STUDENT **ROUNDS**

A Soundtrack for Medical School

FOR ALAN HE '24, MUSIC AND MEDICINE ARE COMPLEMENTARY PURSUITS.

A fter a long day of classes or a grueling exam, you're likely to find first-year medical student Tianfang "Alan" He at his computer composing electronic music. Or perhaps jamming out to some Jimi Hendrix. For as long as he can remember, music has been his passion.

"Music is built on a foundation of perpetual curiosity, technical excellence, and effective collaboration. It can capture the spirit of a generation, express previously intangible emotions, or challenge our understanding of social concepts. Plus, there's nothing better than just sitting down, being creative, and jamming with friends," he says.

Alan grew up in a music-filled home

in the Bronx. "My parents were always playing these soundtracks from Oscarwinning films with terrific scores. They used the music to create a joyous atmosphere and I think that optimism really stuck with me," he says.

Before long, he was performing himself, first piano, and later trumpet, clarinet, saxophone, and by middle school, drums. "I participated in a couple school bands and was able to try numerous instruments. If I had the time, I'd love to master them all, but I just dabble," he says.

As a high school student, Alan was exposed to aspects of music beyond performance—history, theory, composition, as well as electronic music.



Medical student Alan He is an accomplished musician who enjoys playing music and composing to destress from medical studies.

"In jazz, there is a solo section where you can express your emotions and display individual virtuosity in the context of the larger piece," he says. "I enjoyed the freedom associated with improv and creating something new."

Improvisation eventually led to composition. "Electronic music and a MIDI keyboard allowed me to leverage my background in piano to write for any instrument under the sun. Together, they let me compose pieces, score films, and produce beats like my mentors and idols," says Alan.

He reveled in the social commentary of hip hop. "That's the music I really fell in love with because it represented the culture of my borough, our immigrant populace, and the challenges of the social economic class divide."

Driven by a desire to better understand the genre's impact on society, Alan would go on to explore the dichotomy of popular hip hop and politically conscious hip hop for his senior project at Middlebury College, where he double majored in music and biochemistry. He says his dual pursuits worked different sections of his brain. "I never felt overcommitted; it actually helped me develop a deeper appreciation of both the sciences and the arts," he says.

Alan grew up in an underserved, underprivileged community, but attended both local public and elite private schools on scholarship, which provided a unique lens for him to view the world. "Growing up in the immigrant community of the Bronx is similar to attending a multicultural potluck: everyone brings something. Individuals offer perspectives with power to radically improve the community if we are open to the conversation. It's my goal to better understand and share the perspectives of others while broadening my own worldview through academic, extracurricular, and service activities," he says.

Upon graduation, Alan followed his passions for science and community service, joining the clinical research team at Montefiore-Einstein Center for Cancer Care, a National Cancer Institute (NCI) Community Oncology Research Program (NCORP) site in his hometown. As the head study coordinator for NCI MATCH, a precision medicine cancer treatment trial in which patients receive treatments based on genetic mutations found in their tumors, he worked directly with patients, physicians, and entire clinical teams. "I learned the value of effective communication and technical acumen in the professional world while reaffirming my decision to practice medicine in the future," he says.

That desire to better communicate provided the impetus for Alan's concurrent venture. Along with some college friends, he founded ElectroGraphic (EG), a consulting firm focused on visual storytelling through professional graphics for academic publications and grants. "We work with dedicated physicians and innovative researchers to help transform complex ideas into easily understandable figures. Accessibility is key," he says of the company that has since branched to other academic disciplines. In the first year alone, EG's work was featured in multiple peer-reviewed publications with authorship status.

"My experiences in 2016 taught me that the healthcare industry is a multifaceted space, constantly evolving to better serve the needs of our patient populations," he says. "I thought the future would involve greater integration with the technology and became determined

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to learn more about artificial intelligence, machine learning, deep learning, and internet communication infrastructure."

Spurred by this growing interest, Alan joined the New York office of a startup called MightyHive, a data and digital media consultancy, where he fulfilled his curiosity and gained invaluable insight into the importance of listening more than you speak. "I had developed a decent ear for listening to the other members of the ensembles I played with; it definitely helps in the business world." After the company merged with S4Capital, Alan decided it was time to return to healthcare and enrolled in medical school. "Working on NCI MATCH, I fell in love with the process of thinking about what was best for our patients," he says. "But I also realized I wanted ownership and accountability for those decisions."

He says his varied experiences all play a role in who he is as a medical student. President of both Opportunities, Networking and Careers in Oncology (ONCO) and the Asian Pacific American Medical Student Association (APAMSA), he's also co-founded the Entrepreneurship Club, and is working with the Center for Community Engagement to create a program to partner Upstate students with middle and high school students in the community to help foster a love for music and the arts in various forms.

While working in New York, Alan spent his weekends teaching kids how

to create electronic music and score films. "It stems from my love of hip hop and making things more accessible," he says. "Electronic music is deeply tied to composition, samples, and synths. You don't need a physical instrument anymore. You can do so much with GarageBand or Audacity on your computer and it's free

and easy to share," he says.

He hopes to make the Syracuse program a reality once the COVID-19 vaccine rollout is complete. "It's important to lower the barriers to entry so that more people can be exposed to something that could potentially inspire them and help them express themselves through artistic means," he says.

He has also been part of an outreach group at Upstate that has worked with Symphoria, the local Syracuse musicianled cooperative orchestra, on a program to bring musical performances into the Golisano Children's Hospital. "Right now, the collaboration is digital and involves streaming concerts and content into the pediatric patients' rooms. I can't wait to see how the collaboration develops in the coming years," he says.

In the meantime, making his own music remains one of Alan's favorite outlets during medical school. He used YouTube tutorials to teach himself to play guitar as a quarantine hobby and continues to compose electronic music and score films. "It's never a burden to play music, study medicine, or pursue something you love," he says. "The combination is actually a release from having my nose buried in a book all the time."