SpotLight

THE PEOPLE WHO DRIVE OUR SCIENCE & TECHNOLOGY

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IT'S SHOWTIME!

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SpotLight

THE PEOPLE WHO DRIVE OUR SCIENCE & TECHNOLOGY

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INSIDE THIS ISSUE • • •

Welcome to the latest edition of *Spotlight:* A look at the people who make up Lawrence Livermore National Laboratory.

We hope you enjoy this issue of *Spotlight.* We'd also like to hear from you. Send us your thoughts and suggestions, whether it's what you like — or even if you don't — about this magazine, or if there is something you would like to see in coming editions. You can reach us at pao@llnl.gov

On the cover

Dustin Riggs takes a moment in the wig room before the first dress rehearsal. The musical featured 250 costumes. Altogether, they weighed 5,000 pounds and had to be shipped from Florida to Walnut Creek in 60 crates.

DUSTIN RIGGS TAKES CENTER STAGE

BY MADELINE BURCHARD/LLNL

To most people at Lawrence Livermore National Laboratory, Dustin Riggs is best known as the chief of Protocol. When the Laboratory hosts an important visitor or plans a special event, Riggs and the rest of the Protocol team spring into action. However, when Riggs isn't orchestrating Protocol visits, he is a decorated theater producer.

For five weeks, the Lesher Center for the Arts in Walnut Creek was home to Riggs' latest theater production: "Priscilla, Queen of the Desert." The musical follows the adventures and hijinks of two drag queens and a transgender woman as they travel from cosmopolitan Sydney and across the Australian Outback in a rehabilitated van named "Priscilla." Along the way, they get in and out of trouble, make friends and perform to dance classics such as "I Will Survive," "It's Raining Men" and "Girls Just Wanna Have Fun." Actors dance and sing in huge wigs, over-the-top costumes and a bus that spins and changes in front of the audience's eyes.

As the producer, Riggs was responsible for making sure that "Priscilla" was a showstopper. His duties included the typical producer responsibilities. But a larger-than-life show like "Priscilla" required more than business-as-usual.

"A show like this is groundbreaking and bold for a place like the Diablo Valley," Riggs said. "Doing this right was so important to me."

Besides the titular bus, the most iconic images from any "Priscilla" productions are the wigs. For Riggs, not just any wigs would do. He wanted the famous wigs from the 2009 London West End Production. To get the wigs and the rest of the costumes required transporting 5,000 pounds of costumes in 60 crates from Florida to Walnut Creek. For Riggs, every detail in a production is important.

"Theater is all about transporting people to another place," Riggs said. "The bus, the wigs, the eyelashes, the costumes – everything plays a role in creating a fantasy."

The first act

Riggs' began his theater career his freshman year at Granada High School as a backstage assistant at the Tri-Valley Repertory Theatre's production of "42nd Street." He was immediately addicted to the excitement and energy of seeing a play go from script to a fully immersive world. As a creative teenager, Riggs felt immediately at home in the theater world.

"The theater community felt like a group where I could belong," Riggs said. "It is a safe outlet for people who are different. I felt like I could really be myself."

Riggs continued taking acting and backstage roles in theater even as he began his LLNL career as a student intern. While he loved being on stage, he felt more and more drawn to the behind-the-scenes frenzy that came with producing. In 2005, Riggs stepped into his first role as producer under the

As producer, Dustin Riggs was responsible for bringing "Priscilla, Queen of the Desert" to Walnut Creek's Lesher Center for the Arts.

“Theater is all about transporting people to another place. The bus, the wigs, the eyelashes, the costumes – everything plays a role in creating a fantasy.”

–Dustin Riggs

mentorship of Michael Demers for the Contra Costa Musicical Theatre’s production of “Beauty and the Beast.” Demers gave him freedom to follow his heart creatively while showing Riggs how to handle the difficult situations in a cool and collected way.

The whole experience was time-consuming and overwhelming — and Riggs loved every moment of it.

“Before then, I didn’t fully understand what went into managing a large production,” Riggs said. “It took over my life and then it became my life.”

Only one year after he first began producing, Riggs was recognized with a Shellie Award for Best Musical for “Beauty and the Beast.” The Shellie Awards recognize achievements in the performing arts of Contra Costa County and the Diablo Valley. To date, Riggs has won four in total for his productions of “Cinderella” and “Hairspray” and another for his overall contribution to the local theater community.

