



Convincing Trajectory

The odds of winning a prestigious fellowship are long, but many Mizzou students and alumni, with the support of campus mentors and programs, land some of the biggest in the world. Story by Erik Potter



Trajectory. It's what separates a great student from a Gates Cambridge scholar. It's what allows a 20-year-old to convince a group of learned strangers to give a \$20,000 undergraduate Boren Scholarship to her rather than to a different bright young person.

It's what Tim Parshall, director of the MU Fellowships Office, spends a lot of time talking to his undergraduates about.

He uses his hands to create an imaginary line graph in the air. He holds one hand low to the student's left to illustrate where he or she is now. The other he holds up high to the student's right to show the future, where he or she wants to be. Then he brings his hands together in the middle. That's the fellowship the student is applying for. The question is, does the path from one hand to the other pass through the fellowship in the middle? "A lot of what I'm doing with students, especially early on, is just helping them think through their aspirations and how what they're doing now can help them achieve those goals," says Parshall, MA '76.

Each year, 1,600 U.S. college graduates are awarded Fulbright grants to teach, conduct research or pursue graduate education internationally. Forty U.S. citizens receive a Gates Cambridge scholarship to study at the University of Cambridge in England. Thirty-two recent graduates go to the University of Oxford in England as Rhodes Scholars.

The competition for these and other prestigious fellowships is intense. Though undergraduates apply during their senior year of college, to be successful, their decision to compete for one must be made long before that.

In 2014, a score of Mizzou students and recent alumni who worked with the Fellowships Office were selected for national graduate or undergraduate fellowships, including two Fulbrights, one Gates Cambridge and one graduate Boren Fellowship, a Congressionally funded program through the National Security Education Program. Mizzou also had seven alternates or honorable mentions to such programs.

That Mizzou applicants fared so well is no accident. At MU, the path toward high-profile fellowships starts early, before the first day of class freshman year, even before the first John Belushi poster is tacked up on move-in day.



YOU CAN FIND the Fellowships Office table, strategically placed between study abroad and undergraduate research, at every Summer Welcome. That's where Kiersten Kuc first crossed paths with Parshall, in 2013.

Kuc, from Chesterfield, Missouri, doesn't remember when she first learned what international fellowships were, but she knew by the time she was in high school that she wanted one. She had never been out of the country and was looking for an opportunity to study abroad when she

† Growing up, Kiersten Kuc dreamed of earning a student fellowship. That dream came true in the summer of 2014 when she studied media and national identity in Wales on a short-term Fulbright fellowship for undergraduates.

met Parshall.

"She was a bright, engaging student who was looking for more than the typical classroom experience," Parshall says. What especially impressed him was that, during a busy day, Kuc made time later to track him down in his office to ask more questions, and she visited him again when classes started. He could tell she was serious.

With stellar grades and ACT scores, Kuc was accepted into the MU Honors College Discovery Fellows undergraduate research program and named a Walter Williams Scholar in the School of Journalism. If she had not already found Parshall at Summer Welcome, she would have as a Walter Williams Scholar. The program, for elite freshmen, gives them direct admission to the journalism school, pairs them with faculty mentors, places them in special living and learning communities, and introduces them to helpful campus service programs — including the Fellowships Office.

Parshall almost immediately pegged Kuc for a new summer institute program, sponsored by the U.S.-U.K. Fulbright Commission, in which U.S. undergraduates study in the United Kingdom. Kuc jumped at the opportunity. Parshall gave "little tweaks that made a big difference" throughout the application process, Kuc says, helping her focus her essay, write to her audience and avoid words that have different connotations in England than in America.

Parshall also helped Kuc prepare for her interview, suggesting she monitor current events in Wales, where she wanted to study. That helped her impress the interviewer, she says, when she was able to tie in news of labor unrest among Welsh teachers.

Kuc was one of two Mizzou students accepted to the summer institute program. She spent six weeks studying at three Welsh universities.

"I see the enormous benefit and impact it had on me," Kuc says, who brought back an appreciation for how media roles and journalism tenets are not universal but vary across cultures.

