Made at Sac State: Cate Dyer

Cate Dyer (’05, Sociology) enrolled at Sacramento State in fall 2001 intending to earn a baccalaureate degree and then go to medical school and become an emergency room surgeon. But Sac State turned out to be a happy detour on the way to finding her true calling.

She is now the CEO of StemExpress, the groundbreaking, multimillion-dollar biotechnology company she founded in May 2010, when she was 31. StemExpress specializes in tissue and blood collection and cell isolation, all in the name of advancing medical research.

“'I'm passionate about shortening the cycle it takes for cures to be developed,” Dyer says. “If somebody had the cure for cancer today, it would take, on average, eight years to reach the market because of patent issues and the wait for FDA approval. And that eight-year process could turn into 10 because researchers wait so long for tissue samples. The process could be shortened dramatically if they can source materials quickly.”

The company initially operated out of Dyer's home in rural El Dorado County. Her initial investment was $9,000. Her first month's income was $800 – and then the business took off, earning several hundred thousand dollars within 18 months. Dyer predicts that this year the company will double its 2013 revenue.

StemExpress, with its sparkling cell-isolation laboratory and cutting-edge blood and bone marrow donation center, is headquartered in a sleek, 19,000-square-foot building in downtown Placerville. Dyer still maintains close ties to her alma mater. Seventy-five percent of her laboratory staff – including cell biologists, microbiologists and a geneticist – are Sacramento State alumni. And she hires Sac State students for summer internships. They are paid and receive college credit for their work.

The technicians at StemExpress collect the umbilical cord blood, bone marrow, healthy tissue and diseased tissue, such as cancerous tumors, that hospitals and surgical centers generally discard. Staff then fills medical researchers’ requests for either raw material or isolated cells. Among StemExpress’ clients are Yale, Harvard and Stanford universities and such companies as Genentech and Pfizer.

The “'aha” moment that inspired Dyer to help advance the cause of medical research occurred many years before she founded StemExpress. But first:

She was born Catherine Anne Spears (she changed her name to Dyer when she married) in Long Beach. Her father, Richard Spears, opened Mercedes-Benz dealerships around the country for 30 years and moved his family frequently; Dyer had
attended 17 schools by age 16. Her mother, Martha Wildforster-James, was an executive with KLM Royal Dutch Airlines. And her older sister, Charlotte Ivancic, works as the legal counsel for House Speaker John Boehner, R-Ohio.

“I had two busy parents growing up,” says Dyer. “They were both movers and shakers, and my sister and I are wired just like them.”

She graduated from El Puente High in Santa Barbara in 1997 and enrolled as a premed student at Santa Barbara City College, where she received the EMT certification that allowed her to work as a trauma and operating room technician at Santa Barbara Cottage Hospital. “I was working in the emergency room and assisting with surgeries in the operating room – and still going to school,” she says. “I worked every day I was in college. I would work nights in the ER and go to classes from 8 a.m. to 5 p.m. and be on-call in the ER from 7 p.m. to 7 a.m., and hopefully get some sleep and then go back to school. It was crazy.”

She also was the teaching assistant for an instructor who taught a two-semester anatomy course. It was her responsibility to dissect cadavers for the class.

“I got really comfortable with tissue and organs, and I loved the human body, loved all of it,” she says. “I saw organ transplant teams come into the ER when a donor had died. The hospital needed someone to assist in organ collection, and I was good at procurement, so they tagged me to assist with the organ transplant teams.

“That’s when I got exposed to organ and tissue collection. That was the first ‘light bulb’ for me to start this company.”

Dyer was shocked to learn that so few organs are suitable for transplantation, excluded because of the donors’ age, health, sexual history or other factors. “I thought it was such a loss. I realized that the system is about protecting the end user of the organ, but if it can’t be used for transplantation, why isn’t it being used for research? At least do something beneficial with it.”

Once she completed her studies at Santa Barbara City, Dyer chose to attend Sac State.

“I just loved it there,” she says. “The campus itself was great. I liked the laid-back atmosphere. I lived a half-mile away, so I’d ride my bike or motorcycle. I skateboarded on campus at night. I studied a lot at the Riverfront Center. I almost ended up playing soccer for Sac State, but I only had so many years of NCAA eligibility and ended up not doing that.

“The professors were amazing. They inspired me to go out and create something. An entrepreneurial 101 class, honestly, was the best course I took at Sac
State. It introduced me to people like me. Every week, the professor brought in entrepreneurs from the community, people like Shari’s Berries founder Shari Fitzpatrick, who had done what I ended up doing.”

Dyer majored in sociology, in part because medical schools at the time were looking for students with diverse interests. “I love sociology. It’s the study of people, and people fascinate me. Businesses fascinate me. How people connect the dots to create something great fascinates me. So sociology was perfect,” she says.

“And of all the schools I applied to, Sac State did the best job of saying, ‘This is what we can offer you.’ When I saw the information packet, I thought, ‘They have it together, and they really want to help students.’ ”

Dyer worked two jobs – putting in about 80 hours a week – to pay her way through the University.

She was employed by a small Bay Area company that specialized in collecting tissue for medical research. “I came in contact with researchers who said they waited six to eight months for adult liver tissue. I couldn’t believe it,” she says. “I asked, ‘Why don’t you get it from the transplant banks if they can’t use it?’ The thing is, the banks spend a lot of money doing that type of collection, and they’re not about to hand it over to a researcher for $500 or $1,000. Transplantable corneas are worth about $24,000 to eye banks, for example. So I became passionate trying to figure out how to change those things. I didn’t know where it would lead. I just saw it as a problem and wanted to fix it.”

Also while attending Sac State, Dyer landed an Executive Business Maintenance franchise, and local companies contracted with her to hire their maintenance staff.

“At some point,” Dyer says, “I started to put it all together. I realized that I was good at business. I had sales jobs through college [and] was good at that. I had a gift for gab. I wanted to take my love for medicine and my passion around that and patient care and helping people – and do something really positive with it. It’s been so exciting for me to create this company.

“My education at Sacramento State was pivotal to what I’ve done with StemExpress,” she says.

For media assistance, contact Sacramento State’s Office of Public Affairs at (916) 278-6156. – Dixie Reid