Making a splash at the Olympic trials

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— SHE’S ‘DEVINE’
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You could say Lauren Devine’s sweet 16th birthday gift was unique. Her father bought her a cheap electric guitar from a local pawnshop and, from that day forward, her passion for music has never pressed pause.

Brandon Fischer made a splash at the U.S. Olympic trials in Omaha, Nebraska last month, coming in 15th place in the 100- and 200-meter breaststroke events (only the top two advanced). But Fischer, at 32 years old, had a unique journey: he trained for those trials while holding down a full-time job as a mechanical technologist at LLNL’s Jupiter Laser Facility.

Summer students arrive on-site every year looking for an opportunity of a lifetime. While COVID halted the actual on site visits, students still come to the Lab virtually and bring their own unique verve:

- Ariel Gluck
- James Brutus
- Tre’ Jeter
- Aaron Hilton
- Titiksha Singh
- Micah Che

Brandon Fischer was the first 30 year old to break one minute in the 100-meter breaststroke event in 2019. Photo by Jack Spitser.
or many teenagers, getting a car is usually the best gift they could receive on their sweet 16th birthday, but not for Lauren Devine.

Her father bought her a cheap electric guitar from a local pawn shop, and from that day forward her passion for music has never pressed pause.

“Immediately joined the guitar class at school, and since I was the only kid with an electric guitar, I was automatically put in the jazz choir class assigned to play guitar,” she said. “At the time, I hardly knew how to play.”

Before the school year was over, she was playing with her group at jazz festivals, covering for other students on bass, drums and singing alto and harmony as needed.

“That same teacher also utilized me for various musicals as a pit musician on guitar or drums, even after I had graduated from high school,” she said.

Devine was crowned “most musical” during her senior year in high school and she received the “jack of all trades” award from her music teacher — his version of most musical.

She received a bachelor’s degree in music from California State University, Stanislaus. Her performance instruments were classical guitar and singing mezzo/alto, with a concentration in music composition.

Today, in addition to being a team lead and user experience/user interface (UI/UX) designer at LLNL, she plays in four bands throughout California and the West Coast. Her musicianship has taken her far, including a tour of Italy with a chamber choir where they performed at the Vatican and at St. Mark’s Basilica in Venice.

Most of Devine’s musical focus is on playing for ’80s and ’90s tribute bands. Although she prefers performing covers from these two decades, she also plays other types of music and genres as well.

“I enjoy playing classical, Spanish, blues, jazz guitar and bass, singing classical music, singing in duets, quartets, chamber choirs and larger choruses,” she said.

Currently, her primary band is Flannel, a ’90s alternative rock and grunge tribute band, where she performs lead female vocals and plays rhythm guitar and keytar.

Her second main band is Flock of Seagirls, a “Ladies of the ’80s” tribute band. She plays rhythm guitar and keytar.

She also plays bass for In Uterus (an all-female Nirvana tribute band) and sings lead vocals for Jagged Lil’ ‘Sette (an Alanis Morissette tribute band).

Devine gets her inspiration and energy from the crowd. “They inspire me to perform,” she said. “I love the energy they bring when we play songs they love.”

While performing, her focus is on paying tribute to great musicians, creating a fun environment for everyone and reminding the audience to tip their bartenders. “We try not to get political on stage,” she said. “Our audiences are diverse and we’re all just there to have a good time.”
Devine’s musical inspirations are just as diverse as her instruments and abilities. Some of her favorites include Nirvana, Alanis Morissette, Muse, Lady Gaga, Madonna, Smashing Pumpkins, The Killers, Erasure, Samuel Barber, Eric Whitacre, Bach and Mozart.

When the band decides which songs they want to learn, a due date is set for a particular rehearsal, and members of the band are expected to come prepared.

To learn new songs, Devine looks to YouTube tutorials and any available music charts or tablatures. She listens to the professional recordings of the songs and any isolated instrument tracks for her part.

If needed, she also will write out the song structure and work to program any guitar, bass, keys and vocal special effects needed for the song. When she has all she needs, she will practice the song repeatedly until it has been committed to memory.

At rehearsal, Devine and her band will run the song a few times, pausing as needed to work out any kinks, work on dynamics and provide feedback.

“When the band feels good about how the song sounds, we add it to the set list for the next show and perform it,” she said. “If we have performed a song a few times, live, for different audiences, and we feel like the song isn’t really a crowd pleaser, we may drop it from the set moving forward.”