Protocol as production

As Riggs rose up in the East Bay theater community, he also was making big strides at LLNL. When he was 17 years old, Riggs joined the Lab community as an administrative outreach assistant. He continued working while going to school for his bachelor's degree in business administration and management at California State University, East Bay and MBA at Saint Mary's College of California. Since his days as a student intern, he has held roles of increasing responsibility, including program administrator, business analyst and principal directorate administrative business manager at the National Ignition Facility. In 2013, Riggs became the deputy chief protocol officer and in 2015 he was promoted to his current role as the chief protocol officer.

While protocol may seem like a far cry from theater production, Riggs sees them as similar in many ways.

"Hosting an important visitor or putting on a Lab event is very similar to theater production," Riggs said. "We

Bernadette (played by Michael Patrick Gaffney) sings out to the audience during the funeral of her partner.

"Priscilla" played for five weeks at the Lesher Center for the Arts. It received rave reviews for its music, visuals and actors.

have to create a story. What do we want someone to feel when they walk on our campus?"

Like a musical, every moment of a protocol visit is scripted and choreographed. Sometimes, like in a live theater performance, perfect plans have to be changed on the fly. No matter what, the show must always go on.

"Both protocol and theater production are fast-paced and have no room for error, but that is what I love about it. I am addicted to that energy," Riggs said.

For some, Riggs' life as chief of Protocol by day and producer by night might seem exhausting, but that's not how he sees it.

"Theater is where I get my energy and inspiration to do everything else," Riggs said. "I would encourage everyone to find an outlet that brings you joy."

Felicia Jollygoodfellow, played by Charles Peoples III, lip syncs an operatic solo on top of Priscilla, the titular bus.

Encouraged to fly

Riggs credits his confidence, work ethic and optimism to his mother. Despite raising four children mostly on her own, she energetically supported her children's dreams and passions.

When a young Riggs told his mother that he was interested in becoming a pilot, she booked him flying lessons. Amidst the flying lessons and child rearing, Riggs' mother also sent herself to college. When Riggs was in high school, he watched his mother graduate with a law degree.

"She has always been an example that if you work hard enough, you can do anything," Riggs says. "She inspires me to think big."

Riggs credits his mother for inspiring him to think big.

One of the hallmarks of the-top costumes, even

s of Priscilla, Queen of the Desert is its over-
even during a funeral scene.

Dance classics were performed throughout "Priscilla."

Lab physicist tunes into the

The notes sing out, throaty and silvery, reverberating like a mournful soliloquy and immersing the room in a deep baritone. To Branson Stephens, playing the viola da gamba, a cello-like instrument from the Renaissance era, is a bit like time-traveling, or conversing with a long-dead composer.

Stephens holds the bow underhanded in the traditional style, gliding it across the bass instrument's six gut strings. The piece he's playing is called "Sonata in E Minor," written in 1720 by German Baroque composer Georg Philipp Telemann.

"They're a little bit like puzzles," Stephens said. "You have to sit there and study it, and when it falls into place for you and you see what the composer was intending with a particular type of a line, you feel like you've been communicated with across the centuries in a weird way. It's like it was hidden in there; there's a kind of unmediated communication."

The viola de gamba first appeared in Europe in the late 15th century and subsequently became one of the most popular Renaissance and Baroque instruments, according to the Viola da Gamba Society of America. The instrument is name-dropped in Shakespearean plays and was usually played by well-to-do families in ensembles or consorts. By the 16th century, the viola da gamba took on its standard shape — a curved front like a violin, sloping shoulders and a flat back, like a guitar. The instrument went out of fashion around the 1750s, when the violin family (the violin, viola and cello) took over, as music changed from being performed in the home to large concert halls.

Stephens' foray into the instrument began as a high school student, when he heard it for the first time in a north Texas record store. He was fascinated by the sound the instrument made.

"...when it falls into place for you and you see what the composer was intending with a particular type of a line, you feel like you've been communicated with across the centuries... "

-Branson Stephens

Lawrence Livermore National Laboratory physicist Branson Stephens first heard the viola de gamba, a stringed instrument dating from the 15th century, as a teenager in Texas. A longtime cello player, Stephens was fascinated by the viola de gamba's unique sound. After relocating to take a job at the Laboratory, Stephens joined the Pacifica Viola da Gamba Society, often practicing and playing with group members in consorts and workshops. As he learns from some of the best viola de gamba players in the world, Stephens wants to spread awareness of "early music," a genre with a small but passionate following in the Bay Area.

e past through 'early music'

BY JEREMY THOMAS/LLNL

"To me it has more of a nasal resonance," Stephens said, holding his ornately carved bass viola de gamba. "People say it sounds more like the human voice than the cello. I think of the sound of a modern string quartet as being kind of warm or golden. The sound of a viola consort (treble, tenor and bass violas) is more of a cold sound, but also sort of glassy and beautiful in a way."

