never discussed at home — she realized entertainment technology could indeed be an educational tool.

“If you had asked me 10 years ago if I had any interest in thinking about the overlap of technology and language learning,” Lund said, “I would have said, ‘No, not interested.’”

Modern media often gets a bad reputation for causing developmental delays in young children, but Lund, an associate professor at the Davies School of Communication Sciences & Disorders, sees the opportunity for children to learn vocabulary and language skills in an entertainment context.

“I think it is really easy for television and technology to be demonized, especially in child development literature,” said Lund, also associate dean for research at the Harris College of Nursing & Health Sciences. “I started getting interested in how it can be harnessed and used.”

Lund partnered with Jean Rivera Pérez, assistant professor in the Davies School, on two projects involving technology and language learning. Puerto Rico native Rivera Pérez said he intends to develop resources for Spanish-speaking and bilingual children with language disorders. “I decided to [better support] the Spanish speaking Latinx community in the United States with research that feeds the needs of this population.”

Together they developed an app called Leyendo en Casa (Reading at Home) that English-speaking speech-language pathologists may use to educate parents in techniques to promote Spanish to their children with language disorders.

The professors then joined forces to investigate how technologies such as television programs or reading apps can help children who are learning a second language while also developing their native language. An indicator of how well children learn a language is the number of vocabulary words they are exposed to during their early years.

The professors’ 2021 paper published in the Journal of Children and Media analyzes popular bilingual children’s television programs to determine which shows use educational strategies proven to help children learn words. Co-author Rachel Hart, a TCU alumna, helped design a study using a coding system to analyze episodes of Dora the Explorer; Go, Diego, Go!; Maya & Miguel; Handy Manny; and Nina’s World.

School-age children learn approximately 3,000 to 4,000 new words a year through explicit cues, such as direct definitions, and implicit cues, such as visual images. Dual-language learners often speak different languages at home and in school, making it difficult to encounter enough words to promote both languages. They need additional exposure to both languages.

Hart, who recently earned a master’s degree in speech and hearing sciences at the University of North Carolina, Chapel Hill, transcribed the episodes and analyzed them for explicit cues, contextual cues and implicit cues. The goal was to determine which programs used the most effective instructional tools.

They scored Dora the Explorer and Go, Diego, Go! the best in terms of educational potential. Both programs used known vocabulary-learning techniques such as pausing to allow children to repeat a word or inserting a word in a jingle. The shows also incorporated cultural context, which Lund and Rivera Pérez said is an important part of learning a language.

A forthcoming paper from Lund and Rivera Pérez will investigate whether a language and literacy app based on discussion strategies can help Spanish-speaking parents teach their children language skills in Spanish and English.

While they wait for results, the professors said parents don’t need to feel guilty about encouraging a little screen time. “Obviously, everything in moderation,” Rivera Pérez said.

Lund said that TV allows for broad experiences and thus exposes children to more vocabulary. “Television is a great vehicle for expanding our world knowledge on all kinds of things and for using linguistic structures that I don’t typically use in my day-to-day interactions.”

LEARNING FROM DORA AND DIEGO

Dual-language kids’ TV programs can be an effective teaching tool, professors’ study finds.

BY HEATHER ZEIGER
In criminal court cases, bigger is considered better. The assumption is a result of a 1978 case in which the U.S. Supreme Court relied on 25 evidence-based studies on the effect of group size on jury deliberations.

In that case, Ballew v. Georgia, the court determined that a five-person criminal jury was unconstitutional, which turned the tide to allow for today's 12-person juries. Justice Harry Blackmun wrote in the court's opinion that “a criminal trial to a jury of less than six people substantially threatens Sixth and 14th Amendment guarantees” to a fair and speedy jury trial because research suggested smaller juries are “less likely to foster effective group deliberation.”

For more than 100 years, the U.S. Supreme Court has been using social science research to support its decisions. Michele Meitl, an assistant professor of criminal justice, found that justices are using insights from psychology, sociology, criminal justice, economics and political science much more often in the 21st century.

From 2001 to 2015, 40 percent of written opinions from the nation's highest court included a nod to social science research, according to Meitl's 2020 study, which was published in Social Science Journal. That's up from 14 percent in 1990 and 10 percent in 1978.

Realizing their decisions can have far-reaching impact on Americans' daily lives, the justices often turn to academic research to help them better understand complex issues and lend more credibility, transparency and accountability to their opinions, Meitl said.

“They're experts in law and precedent, but they may not be experts in brain development or [jury] deliberation,” she said. “They look to the outside world … to inform them of these things.”

Justices have turned to academic research to support their views on issues like the risk of discrimination in the jury selection process and the ability of young people to understand their Miranda rights.

In a 2005 ruling requiring police enforcement of restraining orders in domestic violence cases, the Supreme Court cited data from the Pace Law Review that mandatory arrests in New York City from 1993 to 1999 rose 114 percent for misdemeanor domestic violence arrests,
76 percent for violation of protection orders and 33 percent for felony domestic violence.

Meitl noted in the study that some justices even “took a trip to the law library to look at the difficulty kids might have getting onto inappropriate websites” in relation to an internet obscenity case.

FAR-REACHING IMPACT
While Meitl analyzed written opinions only in criminal procedure cases, she said her findings on the relationship between research and law are relevant to all cases.

To illustrate: In 1954’s landmark Brown v. Board of Education case, the Supreme Court opinion referenced several psychological studies that showed how racial segregation caused social and psychological harm to Black schoolchildren.

In a 2021 free speech case, the concurring written opinion used data from the National Center for Education Statistics to support the court’s decision that a Pennsylvania high school’s disciplinary measures taken because of a student’s off-campus social media posts violated her First Amendment rights.

During the current term, which ends in June 2022, the high court is reviewing Texas and Mississippi cases that could overturn much of Roe v. Wade, the 1973 decision affirming a woman’s right to abortion. If the justices rely on research to examine the impact of abortion restrictions, Meitl said, “they could use studies to show that more restrictions mean women may seek more dangerous methods.”

She also said the U.S. Supreme Court has become more conservative since 2015, which may make a difference because “Republicans generally use social science less frequently.”

Her study found that Democratic justices, such as Stephen Breyer and Sonia Sotomayor, cited social science in 34 percent of their opinions, compared with 20 percent for Republican justices, such as Clarence Thomas and Antonin Scalia.

A DIFFERENT POINT OF VIEW
Meitl, a licensed attorney, worked for nearly a decade in the legal profession in Washington, D.C., including as a staff attorney for the American Bar Association’s Death Penalty Representation Project.

“I knew I wanted to stay in that lane [for research] and look at courts and appeal,” said Meitl, who often visited the Supreme Court to listen to oral arguments. “I love the court.”