Performing at a venue near you

To catch a show featuring Devine and her bands, follow their Facebook pages or check their websites to see upcoming gigs. The bands did not perform in 2020 because of the pandemic but are now scheduling for 2021.

Current Bookings

Saturday, Oct. 2, 2021
Windmill Cove Restaurant & Bar in Stockton, California. ‘80s vs. ‘90s show. Flannel will be bringing the ‘90s to the show from 5-7 p.m. for a free all-ages show. The ‘80s band will be on stage 2-4 p.m.

Saturday, Dec. 4, 2021
Retro Junkie Bar in Walnut Creek, California. Flannel on stage from 9-11 p.m., DJ from 11 p.m.-2 a.m., 21+. $10 cover.

More shows to come!

Websites:
Flock of Seagirls: https://flockofseagirlsband.com
Flannel: https://flannel90sband.com
Bonnie Fischer’s mother could have never imagined the baby boy that she took to the Laboratory pool for “mommy and me” swim classes would be on the blocks at the Tokyo Olympic Trials 30 years later.

In fact, Fischer, 32, has participated at Olympic trials four times during his swimming career, placing 15th this year in the 100-meter and 200-meter breaststroke events. Despite a strong performance from Fischer, only the top two swimmers advanced to the Olympics.

But Fischer’s story is more about drive and grit than any single swimming competition. He works full-time as a Lab mechanical technologist at the Jupiter Laser Facility and says his regimen in the pool has helped him not only become a more valuable team member but also a better citizen.

“As hard as it is, it’s taught me about how to interconnect,” he said. “It’s given me a good work ethic and work drive. You don’t become a top swimmer in the world and not have a work ethic. It’s taught me a lot of how to do well at work, how I should go out into the world and be a contributing citizen to society.”

On to the trials

As for the most recent Olympic trials, Fischer said his ability to focus when he’s on the blocks is a trait he uses on the job as well. “On the block, it’s like nothing else matters. My perspective goes up. I am immersed on the task at hand and this is what I need to do.”

His training for the most recent trials started as soon as the last trials were over four years ago. He was swimming in the morning, at lunch or in the afternoons while holding down his full-time job. “I was on queue to make a bigger splash,” he said.
When COVID hit, training became much more difficult with pools and gyms closed. He wound up swimming with a resistance band in a friend’s backyard swimming pool and created a makeshift gym in his garage for weight training.

“It was hard to go from something (to train for) to nothing,” the Livermore native said. “It literally was just keeping in touch with the water and keeping active and depending on muscle memory.” That said, he achieved his best time this year in the 100-meter breaststroke event.

In 2019, Fischer had a breakthrough that reinforced his drive to the Olympics: He was the only 30 year old to break one minute in the 100-meter breaststroke event. That time not only earned him a spot on the U.S. national team, it got him noticed.

“Competition is a hard mindset to change because I’ve been built into it,” he said. “It’s still there. Once I get in the water, all gloves are off.”

From guppy to shark

The very first time Fischer stepped in a pool it was at LLNL during those “mommy and me” classes. Every summer, he would advance in swimming lessons. Fischer’s mother Joy and father Richard worked at the Lab at the time and wanted their son to be comfortable in the water.

“They had me enroll for safety so that I wouldn’t drown,” he said, chuckling. “My dad used to swim at lunch. The thing to do was swim at the Lab and do swim lessons. It was the community thing to do; everyone did it.”

“The lessons taught us safety, how to swim, how to stay afloat and be comfortable in the water.”

Fischer doesn’t plan on quitting any time soon. With a goal of becoming a scientist, Fischer plans to apply for graduate school at the University of California, Berkeley and study nuclear mechanical engineering, all while holding down his full-time job. He is currently taking a break from his Olympic trial regimen — a 6,000-calorie a-day diet and swimming several hours each day — though he tries to swim 15-30 minutes a day at lunch.

“When I get done with a swim, I feel the endorphins and feel refreshed,” he said. “It’s a great lifelong healthy way of living. It’s helped me perform well at work and it’s allowed me to work better in the pool.”

If he were a water animal, he says he would be a shark. “There’s more to a shark other than they want to bite us. I don’t want to be preconceived or judged. Like a shark, you think of the teeth, but there’s much more below the surface,” he said – just as Fischer is more than just a world-class swimmer.