At 17, while working as a summer intern at Los Alamos National Laboratory, Stephens noticed the viola de gamba on a poster on a physicist's wall. The physicist was "shocked" that Stephens recognized the instrument and invited Stephens to his home, where Stephens held the viola de gamba for the first time. He was no stranger to stringed instruments. He'd been playing the cello since middle school and had continued throughout grad school.

While similar to the cello in size and shape, there were several key differences. The viola da gamba is played between the legs, hence the name — literally translating to 'les-viola.'

The bass viola de gamba that Stephens plays has seven strings, instead of four, and unlike the cello it has movable frets, making playing chords easier, but staying in tune more difficult, Stephens said.

"They're really different than the violin family," Stephens said. "It's sort of backward in a sense. The cello has a strong down bow stroke; the gamba has a strong up-bow stroke. It's sort of a mirror world from your brain. But (the gamba) has always resonated with me. The problem is that there aren't a lot of these instruments available in most places and there aren't a lot of people who play them."

It wasn't until he was hired at Lawrence Livermore as a code physicist and moved to the Bay Area that Stephens not only found a viola da gamba of his own, but an entire community devoted to early music. Like many forms of artistic expression, early music thrives in the region.

Interest in the genre, which generally refers to music created prior to 1750, underwent a resurgence in the 20th century with musicians who wanted to recreate what Medieval, Baroque or Renaissance-era music must have sounded like when it was originally written. Today, there are numerous "historical performance" collectives all around the world who gather and play, but early music is still extremely niche (Stephens guesses there are only a few hundred people that play in the area). Berkeley happens to be a hotbed for the genre, hosting the Berkeley Festival & Exhibition, one of the world's largest early music conclaves.

Once relocated to the area, Stephens linked up with a group of enthusiasts through the Pacifica Viola da Gamba Society (PVdGS), an active chapter of the national Viola da Gamba Society of America that includes players of all skill levels, instrument makers, teachers and performers. The society even rents out bass viola de gambas (which can be prohibitively expensive to buy) for a modest monthly fee.

"I really came to the right place," Stephens said. "It's a really remarkable group of people who play…You meet a lot of people you find you have a lot in common with. There's something about the instrument that attracts a certain type of person. I think of early music as the dorky nerdy corner of classical music. There are a lot of people who play modern music who aren't interested in it. It's a matter of taste, but there is a certain kind of geekiness."

From September to May, the society holds free monthly "play days" in an El Cerrito church, which typically draw between 20 and 40 players. A professional musician leads the morning group session, where players work on a piece of selected music, usually something the players have never seen, then the players gather in consort groups (ensembles) of about 4-6 people organized by playing level. The players run through the piece while the coaches provide pointers — often the sessions last into the late afternoon. While many people have the preconception that early music is simplistic, it's actually quite the opposite, Stephens explained.

"It's polyphonic (many-voiced) music," he said. "It's like everybody is soloing at the same time, and the interlocking of all of those parts produces a particular effect. You're basically hanging on for dear life when you play it, because if you get lost it's really hard to get yourself back into the music. That feature draws a certain kind of person."

Playing in the consorts, he added, is like a "brain exercise" that often reaches a point of transcendence when all the players are on the same page.

"You're playing with a group of people and you get to a moment in the music where there's a harmony change,

there's a sudden stillness to it where it just really works," Stephens said. "I guess it's an emotional thing, but there are these moments of sublimity that just strike you out of nowhere. That's the best thing about it."

Besides the society's play days, Stephens participates in more informal consorts at area homes and recitals the society holds every June. He also has attended larger regional viola de gamba workshops where he is taught by some of the best viola de gamba players in the world.

"These are people whose depth of knowledge in this field is staggering," Stephens explained. "It would be like learning from Joshua Bell or Yo Yo Ma — we get to learn from the equivalent to that person. The difference is that it's such a smaller community."

In addition to playing with the society, Stephens practices with his own teacher, a professional player in Oakland. After two-and-half years practicing, he considers himself to be at an intermediate level, with most of his experience being on the bass viola de gamba. He's tried the treble and has his sights set on learning the more-challenging tenor, with a goal of simply becoming better and playing as much music as he can with as many people as he can.