Nicole Leeper Piquero, a professor of sociology at the University of Miami in Florida and Meitl’s dissertation chair while both were at the University of Texas at Dallas, said it’s rare for a criminal justice professor to also have a law degree. The combination allows Meitl to look at criminology in a fresh way and makes her good at asking questions, which is important to research, Piquero said.

“She’s approaching the same question from different angles,” Piquero said. “She has a unique view to bring those worlds together. She sees both perspectives and how they can help each other.”

A LIBRARY FOR LAW
In 2020, Meitl delved deeper to examine what types of research justices cited most often.

She found that every justice cited social science research at least once in 168 cases between 2001 and 2015. She also discovered the No. 1 type of research cited by justices appeared in law journals (37 percent), followed by peer-reviewed articles (24 percent), government reports (17 percent) and books (14 percent).

Justices tend to rely more on law journal articles because they “are more comfortable” with that format, Meitl said. “That’s what they read in law school. … Many of the other citations we’re starting to see more of, the justices consider them to be more wish-washy.”

The Supreme Court can still be skeptical about the relevance of academic work to its rulings. Meitl said, citing 2017’s Gill v. Whitford. In that case, plaintiffs charged that a Wisconsin redistricting plan adopted by the state’s Republican-controlled legislature was unconstitutional because it unfairly favored the ruling party. During oral arguments, a lawyer implored the justices to use data analytics to show that such partisan gerrymandering could become a “more serious problem.”

Chief Justice John Roberts called the attorney’s numbers “sociological gobbledygook.”

“Social science and law are very different,” Meitl said. “Social science is always open to interpretation and building on studies to clarify something. With law, it’s precedent: This is how it was done in the past and how it should be followed.”

Meitl’s research shines a light on how well academics and scientists communicate the validity of their research. But the jury still is out on whether Supreme Court justices will continue to rely more on research to support their decisions.

For that to happen, Meitl said academic research must be more accessible to a wide swath of people. “Quality research is important and can make a big difference,” she said. “It’s important that we make it understandable and accessible to the outside world if we want it to have an impact on the court and policy.”
SHELTER FROM THE STORM

A monoclonal antibody used as an anti-rejection drug may help patients suffering from a severe Covid-19 infection.

BY PRESCOTTE STOKES III

In January 2021, Jeff Walburn met with a contractor about renovations on his house. Having undergone a successful liver transplant 13 years prior, he was taking extra precautions to guard against the coronavirus: meeting outside, social distancing and limiting touching of surfaces.

Three days later, the contractor called to say he had tested positive for Covid-19. The following day, chest pressure and fatigue sent the 58-year-old Walburn of Weatherford, Texas, to urgent care. Doctors there gave him a Covid test and after consulting with his transplant team, prescribed treatment.

The next day, the test confirmed he too had contracted the virus.

Walburn said his transplant physician, Dr. Stevan Gonzalez, later told him his goal had been to keep his patients out of the hospital because they may end up on a ventilator.

Over the next 10 days, more symptoms followed, including a miserable cough and loss of taste and smell. “The headaches were also excruciating,” Walburn said. “I couldn’t hardly sleep because of the headaches. They were so severe.”

Inside Walburn’s body, a cytokine storm was likely erupting. His immune system, in attacking the virus, had turned from friend to foe by generating a toxic number of cytokine proteins. As those immunity-enhancing chemicals flooded his body, they were interfering with its regular functions.

In many cases, those storms end up destroying heart and lung tissue and ultimately lead to death.

Walburn eventually recovered. For others battling Covid, an existing monoclonal antibody given to kidney transplant patients to safeguard the new organ could potentially stop the immune system’s overreaction and save lives.

The Fort Worth Clinical Sciences Working Group, made up of 15 North Texas physicians, has received approval from the U.S. Food and Drug Administration to conduct trials and test the drug in Fort Worth-area hospitals.

The drug they will test is basiliximab, a transplant rejection drug commonly known as Simulect. Results will show whether it can reduce inflammation caused by that cytokine storm in patients with the most severe cases of Covid-19.

IMMUNE MALFUNCTION

In the early stages of the pandemic, medical professionals did not know what caused the novel coronavirus to turn fatal. While researchers across the world worked at a lightning pace to develop Covid vaccines,
Gonzalez, associate professor at the TCU and UNTHSC School of Medicine, spent countless days and nights treating people in the intensive care unit of Baylor Scott & White All Saints Medical Center-Fort Worth, where he serves as medical director of liver transplantation at the Annette C. and Harold C. Simmons Transplant Institute.

Even when critically ill Covid patients received the most aggressive form of medical care he had to offer, they often declined in a hurry, Gonzalez said. “They would rapidly go into respiratory failure, and their bodies would go into a state of shock. They would require an increase in oxygen support to their lungs and ultimately end up on life support.”

By March 2020, the world’s medical community had figured out that uncontrolled development of cytokines, proteins secreted by the immune system, were often the cause of Covid’s fatal turn. “We had observed this kind of reaction to viral infections in the past,” Gonzalez said, “and looking at what was coming out in the cutting-edge research of Covid-19, we were understanding that the immune system had a major role in creating this reaction.”

Cytokines are the body’s natural immune response to a viral infection, said Dr. Stuart D. Flynn, the founding dean of the TCU and UNTHSC School of Medicine. “When they [cytokines] work correctly, they are working every day for us clearing organisms out of our body, and we never know it.”

But the Covid-19 virus is a deadly stranger to the human body. Once infected, the body tries to create an appropriate immune response using those typically helpful cytokines to eliminate the virus. As the infection accelerates, that once-reliable immune response turns into a bigger problem than the virus.

“The cytokine storm is this horrible state that leads to unchecked and unregulated inflammation,” said Dr. Mohanakrishnan Sathyamoorthy, a professor and the department chair of internal medicine at the TCU and UNTHSC School of Medicine, who was looking at existing drug treatments that could neutralize the reaction. “In some patients, there is a dysregulation of intensity of this inflammatory response, and the result is you actually end up damaging your own tissue.”

SEEING HOPE

Gonzalez, Flynn and Sathyamoorthy joined forces to launch a research group in hopes of curtailing the lethal immune response. “I realized that this couldn’t be a solo project; this is a medical school level effort,” said Sathyamoorthy, who is also medical director of Baylor Scott & White’s Fort Worth Heart and Vascular Hospital. “The best way to think about how we can serve our community, science and medicine at large would be to create a working group.”

Sathyamoorthy recruited Flynn and Gonzalez to start, then recruited faculty and physicians across Dallas-Fort Worth to participate. “This is our time and opportunity here in Fort Worth,” Flynn said. “We’ve set up this environment to build a much bigger attraction to [the medical] industry to want to come in here and do their clinical trials. That is the ultimate goal.”