As for going for it again in 2024, Fischer has a wise mindset. “Sometimes my head talks me out of things, but my heart says you’re going to do it. I don’t know how I’m going to do it, but I want to go to 2024,” he said. “I want to keep doing this to prove to myself that I can do it. I can make it despite what everyone else says. It’s always going to be there. But it’s nice to have the job because it keeps me sane.”
Ariel Gluck says fencing has contributed to her success in the lab and in the classroom.

When Ariel Gluck was 11 years old, she wanted to find a sport that did not involve running, so she Googled fencing. She found a club near her house and the rest is history.

Fast forward to today: As a fourth-year materials science engineering major at Ohio State University and an intern at Lawrence Livermore National Laboratory, she said fencing has been invaluable in teaching her how to balance time and priorities.

“Juggling engineering school and a varsity sport— even if I’m just a walk-on—is a crash course in precision time management,” she said. “I have learned how to balance my career aspirations with developing myself as a complete person with an identity beyond my passion for engineering.”

She said fencing is a sport that demands focus and it is the part of her routine where she can let go of school and work concerns and just enjoy herself.

Gluck said she has never been a competitive athlete. Growing up, she focused her drive solely on engineering major at Ohio State University and an intern at Lawrence Livermore National Laboratory, she said fencing has been invaluable in teaching her how to balance time and priorities.

“Balancing daily three-hour practices with my rigorous coursework helped me develop excellent time management skills, which were crucial to adapt to online classes and remote work,” she said.

She has taken part in several projects at Ohio State’s Center for Design and Manufacturing Excellence as well as a remote internship based in Tel Aviv. Her work on a project testing metal-printed lattices with nTopology software set the foundation for her position at the Lab. She uses nTopology to optimize topology and design lattice structures for a range of projects at LLNL, including cellular fluidics, functional coatings, and 3D printed glass.

Gluck said it is never too late to start a new hobby. Her mother started fencing shortly after Gluck started; a few years later, her mother qualified for the Veteran World Team.

In addition to fencing, Ariel Gluck enjoys rock climbing. She says hobbies are important to distract her mind from school and work.

Whether he’s working as an intern on the world’s most energetic laser, leading a national student association or competing in athletics, 22-year-old University of Central Florida senior James Brutus likes to set goals and try to meet them.

As an Air Force ROTC cadet, Brutus will spend the next nine months serving as the national commander of the Arlington, Virginia-based Arnold Air Society, a collegiate student professional development organization.

As the leader of the Arnold Air Society, Brutus’ 2021-22 term runs through April 2022 and his “command” reaches about 2,800 ROTC cadets at 125 universities, including cadets at the Air Force Academy.

Brutus also enjoys athletic challenges. To date, he’s biked 100 miles in the Florida Keys, run a 21-mile race, gone skydiving from 5,000 feet and scuba dived three times in Hawaii.

“I continue to challenge myself to try new things, as I’ve found that it helps me to develop a mindset that I can accomplish whatever I set my mind to achieve. When I see a new obstacle in my life to overcome, to give myself a bit of a motivational boost, I enjoy looking back at my previous accomplishments.”

For the past six weeks, Brutus, who is seeking a bachelor’s degree in photonics science and engineering, has served as a “virtual intern” for the National Ignition Facility & Photon Science (NIF&PS) directorate.

“This internship has definitely been what I was hoping it would be,” Brutus said. “I was looking for something that was academically challenging and this internship has definitely challenged me.

“It’s been humbling to learn how much there is to know. I’ve been taken aback by how bright and intelligent some of the people are that I’ve worked with. It sets the bar high for where I want to be in the future.”

During his 15-week internship, which concludes Aug. 13, Brutus is part of a team conducting a plasma optics project, using multiple high-power lasers to create a plasma transmission grating. Brutus collects data from completed simulations, behind the scenes, so the team can prep for experimental tests.

The team plans to use a secondary probing laser pulse directed at the plasma profile created by the initial pulses.

LLNL summer student James Brutus loves a challenge.