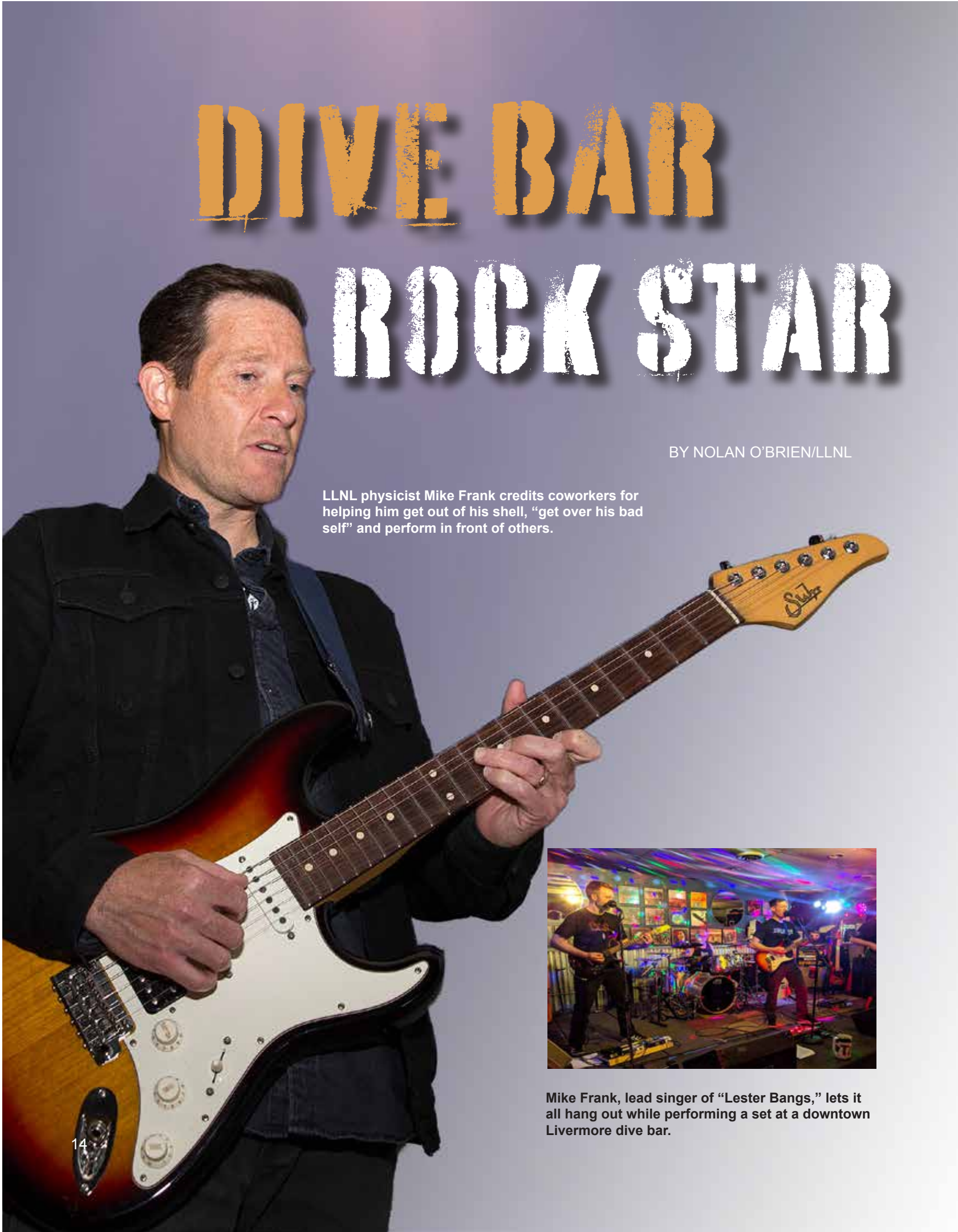
Most of what Stephens has learned about the viola de gamba has come through word of mouth. Very few of his fellow players are as young as he is (38), which does lead him to be concerned about the music's future.

"I want to make it more accessible to other people," Stephens said. "I've dragged a bunch of friends to concerts and it may be the first time they've heard someone play on gut strings or play a Baroque or Renaissance instrument. As for early music's future, I think it will maybe become even more of a niche community than it already is, but it will continue just because the music itself is so wonderful. I want to encourage people to give early music and historically informed performance practice a chance. A lot of people think Bach is all there is, but there's some really sublime music out there that people just don't know about."