By April 2020, the research group consisted of 15 physicians in leadership roles at major North Texas health organizations, including Baylor Scott & White, Texas Health Harris Methodist Hospital, JPS Health

“I realized that this couldn’t be a solo project; this is a medical school level effort. The best way to think about how we can serve our community, science and medicine at large would be to create a working group.”

Dr. Mohanakrishnan Sathyamoorthy, professor and department chair of internal medicine at the TCU and UNTHSC School of Medicine
When the spiky Covid-19 virus enters the body, it triggers an immune-system response. But sometimes the immune system goes into overdrive, triggering a cytokine storm that does the body more harm than good.

Network, Cook Children’s Medical Center and the medical school. The physicians represent a range of medical specialties, including infectious diseases, transplant immunology, cardiovascular medicine, pulmonary critical care medicine, pediatric critical care medicine, and pediatric oncology and immunology.

By mid-August 2020, as new daily Covid diagnoses in the U.S. hovered around 60,000, the group had developed multiple study proposals in hopes of lessening the pandemic’s devastation.

The first studied how a cytokine storm manifests inside the body and then evaluated available medicines that might also treat the inflammation caused by a cytokine storm.

That search led them to basiliximab. In 1998, the FDA approved basiliximab for treatment of kidney transplant patients. The monoclonal antibody, a type of synthetic molecule that mimics a natural protein, can inhibit the body’s immune response and keep it from rejecting a new kidney.

Basiliximab can also calm down the specific cytokine that attacks a viral intruder. The researchers submitted an Investigational New Drug (IND) application to the FDA seeking approval to test the proven anti-rejection drug on Covid patients.

In fall 2021, after almost a year of back and forth with the agency to complete rigorous revisions, the FDA granted approval to conduct trials with basiliximab. The physicians immediately strategized about how to enroll 300 patients in the Dallas-Fort Worth area.

Covid-19 patients at Texas Health Harris Methodist Hospital Fort Worth, Baylor Scott & White All Saints Medical Center-Fort Worth and John Peter Smith Hospital can soon request to take part.

IND applications are almost always sought by and granted to pharmaceutical or medical device corporations, so for a small physician working group to receive such approval without any funding is a positive development for the medical school and TCU, Sathyamoorthy said. “To get the trial underway and enroll the number of patients needed, we need significant financial support. Raising money to complete the job is the next great challenge in this journey, and one we can do together here in Fort Worth.”

Another key proposal was to establish a biorepository to store all the fragile research specimens. Floyd Wormley Jr., associate provost for research and graduate studies at TCU, volunteered freezers in the university’s research labs.

Any future medical researcher who wants to replicate or build on the basiliximab study will need to retrieve the existing tissues from the TCU campus.

“Everyone here has had an open-door policy and wanted to help,” Flynn said. “Everyone is excited. This is cool stuff for Fort Worth.”

**HEALING STEPS**

The timing of the research is a boon for the newest students at the TCU and UNTHSC School of Medicine. They studied cytokines in fall 2021, and some of the students will be able to assist with the research efforts.

“They will get the basic information of how these cytokines work, which is a beautiful thing,” Flynn said. “This whole issue of cytokines, cytokine storms and clotting — they are all intimately related.”

Walburn, already a believer in the power of anti-rejection drugs, said the research could be a game changer in battling Covid.

“I didn’t do anything without consulting Dr. Gonzalez. I trust him explicitly,” Walburn said. “If it wasn’t for his guidance [on treating the virus] I probably would’ve been in a hospital on a ventilator. I’m a strong advocate for anything that would lessen the symptoms of that monster because it is bad news and it’s rough.”

The road back to full health after contracting the virus and surviving the storm has been a long one for Walburn, as the effects have lingered for months.

“I would say I am about 75 percent back with the smell. I still don’t have it all,” he said. “There’s times that my wife is cooking dinner and I can’t smell it. The taste of things didn’t come back until about August.”

Walburn also had to rebuild his capacity for exercise since battling the virus. After the liver transplant, he used to train for up to 15 hours a week and had completed three half-Ironman events and the six-day, 350-mile Lone Star Circle of Life bike ride.

Even simple walks became a daunting task while he recovered from Covid.

If he took a short walk, he said, “My chest was hurting and I was short of breath. I didn’t realize it was going to be as hard as it was.”

But thanks to the marvel of modern medicine, he has a full recovery in sight, has received his vaccinations and is training to participate in a full Ironman event. After that? “I think I’ll summit Mount Kilimanjaro or Denali.”

“Everyone here has had an open-door policy and wanted to help,” Flynn said. “Everyone is excited. This is cool stuff for Fort Worth.”
DOING THE MATH

Dongwoo Kim studies how retirement plans can help schools retain teachers.

BY BARRY SHLACHTER

EVEN BEFORE COVID-19 BURNOUT PROMPTED SOME TEACHERS TO RETIRE EARLIER THAN THEY’D PLANNED, Dongwoo Kim had been researching how better retirement savings options could stem such career departures.

Kim, an assistant professor of economics, has co-authored three recent peer-reviewed papers on how pension plans help — or hurt — the retention of public employees.

The pandemic has made Kim’s research more relevant. From August 2020 through February 2021, midyear retirements surged 44 percent in Michigan public schools over the year-earlier period, according to state data reported by Crain’s Business Detroit. In Texas, early retirements of teachers, support staff and administrators rose 28 percent for the September 2020 to May 2021 period, compared with the previous school year, state data show.

Most teachers participate in state-managed pension plans, which provide regular, defined benefits after retirement, but 40 percent are excluded from collecting Social Security benefits.

States usually have one pension plan covering educators and support staff. For retention, that means a retirement plan is unlikely to keep a teacher from jumping in-state to another district. On the flip side, participating in a state retirement plan may dissuade some teachers from pulling up stakes for another part of the country, Kim said.

Kim examined state teacher pension plans from 2001 to 2015 to see how well their investment portfolios weathered ups and downs over time. In many cases, plan managers, feeling increased confidence from boom times, overestimated the rate of investment returns and found they could not meet their financial obligations.

State plans can increase benefits to adjust for inflation but not reduce them. To stem the financial losses, some states created tiers, which offer lower benefits for newly hired teachers while keeping better benefits for veteran teachers.

Education authorities responded to the instability of pension funds not by reducing teacher salaries but by culling the workforce. As a result, “salary expenditures are reduced when pension costs rise,” Kim and his co-authors wrote in the 2021 article “The Trade-Off Between Pension Costs and Salary Expenditures in the Public Sector,” published in the Journal of Pension Economics and Finance.

Fewer teachers lead to bigger workloads for those who remain and reduce educational services for students, Kim said.