Already a driven student, Kuc, now a sophomore, has a better idea of where she's headed. She feels a greater appreciation for travel and wants to study abroad for a semester before she graduates. She also has a greater appreciation for the research opportunities she has at MU after seeing how amazed the other Fulbright fellows were when she told them she did research as a freshman. The experience gave her a glimpse of the bigger picture, of the world Parshall is gesturing at when he holds up his hands in an imaginary line and asks, "What do you want to do out here?"

FOR IDA SOPHIE WINTER, who was born in Leipzig, Germany, but grew up in Wausau, Wisconsin, international fellowships were never a foreign concept.

The junior majoring in journalism, French and international studies was almost predestined for wanderlust. Her mother is from Germany and met her father while studying abroad in the U.S. on a fellowship. As a child, Winter lived in Lebanon for a year when her father received a Fulbright award to teach there. In high school, she lived for a year in Germany with her mom's family.

She developed a love of different cultures and dreamed of being a foreign correspondent. When she came to Mizzou and met Parshall, he told her about the Boren program, which pays for students to study less commonly taught languages in regions critical to U.S. interests, such as Africa, Asia and the Middle East. She was hooked. "I've based my whole college experience on that ultimate goal," she says.

She has established a straightforward trajectory. She worked as a translator for *German World*, a bilingual magazine based in Los Angeles, as a French and German tutor for the Total Person Program in Mizzou Athletics, as an intern for her state representative in the Wisconsin statehouse, and at the German-American Heritage Museum in Washington, D.C., for a summer.

This past summer, her trajectory took her to Rabat, Morocco, for an internship with the U.S. State Department. Afterward, she rode two and a half hours east for a yearlong program at Al Akhawayn University on a Boren Scholarship that will help hone her Arabic-language skills and immerse her in Moroccan culture.

As a Boren scholar, Winter is committed to serving a year in one of several federal departments, including State and Homeland Security. Rather than becoming a foreign correspondent, she is now considering a career as a foreign service officer.

Being a white Western woman in a country that's 99 percent Arab and Muslim has opened Winter's eyes to the immigrant experience. She's felt the temptation to cluster with other foreigners like her and to demonize the population hosting her. "It teaches you tolerance, to keep an open mind, to be patient in places where people aren't as comfortable," she says.

Before her summer internship was over, Winter was already considering where her trajectory will take her next.

"[Parshall] has been talking about the Fulbright since I've been here," she says, adding that she'd like to defer her government service to study at the London School of Economics' Middle East Centre. "He's been grooming me for that. That is the goal."

← Previous spread: Ida Sophie Winter, an MU junior studying in Morocco for a year, gives an interview to a local radio journalist from Fes.

Kuc was one of two Mizzou students accepted to the summer institute program. She spent six weeks studying at three Welsh universities. It was the first time she had been outside the country.



† After a day of sight-seeing, Winter, who is studying on a Boren Scholarship, stumbles on a “fantasia,” a traditional Moroccan equestrian competition that tests riders’ horsemanship, coordination and rifle skills.

ART IS A FAR CRY from synthetic biology. Which is to say that having a long-term commitment to earning a competitive fellowship is not the same as having clairvoyance about your future. For Shakked Halperin, BS BE '13, his trajectory to a Gates Cambridge Scholarship to study bioengineered water safety detection systems was never a straight line.

Math had always been Halperin’s favorite subject in school, but he also excelled at art. After high school, he deferred a full-ride scholarship to art school for a year to volunteer with Ethiopian immigrant youth in Israel. During that time, he began to waver. First he decided to join the Israeli military and make his life there, where his parents are from and much of his extended family remain. Then, sometime during his volunteer work, something clicked.

“From spending time with these kids, I found my passion was to help people,” he says. He’s not sure why — perhaps from fear of not being able to apply his art degree — but he decided the best way to do that was by pursuing math and science.

Halperin gave up the art scholarship and en-

rolled at MU. But even in his Honors College classes he was antsy. He’d just spent a year building a Boy Scout-like youth group in Israel and implementing programs. Learning only in class wasn’t enough. He needed application.