About once a month, Stephens plays his viola da gamba with members of the Pacifica Viola da Gamba Society. Held in an El Cerrito church, the group's "Play Days" are led by professional musicians and typically draw between 20 and 40 players. Stephens said playing in the consorts is like a "brain exercise" that can be difficult, but also transcendent.

DIVE BAR ROCK STAR

BY NOLAN O'BRIEN/LLNL



LLNL physicist Mike Frank credits coworkers for helping him get out of his shell, "get over his bad self" and perform in front of others.

Mike Frank, lead singer of "Lester Bangs," lets it all hang out while performing a set at a downtown Livermore dive bar.

If you were to pass LLNL physicist Mike Frank in the hallway, he would appear to be a run-of-the-mill scientist, quiet and subdued, respectful and insightful. He would likely be wearing a button-up shirt neatly tucked in, with his hair neatly combed to one side. He has the look of someone who runs high-consequence national security simulations, and he takes his work seriously.

By night, you would find there's another side to Mike. (Colleagues often confuse his first and last names, so he has asked to be called by his first name.) He is one of many scientists at the Laboratory who moonlights as a musician, but he is among the rare few who can legitimately be called a dive bar rock star.

When Mike joined the Laboratory, he had always day-dreamed of playing in a band, but never thought he would really do it. He had played the guitar on and off since fourth grade, but he was self-taught and didn't have any experience playing with others. What he did have was a supervisor, Rob Allen, who was deeply connected with the Livermore winery music scene. Perhaps most important, Allen was patient and encouraging enough to get Mike out of his musical shell. Allen lent Mike an electric guitar and invited him out to a few jam sessions. They formed a rag-tag band with another Laboratory employee and friend, Bob Weidman, and played a few gigs at downtown clubs and wine bars.

Visit Lester Bangs website at: https://www.lesterbangs.band/

"I wasn't very good at that point, and I was really nervous playing and singing in front of even small audiences," Mike said. "But those early shows really taught me that performing in front of others is a bigger deal in your own head than in the heads of the audience. I learned to get over my 'bad self,' so to speak. If you're not a natural extrovert, you have to get over that inner critic. Those were the years of internally recalibrating my mind; 'You can do this.' It was a lot of fun, and my confidence grew each time we got positive feedback."

These early gigs were an important part of Mike's origin story as a performer, and jamming with Allen proved key to building his confidence. Mike was ready to start his own band to focus on performing the music from his formative years, the music that really spoke to his heart: "high-energy, alt-'90s hard rock, or grunge."

"I love '90s music," Mike said. "I remember vividly when I heard 'Smells Like Teen Spirit' for the first time. That was a significant moment — driving on the Massachusetts Turnpike at night, windows down, and I was like 'Whoa, this is intense.' It was just a time of life when everything was vibrant and loaded with possibility."

Mike had found a group of East Bay musicians who shared his love for alternative '90s hard rock. They formed a band, have gone through a few band members and band names – the current one being "Lester Bangs" – but have consistently kept their focus on alternative hard rock. For their first two years, Lester Bangs did nothing but practice so they could do justice to Soundgarden, Alice in Chains, Stone Temple Pilots, Pearl Jam, Foo Fighters and Rage Against the Machine when they performed. They are OK with the fact that the music they perform may not be a good fit for wineries looking for mellow background music, weddings looking for dance music, or a "classic rock" crowd looking to relive the '70s.

"We've had a couple of mismatches between us and the crowd – those are a bummer," he said. "But when the music means something to the crowd like it does to the band, that's when the energy builds to something special.

"When you play the type of music we play, the audience expects a certain energy," Mike said. "It's not like singing in the shower or in the car. It's physically effortful to really do Soundgarden or Foo Fighters vocals. There has to be emotion, and it has to come across, not in volume, but in intensity. You have to love the music enough to be willing to put yourself out there, to risk showing emotion, to push your voice a little harder. It has to be authentic. That's when people connect, and the energy of the room just pops."

And when it does, Mike says, you really feel it.

"Performing for me is all about those moments when some middle-aged guy, or some group of friends, they're jumping around, shaking their fists to Rage Against the Machine, just totally cutting loose, totally into the music," he said. "That's really gratifying.

"People want authenticity, and to sense that the music means something to you," he said. "They want to see you let it all hang out. People can tolerate imperfection more than they can phoniness or a weak effort. For me, it was about learning to open-up and risk embarrassment and imperfection. That makes you vulnerable to criticism, but that's also what it takes to really connect with other people."

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