In another 2021 study, Kim explored nontraditional benefits that might keep public school educators in the classroom longer. Most U.S. districts are required to participate in their state’s pension plan for teachers, so administrators are restricted from experimenting with alternate retirement plans.

Kim and his co-authors focused on how late-career incentives, including cash bonuses and deferred-retirement option plans, might persuade high-need teachers — like those in science and mathematics — to keep shaping young minds.

They tracked 2,131 Missouri science and math teachers between ages 48 and 65 for three years starting in 2011. Their study projected that a $30,000 bonus to educators in their 31st year of employment would triple the number of teachers postponing retirement versus a $10,000 incentive.

Several states offer a deferred-retirement option, which permits teachers to collect their regular salary along with their pension, which is put into escrow while they are working. But in every case that the researchers reviewed, those options were not targeted to encourage specialized teachers to stay in the classroom.

Kim has proposed research on how providing Social Security benefits to Texas public school educators would affect the state’s teacher labor market.

Kim said he hopes his economic research will lead to improved retirement savings options and serve the public good.

His pension research struck a chord with Ryan Peterson, a journalist-turned-public schoolteacher now working on a doctorate in curriculum studies at TCU. “Kim’s research on predicting how a late-career bonus would help entice teachers to stay in the field is definitely eye-catching and something I think many teachers would like to see implemented,” Peterson wrote in an email.

“To be rewarded with a shaky-at-best future is disappointing to say the least. It will be continually hard to retain strong teachers and recruit competent new teachers to the craft until we start placing educators on the same compensation level as doctors and lawyers,” Peterson said.

“Well-funded pension systems are a step in the correct direction.”

Kim is interested in exploring other ideas on teachers and pensions, such as how offering both Social Security and a state pension plan might affect attracting and retaining teachers.
Throughout the Covid-19 pandemic, Jie “Jackie” Zhuang has been puzzled about why so many Black Americans appear reluctant to get vaccinated even though they have been disproportionately impacted by the virus.

“I need to make sense of what I see on TV every day, hear on the news and see in people around me,” said Zhuang, an assistant professor of communication studies at TCU. “The vaccine is an effective tool and has been made widely available to the public. So, what is the problem? What’s missing in health communication?”

The answers, she said, lie in delivering the right messages through the right messengers to persuade a population inclined to mistrust the health care system.

While Black Americans face about the same odds of getting Covid-19 as white people, they’re roughly three times as likely to be hospitalized and twice as likely to die, according to the U.S. Centers for Disease Control and Prevention. And as more transmissible variants such as delta and omicron have surged, hospitalizations and deaths have risen mainly among unvaccinated people. Low vaccination rates hurt efforts to achieve broad protection nationwide and exacerbate racial health disparities and the virus’s greater impact on people of color.

Preliminary results of Zhuang’s study show Black adults perceive a low prevalence and low social acceptance of Covid-19 vaccinations in their immediate social circles and among all Black Americans. But perhaps the biggest surprise, she said, were indications they were more likely to get vaccinated if their family doctors supported it.

“We focus a lot on media reports and CDC alerts, but I think we probably unintentionally neglected the role played by family doctors,” she said. “While it’s important to have a large-scale, message-based intervention, our health care providers need tools to initiate a conversation with their patients.”

A LEGACY OF MISTREATMENT

Many Black Americans have long mistrusted the health care system because of past medical racism, as illustrated by the case of Henrietta Lacks and the Tuskegee experiment, in which the U.S. government studied syphilis among 600 Black men from 1932 to 1972 without telling them of their illness or treating them for it. In the Lacks case, doctors took cells from her without her consent and used them for research. While the Lacks family learned of the experiment only after it ended, Black and brown communities have long been targeted for medical research with little regard for their consent or well-being. This legacy of mistrust has made it difficult for some Black Americans to trust the medical system and its recommendations, including vaccination.

“While much of this mistrust stems from historical mistreatment, it’s important to recognize that the vaccine is a different beast,” said Zhuang. “It’s important to acknowledge the historical context but also to understand that the vaccine is different and can help protect us from a highly transmissible and deadly virus.”
consent shortly before she died of cervical cancer in 1951. Lacks’ cells have been bought and sold to use in medical research.

While history cannot be ignored, more recent incidents and personal experience may be larger factors in explaining current medical skepticism and vaccine hesitancy. In a 2020 Facebook video that went viral, Dr. Susan Moore of Indiana accused her doctors of withholding Covid-19 treatment and pain medication because she was Black. “I put forward and I maintain, if I was white, I wouldn’t have to go through that,” she said in the video. Moore died later that year.

As of mid-November 2021, Black adults had the lowest rate of full Covid-19 vaccinations (35.1 percent) and at least one dose (39.4 percent) among all racial/ethnic groups, according to CDC data.

GETTING THE MESSAGE ACROSS

For her study, Zhuang surveyed the same group of unvaccinated Black adults nationwide three times. The first survey in early June 2021 included over 1,200 people, the second was roughly 400 people in early July, and the third included about 260 people in late July. She received an inaugural TCU Invests in Scholarship grant of $20,000 to help fund the research.

Collecting data from the same group of people over multiple points in time “will always provide more and better information than a one-time, cross-sectional survey,” said Paul Schrodt, a professor and director of graduate studies in TCU’s Department of Communication Studies and Zhuang’s mentor. “The thing that has impressed me the most about Jackie’s research is her thoughtfulness, precision and care of how she thinks through all aspects of research and design.”

Zhuang’s research found that changing people’s perception of social acceptance may affect their behavior, but who delivers health messages and what the messages are can be crucial. Personalizing easy-to-understand information may be more effective than supplying blanket information or comparing them to other racial/ethnic groups, she said.

Karen Lincoln, founder of Advocates for African American Elders and an associate professor of social work at the University of Southern California, agreed.

“It’s very important to tailor health messages to certain groups based on culture, ethnicity, race, language and literacy levels,” Lincoln said. “We need to focus more on crafting the message and who the messenger is.”

Zhuang hopes to present her findings at the International Communication Association’s annual conference in May.

USEFUL ACADEMIC RESEARCH

Mary Bresnahan, a professor emeritus in Michigan State University’s department of communication who advised Zhuang on her master’s and doctoral degrees, says Zhuang is on track to be a leading health communication scholar.

“She commands a range of analytical skills and a deep understanding of statistics” to interpret large pools of data, said Bresnahan, who has collaborated often on research with Zhuang. “No stone goes unturned when working with Jackie. In scholarly research, that’s a good thing.”

Zhuang said she hopes to expand her Covid-19 research to a larger database or further explore the doctor-patient relationship.

In other research, Zhuang tends to tackle practical topics that are useful to the public, not just other academics, such as misperceptions of how HIV spread in her native China, Michigan residents’ perceived risks of dioxin pollution, stigmas toward veganism and various aspects of breastfeeding.