So, as a freshman he volunteered in his chemistry professor’s research lab and later in the bioengineering lab of Professor Sheila Grant. He joined the student chapter of Engineers Without Borders, leading a project to reconstruct a wastewater treatment facility in a Honduran village. The plant, built 20 years ago by a Western charity, was constructed with parts that couldn’t easily be fixed or replaced. So the students not only fixed the plant but also re-engineered it. “We used sand and gravel as building materials, which were available to the locals,” he said. “We included them in the design process so they feel it’s their system, ... so 20 years down the line they’re not struggling to find the engineering students from Mizzou” to fix it again.

Halperin also landed a National Science Foundation-funded Summer Research Experience for Undergraduates (REU) at the University of Cali-

ifornia, Berkeley the summer after his sophomore year. It was during a seminar for REU students that summer that he first heard about Gates Cambridge and Fulbright scholarships.

"I was only half-listening," he says, because he didn't think they were talking to him. "I was just intimidated because these other kids were from Johns Hopkins and other big programs."

But after completing a successful research project and publishing a paper — the only REU student in his group to do so — the idea of a major fellowship began to take root.

During Halperin's junior year, he went to the Fellowships Office. He wanted to apply for the Gates Cambridge — and a Rhodes Scholarship, Fulbright and others.

"He had a lot of work to do, but he's also tireless in terms of energy," Parshall says.

He was still working on his applications the summer before his senior year when he left for Tsinghua University in Beijing for a highly competitive international REU.

Halperin found a professor at Cambridge who was doing work he was excited about — re-engineering bacteria to release a pigment in the presence of harmful amounts of arsenic in well water. Natural contamination of ground water is widespread in Bangladesh, Nepal and India. The problem in Bangladesh, in particular, was characterized in a World Health Organization report in 2000 as "the largest mass poisoning of a population in history."

After graduating a semester early in December 2013, Halperin returned to Israel to catch up with family and see his Ethiopian students. While there, he interviewed with the Gates Cambridge committee via Skype.

"I wore my uncle's suit, which was 10 sizes too large. I looked like a clown," he says.

Five MU biology and psychology faculty members would disagree with Halperin on that point, Parshall says. The professors, only one of whom knew Halperin, helped him prepare by conducting two mock interviews via Skype, grilling him on the science of his research proposal.

Halperin also practiced his answers on friends, family, strangers on the bus, anyone who would listen. In the end, he says, the committee — "the most accomplished people I'd ever talked to" — focused mostly on his art, music and volunteering. "It felt like a nice dinner conversation."

Halperin was at a bus station in Tel Aviv when he read the email saying he'd been awarded the scholarship. "I immediately started dancing and singing, which seemed to concern the strangers at the bus stop," he says. Then he called his parents. "On the bus ride home, I promised myself

I will never doubt my capabilities as long as I am willing to put in the work."

Looking forward, Halperin wants to continue helping people through science. He loves the freedom that working in academia provides but also has a strong entrepreneurial drive — in summer 2014 he co-founded InterShunt Technologies, a startup company developing a surgical device to treat a certain class of heart failure.

He draws inspiration from Grant, who mentored him while he worked in her lab and showed him what an academic can be: a quality teacher, rigorous investigator and entrepreneur (she co-founded the startup biotech company EternoGen). "She's a model for what I see myself becoming," he says.



FOR PARSHALL, students like Halperin, Winter and Kuc are not singular success stories; they are part of a pattern, and they're examples he will use next summer when a new wave of students and parents visit the strategically located Fellowships Office Summer Welcome booth. "People like to see success," he says. "When you talk to these kids and hear what they're all about, you know we've got many damn-fine students." **M**

↓ Shakked Halperin, BS BE '13, gave up a full-ride art school scholarship to study engineering at Mizzou because he thought he could better help people as an engineer than as an artist. That public service spirit helped earn him a Gates Cambridge fellowship to pursue his graduate education at the University of Cambridge in England.