LLNL summer student James Brutus competed in the three-mile America’s Mighty Warriors Military Race, held in partnership with the Clermont, Florida-based Clermont Triathlon Club. In 2019, Brutus helped coordinate bringing 30 participants to the race to raise money for veterans’ traumatic brain injury and post-traumatic stress disorder treatments.
Running, ping-pong, billiards, 10-pin bowling and martial arts. Those are among the hobbies that Lawrence Livermore National Laboratory computing intern Tre’ Jeter uses as personal time to distract him from work and his studies. “Each of my interests require me to be patient and logical, from how fast I start a run down to the oil pattern on a bowling lane,” he said. “I have related this way of thinking to my personal life and have overcome personal challenges much easier than before.”

He said earning a third-degree black belt in Tae Kwon Do and level-three yellow belt in Jiu Jitsu has really disciplined him in all of his endeavors.

“I don’t give up easily and I think that level of determination and resilience is needed for this field of work to begin with,” he said. “My martial arts background has helped shape that layer of perseverance.”

His passion does not stop there. He began fiddling with computers at a young age, but he did not learn about computers extensively until his junior year of high school in the Scholars Academy at the University of South Carolina- Upstate. The program gave him a four-year head start on college, where he amassed 87 college credits as a high school student.

He matriculated through his undergraduate studies at Claflin University in Orangeburg, South Carolina. He was the first student in the institution’s history to graduate with a dual degree combination of computer science and computer engineering while completing a cybersecurity minor. He graduated magna cum laude and took part in nine organizations while in college.

Jeter received his first internship at LLNL at the end of his freshman year as a cybersecurity intern in Global Security. He worked on network mapping, vulnerability scanning and Python programming. He returned to the Lab as an intern in summer 2019 in Computing, where he worked on model-specific register analysis.

In 2020, he stepped away from the Lab to pursue a cybersecurity engineering internship with the Space Dynamics Laboratory in Logan, Utah. He gained more hands-on experience within security and was able to bring that knowledge back to LLNL this summer.

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Jeter said he will use what he has learned to better prepare himself when he is a first-year Ph.D. computer science student at the University of Florida this fall.

“Aaron Hilton strives to be his best day in and day out.”

The discipline and time management skills I learned through my ballet training have helped me in other aspects of my life from academic studies to collegiate athletic pursuits,” he said. “As a dancer, I learned how important it is to take care of yourself to be able to perform your best day in and day out.”

“We moved around a bit,” he said. “It was easier for my parents, who were both working, to put my older sister and me in the same activities.”

At 16, the family moved to Washington, D.C. Hilton applied to a dance academy in New York City to get more intense training. After graduation, he took a gap year before college to dance with the Boston Ballet.

“I did my freshman year and thought after Boston I was done with ballet,” Hilton said. “Then at the end of freshman year, I took an audition in New York and it was the first time this company had done an in-person audition in a long time. I got a job in Miami. I was able to take multiple years of absence from school and danced for 3 years until spring of 2020.”

As the pandemic struck, Hilton went back to hitting the books and participating in ROTC activities. “Unfortunately, I think the ballet chapter has closed. The longer I delay my academic pursuits, the longer the process would be to start down a new career path.”

Because his parents served in the Foreign Service, Hilton has a love for country and feels a career in the Navy can help him achieve his goals. But dance will always be a part of him.

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As a woman in STEM, Singh has faced some challenges, which is why she is an advocate for other women in STEM. She is actively involved in the Phi Rho sorority and serves as secretary for the University at Buffalo’s Society of Women Engineers.

“Seeing other women pursue their goals in the STEM field inspired me to want to help others and pursue my own interests as a woman that supports other women in engineering,” she said. “There are a lot of stereotypes surrounding women in a STEM workplace. These stereotypes cause younger women not to want to pursue degrees or occupations in this field. I hope to inspire and help young women pursue STEM-related careers to actively increase women involvement in STEM and help them grow, explore and succeed. I wish to show younger women how STEM impacts the world and I want them to experience it.”

Along the way, Singh has learned about teamwork, friendship and the power of communication. “I have learned how important it is to be able to articulate your thoughts,” she said. “I have learned that whatever happens, it is always important to take risks and explore all the possibilities. It is important to be patient. I have learned that time and tide wait for no man. It is very important to manage time and keep working hard.”

Through her work as a teaching assistant in the Mathematics Department at the University at Buffalo, Singh discovered that she also loves teaching. “I am really passionate about teaching, sharing ideas and connecting with people on subjects of curiosity. I aspire to become a professor and teach thousands of students across the globe.”

Singh was inspired by her father at an early age to pursue engineering.