“I don’t want my research to stay in the journal,” she said. “As a health communications scholar, I’m not as interested in changing people’s attitudes as changing their behavior.”

“AS A HEALTH COMMUNICATIONS SCHOLAR, I’M NOT AS INTERESTED IN CHANGING PEOPLE’S ATTITUDES AS CHANGING THEIR BEHAVIOR.”

Jackie Zhuang
The TCU educational experience has long revolved around the teacher-scholar model, made possible by the 13:1 student-to-faculty ratio. Small class sizes lead to an environment conducive to the kind of mentorship necessary for effective integrated research teams. At many top 100 universities throughout the United States, only juniors and seniors do meaningful work in labs, and even then they’re often supervised by graduate students and have little to no contact with professors. Not so at TCU.

Endeavors sat down with two faculty members and seven students to discuss how TCU students of all levels work together to build a culture of research and scholarship.

**A CULTURE OF COLLABORATION**

Undergraduates make meaningful contributions to research at TCU.

BY LISA MARTIN

The TCU educational experience has long revolved around the teacher-scholar model, made possible by the 13:1 student-to-faculty ratio. Small class sizes lead to an environment conducive to the kind of mentorship necessary for effective integrated research teams. At many top 100 universities throughout the United States, only juniors and seniors do meaningful work in labs, and even then they’re often supervised by graduate students and have little to no contact with professors. Not so at TCU.

*Endeavors* sat down with two faculty members and seven students to discuss how TCU students of all levels work together to build a culture of research and scholarship.

**What sets TCU’s approach to research apart?**

*McGillivray:* I think the way that TCU operates under the teacher-scholar model is unique in the sense that undergrads really do form a major part of our research. Any university is going to have aspects of teacher-scholar, but if you go to a really huge research university, you are
probably going to be paired more with a postdoc or senior graduate student rather than working really side by side with a professor. One of the reasons I came to TCU is that I wanted not only to be doing research, but also teaching students how to do research.

Caron: I started research during my sophomore year here, and a lot of times at other colleges and universities, students don’t have an opportunity to start until junior year. Knowing that I could come to TCU and do meaningful research early into my undergrad years, where I could get some of that really valuable experience, was very important to me.

Valimukhametova: I came here from Russia for my PhD and love that we have undergraduates and even high school students working together in Dr. Naumov’s lab. New people and fresh blood bring new ideas, and we can train our most junior members on research excellence. We also have people from different fields in this lab. My experience is more in chemistry and biology, but we have some who are strong in math, and we have a medical student. All of these different backgrounds and strengths make us stronger.

Kinard: This lab has been such a blessing to me as a budding physician. I started working here as a first-year medical student as part of my senior research thesis. To be honest, physics was never my thing. But what I’ve learned in this lab is to stay innovative, to stay creative and stay questioning. I never thought of myself as creative or questioning enough to be a scientist, but in this lab I feel really diligent about my message. I feel diligent about answering the questions that I’m seeking out. I feel constantly inquisitive and propelled toward excellence.

Naumov: For the junior members of our team, they get to learn lab techniques and contribute in meaningful ways to the research we are doing. I have found that TCU has very strong undergraduates compared to other schools. They have a fresh memory of classes they’ve taken and theoretical knowledge they are excited to apply.

Has the experience in the lab altered career trajectories for TCU students at all levels?

McGillivray: Definitely. I don’t have exact numbers, but I would say that probably close to half of our students eventually do research here. Within the biology department, it’s pretty common for students to at least give it a try. These undergraduates are a major part of the workforce in the labs. I’ve had a number of students who have published with me, and there are some travel funds for students who want to present at conferences. TCU is pretty unique in how much support it gives to undergrads.

Campbell: Prior to TCU, I was teaching high school physics in the Fort Worth Independent School District. When I was applying for grad school I had this idea of what I was interested in, but it was always with the ultimate goal of returning to teaching. Then when I started doing research in Dr. Naumov’s lab, I realized I enjoyed the lab much more than I anticipated. My goal now is to return to research after I complete my MBA. That desire and interest was found during my time at TCU.

Naumov: For undergraduates, they start with a general idea that they like physics. What part of physics they like they don’t know. Some move to biophysics or medicine as they work with us. Their time in the lab in many cases helps them decide what they are going to pursue in life.

What are some of the things the more experienced researchers try to impart to their younger counterparts?

Lee: I try to get the undergraduate students I work with to find shortcuts, to try and avoid the tedious jobs. I try to get them to think of a way of tackling a problem so they can get more of a qualitative experience instead of just blindly doing experiments and spending hours and hours doing things like measurements. To make their time count in a more efficient way.

Nguyen: I’m a high school junior and feel so lucky to be here in this lab run by Dr. Naumov, who is at the top of his field. In high school you don’t really see outcomes the way you do in this lab. I’ve learned so much from him but also from the students. It’s been an amazing experience for me.

Jordan: I have loved working with the graduate students in the lab. It was definitely a little intimidating at first, but I think working alongside them has accelerated my learning curve because they never complain about answering questions or explaining things, so I feel really comfortable working with them.

McGillivray: All my students in the lab have their projects, like understanding how bacteria could cause disease or doing something with antibiotic development. My goal is to manage them and help troubleshoot, teach them the techniques and help get them over roadblocks.

Caron: There was a steep learning curve when I first got into the lab. People would throw around these terms that I didn’t necessarily know. But the longer you are in this environment, the more you pick up on it and the more everything just makes sense to you. There is definitely a large jump between just learning about something in your classes and actually doing the research for yourself.

Naumov: The undergraduates learn techniques. The grad students learn how to communicate with the undergraduates and how to lead a program, which includes distributing duties among the undergraduates and the high school students. In explaining things, they also learn, because when you try to explain something to someone, you truly learn it. I can tell you that as a professor.

READ MORE at endeavors.tcu.edu
TO BE OR NOT TO BE STEREOTYPED

Shakespeare adaptations still portray girls as the weaker sex.

BY TRISHA SPENCE
Classrooms of teenagers across the world are still soaking up *Romeo and Juliet*, whether in school or through Taylor Swift’s lyrics. Between the lines, each generation of high school students interprets William Shakespeare’s tale of star-crossed lovers through its own pop culture filters.

Shakespeare wrote *Romeo and Juliet* in 1592-93. The famous tragedy has been the subject of centuries of adaptations, including *West Side Story* and *Shakespeare in Love*.

Original or spinoff, the bard’s core messages rarely change. But what are young people learning about life through the legendary play, iteration after iteration?

Ariane Balizet, professor of English, studies how Shakespearean adaptations in film, TV and young adult fiction articulate persistent ideas about girlhood. Balizet’s gender-based studies fit well with her other work. She reviewed films like *Never Been Kissed* and *Get Over It!*, which also include scenes of fictional characters studying the playwright’s work.

Balizet also considered the messages contained in depictions of fictional characters studying the playwright’s work. She reviewed films like *Never Been Kissed* and *Get Over It!*, whose characters study the bard in school. On the small screen, Balizet looked to *Gossip Girl*, *Buffy the Vampire Slayer* and *Gilmore Girls*, which also include scenes of studying Shakespeare.

Balizet said writers lean on Shakespeare as a mark of intellectualism to elevate their work. Just invoking the name Shakespeare or quoting his works in their scripts might draw a bit of the same renown, she said.

“This thing that we call Shakespeare is actually a hurtful prism for understanding the lives of young people of marginalized genders,” Balizet said.

She studied adaptations produced between 1994 and 2018, a time when anxieties about teen pregnancies were heightened by pushes for abstinence-only sex education. In 1994, for example, the Texas State Board of Education started migrating to the tighter policy. These apprehensions seeped into Shakespearean retellings, Balizet said.

Fear that young women may face the “crisis of teen pregnancy,” Balizet said, appears in *10 Things I Hate About You*, a reimagining of Shakespeare’s *Taming of the Shrew*.

In the film, when an obstetrician’s teenage daughter wants to go out, he makes her wear a weighted pregnancy suit to imagine the consequences of sex.

“Pregnancy is not just material evidence that a young woman has lost her virginity and thus her moral worth,” Balizet writes. “Pregnancy is the shameful, embodied punishment for the loss of purity.”

The film suggests that to be valued by men, girls must meet expectations of sexual purity, beauty, composure and romance, she said.

Balizet’s book fills “a new place for Shakespeare in our culture. … The book does a service to the discipline or profession of Shakespeare studies because it shows a relevance in pop culture that’s not often seen.”

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“Shakespeare is the authority on culture. Shakespeare is the authority on romance.”

Balizet said. “Shakespeare is the authority on tragedy or comedy or power and taking that cultural value and using it to authorize one version of girlhood.”

Reading his work is a rite of passage in the American education system. The Common Core State Standards for English Language Arts & Literacy lists Shakespeare, one of few authors called out by name, as a requirement.

Deciding whether Shakespeare is bad for girls was not Balizet’s goal, she writes. Rather, she wanted to demonstrate “how the construction of girlhood within and through Shakespearean adaptation has cultural meaning that is useful in advancing the rights of and opportunities for girls.”

But the playwright rarely presents healthy, accurate or inclusive representations of girls, Balizet said. “My study of Shakespeare in teen girl TV reveals persistent, troubling patterns of girls’ intellectual, physical and sexual subordination.”

“For some girls, reading Shakespeare is very painful,” she said. “There aren’t a lot of bookish girls in Shakespeare. There aren’t a lot of self-employed girls. There are a lot of dead girls in Shakespeare.”

Ariane Balizet, on the stage of Hip Pocket Theatre in Fort Worth, says even modern adaptations of Shakespeare on TV and in movies present girls as subordinate.
On Oct. 12, 2019, Atatiana Jefferson was playing video games with her 8-year-old nephew at her family home in Fort Worth’s Hillside Morningside neighborhood.

She was unaware that a concerned neighbor had called the Fort Worth Police Department, which sent officers to investigate the report that a door to her house was open.

Thinking she heard a prowler outside, the 28-year-old Black woman grabbed her handgun and peered out the window.

Bodycam footage revealed that Aaron Dean, a white officer who had graduated from the police academy 18 months earlier, shot Jefferson once through the glass. Dean was charged with murder, and he is awaiting trial.

The tragedy grabbed worldwide headlines and sparked protests throughout Fort Worth. Police in riot gear locked down City Hall. As demonstrators marched through the streets, protesters decried police violence.

Many members of the Black community said they felt unheard by city officials, which only amplified their anger, frustration and fear.

“The truth is that many of us are tired,” Pastor Bryan Carter of the Concord Church in Dallas, which hosted Jefferson’s funeral, told the Fort Worth Star-Telegram. “We are tired of talking to our children about police, tired of crying mothers, tired of funerals, tired of checking the box, tired of hoping the jury will come back with a just verdict.”

A few months later, Julie O’Neil, associate dean for graduate studies and
administration in the Bob Schieffer College of Communication and professor of strategic communication, began working with colleagues Ashley E. English and Jacqueline Lambiase to find ways to improve communication among civic leaders, the police and marginalized residents.

“Good public relations is about building relationships, listening, dialoguing, engaging,” O’Neil said. “We thought it would be a unique contribution to look at listening and city government and Black communities.”

Supported by a grant from the Arthur W. Page Center for Integrity in Public Communication at the Donald P. Bellisario College of Communications at Pennsylvania State University, the three scholars are studying civic listening in Fort Worth and around the nation.

In the spring and summer of 2020, they spoke over Zoom with 25 Fort Worth residents, including community activists, pastors, educators, small-business owners, retirees, attorneys, nonprofit managers, elected officials and local government employees.

During these hourlong, one-on-one conversations, the professors explored the experience of Black residents and activists with the city in the wake of Jefferson's death.

How did the residents perceive the city’s listening architecture and processes, meaning did the city government have systems in place to effectively listen to residents’ concerns? Did they feel the city took the concerns of its Black people less seriously? And how might the city improve its listening processes for communities of color?

“We don’t see a lot of research that looks in a systematic fashion at the experiences of Black stakeholders,” said English, an assistant professor of strategic communication.

The interviews became emotional at times, particularly following the murder of George Floyd in Minneapolis on May 25, 2020. Tears were shed by participants fearing for the lives of their Black children and grandchildren.

The researchers also heard disdain for the three-minute public comment period during Fort Worth City Council meetings. Complaints focused on the restrictive nature of the system; explaining problems and proposing meaningful solutions can often take more than 180 seconds.

At no time during meetings can residents have an official, on-the-record dialogue with council members, either.

Many also expressed frustration at feeling policed during City Council meetings. Impassioned speakers were sometimes warned that they were speaking too loudly or that they needed to exercise more decorum.

Some of those interviewed raged against perceived displays of pseudo-listening.

“You say you’ve come to listen, but your social media people are taking pictures so you can post that you’re there,” English recalled hearing from several community members. “It was really important to the younger generation that the city leaves the publicity team at home and actively engages and authentically listens with a posture of humility.”

For Lambiase, professor of strategic communication, “My takeaway is just how much trauma was experienced by the Black community in Fort Worth after an incident like Atatiana Jefferson’s murder. “The experiences of brutality may not have happened to them individually, but they felt it.”

Sadness and disappointment flowed through many of the interviews, English said.

All three professors spent months analyzing themes and other qualitative data.

“We heard a lot about a lack of basic human caring on the part of the city,” O’Neil said.

Participants also held the professors accountable, expressing hope that their findings could effect real change rather than simply become fodder for an academic journal.

To that end, English, O’Neil and Lambiase have reached out to their network of public relations scholars and other communication leaders around the country.

The goal is to build a national movement among local governments to more actively listen to the constituents they serve.

“Listening is not a thing that communicators necessarily do well, which is ironic,” Lambiase said.

She wants to help civic leaders “focus not only on content creation and pushing information out but also on how they can get good input and how they allow the community to become co-solvers of problems. Because community residents can help you only if you take the time to listen to them.”

As Fort Worth reckons with the fallout from Jefferson’s killing, including renaming parts of Interstate 35 in her memory, the city continues to weigh police reform. In April 2021, English moderated a virtual discussion for public administrators on building equitable communities that included Carter as well as Fort Worth Police Chief Neil Noakes, who took office in February 2021.

“It was a transformative experience,” English said. “It was unbelievable the level of humility shown by this police chief. These kinds of dialogues between leaders can make our processes much more efficient, more equitable and more effective for the benefit of all.”

Listening also guides the second phase of the professors’ research, which kicked off in the summer of 2021. The Page grant funded a survey of more than 500 Black people from around the country.

In a series of questions, participants used a scale of 1 to 7 to quantify their perceptions of how well their local government listens to them. One open-ended question allowed respondents to elaborate. O’Neil, English and Lambiase are analyzing the responses, which may lead to further research. They’re also working toward publishing their findings.

“We want to know if better listening leads to better relationships and better perceptions of trust within their city government,” O’Neil said. “Or for folks who think their city doesn’t listen to them, do they have less trust in their city? Are they less committed to their city government and are less involved as a result of that?”

As English said, “Listening can save someone’s life. And maybe listening can also heal and affirm those who have not felt heard for so long.”

WATCH A VIDEO about civic listening at endeavors.tcu.edu
STEERING PAST TROUBLE

Danica Knight employs trust-based interventions to help troubled youth.

BY HEATHER ZEIGER
Talk about tempers and trouble. Soon after two youths at a residential juvenile justice facility started arguing, their heated exchange turned physical. One of them injured a staff member who intervened, which triggered an automatic security alert. Though the teen had been making significant progress in controlling his violent outbursts, he faced daunting consequences for the assault: isolation, a transfer to a more secure facility or going to an adult prison, depending on a judge’s decision. But jumping to the punishment phase might not benefit anyone in the long run, said Danica Knight, professor of psychology. Many children and teens feel frustrated or angry and don’t know how to handle those feelings, so they act out.

“The first thing caregivers tend to do is jump in and correct,” Knight said. “Instead, they could pause to think about what the need behind the behavior is. What is the child dealing with? What is the bigger issue?” Often, those issues can be traced back to challenges the child faced early in life, such as abuse, violence or poverty.

For three decades, Knight has been studying how young people go awry. Often, youth delinquency and substance abuse stem from a combination of childhood trauma and not learning to self-regulate. She spent 27 years with TCU’s Institute of Behavioral Research, where she led multimillion-dollar grant projects to develop substance abuse intervention programs for young people. In 2019, she moved to the university’s Karyn Purvis Institute of Child Development, where she serves as associate director of research.

One of the principles Knight teaches caregivers is that they need to see the need to meet the need. After the altercation, another staff member pulled the youth aside to understand why he had turned physical. The adolescent said he had been provoked by the staffer who intervened and couldn’t handle his frustration. As a result of their conversation, leadership at the facility determined the situation was not the teen’s fault, which helped his mother advocate for her son when he faced the judge over the incident.

The judge gave the kid a second chance to complete his rehabilitation program and stay at the facility. There, he continued to work with the staff and his mother as he addressed his problems. With support systems in place, he could learn how to manage his impulses rather than turning to risky, potentially fatal decisions as he entered adulthood.

Effective interventions are the goal of Knight and her research team, including project director Yang Yang and project coordinator Lainey Tinius. As part of a new National Institute on Drug Abuse-funded research project, they are testing whether their intervention programs in justice facilities can curb drug abuse once a juvenile returns home.

This project is a joint venture between the Purvis Institute and the Institute of Behavioral Research and is part of the National Institutes of Health’s Helping to End Addiction Long-Term, or HEAL, initiative. The federal program is a multidisciplinary effort to find science-based solutions to the opioid crisis in the United States.

The overarching goal of Knight’s project is to right the ship for struggling young people so they can steer past dangerous behaviors like opioid abuse.

The answer, more often than not, means dealing with childhood trauma through interventions that involve the whole family.

**ATTACHMENT THEORY**

The basis of Knight’s new project, Trust-Based Relational Intervention®, was developed in the early 2000s by TCU’s Karyn Purvis and David Cross, who worked with families of fostered and adopted children. Cross, the Rees-Jones director of the Karyn Purvis Institute and a professor of psychology, served as Purvis’ adviser when she came to TCU for degrees in child development and psychology. Their research, based on attachment, sensory processing and neuroscience, addresses the physical, relational and emotional needs of children who have experienced trauma.

Attachment is the theory that a child’s emotional needs stem from the bond formed between the caregiver and the child during the first two to three years of life. “When a child is raised in an environment where their needs are met consistently, an emotional connection between parent and child is made,” Knight said. “The child can learn to self-regulate in partnership with the parent.”

A rift in that relationship happens when
“Imagine how a child would thrive if in all these contexts adults paid attention to what they truly needed and found a way to meet that need.”

Danica Knight, professor of psychology

the child’s physical and emotional needs are not met. Consequently, the child never forms the bond of trust that allows the caregiver to teach self-regulation skills amid healthy and appropriate boundaries.

Using Purvis and Cross’ materials, Knight’s research team, which includes TCU students and faculty, developed a two-track intervention curriculum for families with sons and daughters in the juvenile justice system. The program’s intent is to mend the family relationship so the child has a supportive environment that fosters healthy communication. This is the first step toward addressing the roots of the behaviors that can eventually lead to substance abuse disorder.

Most children and teens in the justice system have experienced multiple traumatic events or ongoing, prolonged trauma, known as complex trauma. Knight said that children who have experienced this type of trauma possess heightened emotions and do not self-regulate well, making them more likely to engage in substance abuse and other risky behaviors.

Those uncontrollable emotions stem, in part, from neurochemistry. Children who have experienced complex trauma tend to produce more cortisol, one of the stress hormones that is part of the body’s fight-or-flight system. These children struggle socially because they are unable to express themselves in constructive ways and tend to respond to difficult situations with anger, fear or withdrawal.

In the youth-focused training sessions, adolescents learn how to communicate what they are feeling and react to difficult situations in healthy ways.

In adult-focused training sessions, caregivers learn how to recognize their child’s needs and respond in ways that equip children to regulate their impulses.

Then adults and youth attend combined sessions, called nurture groups, to practice what they learned and begin to build trusting, supportive relationships that will continue once the children go home.

Knight said that trust-based intervention can change the trajectory of an entire family.

AVOIDING OPIOIDS

Opioid abuse has been an escalating problem in the United States, and federal agencies are desperate for research-backed creative interventions.

In 2018, the NIH HEAL initiative reported that 10.3 million Americans 12 and older misused opioids, including heroin. The Centers for Disease Control and Prevention estimated that between May 2019 and May 2020 more than 81,000 people died from drug overdoses — the majority involving synthetic opioids.

Studies indicate that people between ages 16 and 30 are the most at-risk group for initiating opioid use, misusing opioids and dying from an opioid-involved overdose. Children and teens in the justice system are especially at risk for future opioid addiction.

Knight said she gravitated toward the NIH initiative because it targeted vulnerable adolescents, including those in the justice system. That population was at the center of the work she had long done at the Institute of Behavioral Research.

“Ninety percent of kids in the juvenile justice system end up using substances at some point and often do so at the point of having a substance abuse disorder,” Knight said.

In 2019, the Purvis Institute and the Institute of Behavioral Research were jointly awarded funding for the one-year development phase of Knight’s study. The development phase was completed in August 2020, and in October 2020 the two institutes were awarded $4,460,305 in additional funding for the four-year main study phase of the project.

In March 2021, Knight’s research team began recruiting youth in 10 secure residential facilities in Texas and Illinois, as well as their caregivers, with a goal of 360 youth/caregiver pairs over a three-year period.

In the first phase, families will take part in assessments to document the youths’ progress after release. In 2022, the project will recruit families to participate in assessments plus Trust-Based Relational Intervention training to examine the value added by the intervention. All the families will go through the dual-track intervention sessions.

Currently, TCU staff conduct the intervention groups and assessments. In the last year of the five-year project, facility staff will be trained on how to implement the intervention groups. But in the meantime, facilities that want to use TBRI strategies with youth in day-to-day interactions will get the training and support.

The research team will check in with the families to determine whether parents and youth continued using the skills and techniques they learned in the training sessions once the kids returned home.

The team will also conduct long-term studies to identify whether early intervention helped deter later misbehavior and opioid use.

Knight said the preliminary results are promising. She cited one example of a youth who had a history of aggressive outbursts. While spending time at a secure facility that used her curriculum, he spiraled into anger. He told one of the staff members that he was “in the red,” a phrase he learned in the training sessions that indicates feeling out-of-control frustration.

“This simple statement represents a milestone for this youth,” Knight said. “Because of using that one phrase, he was able to identify his emotions, recognize that he was not in an ideal place — in the green — and signal to an adult his need for help.”

Aliya Moore, a senior psychology and Spanish major, worked with Knight translating documents and surveys for Spanish-speaking families in the research program. One of her major takeaways was that intervention is a team effort. “Each person on the project plays a crucial role to the success of the participants in the project, including the participants themselves.”

Knight said she agrees that a team-based approach is necessary: “Children live and function in multiple contexts — families, schools, etc.”

She said she hopes that her work will eventually be used by all adults who interact with children, including teachers, counselors and probation officers. “Imagine how a child would thrive if in all these contexts adults paid attention to what they truly needed and found a way to meet that need.”
MIDWAY BETWEEN VENICE AND FLORENCE, THE ITALIAN CITY OF BOLOGNA is known for meaty pasta sauce and a vibrant cultural scene.

In Women Artists, Their Patrons and Their Publics in Early Modern Bologna (Pennsylvania State University Press, 2021), Babette Bohn writes that Bologna should also be famous for incubating female artists. Bohn, a retired professor of art history, devoted years to studying female artists who worked in the city from the 15th to 18th centuries.

In November 2021, Bohn presented her findings during the Sydney J. Freedberg Lecture on Italian Art at the National Gallery of Art. Her talk was the first in the series’ 25-year history to focus on female artists.

In her book, Bohn writes that “women artists were more successful in Bologna than in any other Italian city because they were celebrated by early Bolognese writers.”

These writers “saw local women artists as a key component of Bologna’s cultural identity, distinguishing their home as a city with unique claims to women’s excellence in the visual arts.”

Bologna’s barrier-breaking female artists earned acclaim as painters, sculptors, printmakers and more.

“I’m always interested in projects that are visiting and revisiting women’s history and gender history, and Babette’s book is a one-stop resource for any scholar or student who wants to learn more about the 68 documented female Bolognese artists — an astonishing number — that she writes about,” said Eleanor H. Goodman, executive editor at the Pennsylvania publisher.

For Bohn, the book represented a shift in perspective on research.

“I always used to say that I’d so much rather be drooling over a painting than poring over an illegible handwritten manuscript from the 16th century,” Bohn said, “but it turns out that archival research can be absolutely thrilling.”

Bohn spent months in various archives in Bologna. She was searching for any information on these women — birth records, marriage certificates, wills, inventories of possessions and the like.

She stumbled upon people like printmaker Veronica Fontana (1651-1688), who enjoyed significant commercial success during her lifetime but died in poverty.

“She had only enough money to pay for one candle to be lit for a Mass in her memory,” Bohn said.

Many female Bolognese artists in the 17th century thrived, thanks in part to support from the city’s patrons. Bohn discovered that more than half of Bologna’s female painters during that time received public commissions, “an achievement probably unmatched anywhere else in Europe.”

Bohn credited the city’s artistic patronage, which operated with little regard to class, for providing professional opportunities to Bolognese women.

Bohn wrote much of the book in the nation’s capital in 2017-18 as a Samuel H. Kress Senior Fellow in the Center for Advanced Study in the Visual Arts at the National Gallery of Art.

Until Bohn’s work disproved them, scholars credited the art school that baroque painter and printmaker Elisabetta Sirani (1638-1665) ran for women as a reason that Bologna remained an epicenter for female artists.

Bohn questioned the assumption that women were not permitted to study art with men who weren’t their relatives. She learned that in Bologna, women could become students of men regardless of familial ties.

The discovery overturns the popular yet inaccurate assumption that women artists were usually the daughters of male artists while also offering compelling evidence that the concept of women as artists was widely accepted in the Italian city.

“Perhaps most significantly,” she said, “it opened the door for many more women to gain access to professional training.”

BOLD STROKES

Bologna opened studio doors to women artists long before other European cities did.

BY LISA MARTIN

PHOTO BY RODGER MALLISON
RIGHTING A WARTIME WRONG
Benjamin Ireland traveled far and researched widely to reunite family members separated during World War II.

PHOTO BY LEO WESSON