HEAR:

Alzheimer’s and a ‘symphony’ of the brain

Hear what happens when two graduate music composition students spend time with neuroscientists, studying Alzheimer’s and the neurological effects of aging.

ARTIST’S STATEMENT: Zachary Bush

Cycles

“Cycles was written as part of collaboration with the Arizona State University Biodesign Institute. I was asked to write a piece about Alzheimer’s disease and as part of my experience, I visited with professors and scientists in the lab, visited a brain bank and held interviews with caregivers of Alzheimer’s patients. I decided to focus on the research aspect and the following piece depicts what I call a research “cycle.” Research takes months or years of methodical effort to try and prove a hypothesis. There are often many setbacks during this time. However, the experiments eventually are complete and the triumph of discovery prevails. This celebration is short-lived as the scientists then return to the methodical work of writing their findings and having them published, seeking funding for future research and starting the whole process once again.

While this piece depicts a research cycle in potentially any field, there are certain rhythmic and pitch elements which are specific to Alzheimer’s. The e4 allele is a known marker of Alzheimer’s and the piece contains a large emphasis on “e” during the sections about research. Additionally, chromosomes 1, 14 and 21 have some connections to Alzheimer’s and those numbers form the values for rhythmic duration in the piece.”

ARTIST'S STATEMENT: Stephen Mitton

Stages

In this piece I have attempted to capture the daily struggles of Alzheimer’s sufferers and their caregivers as the disease progresses through various stages over time. While the experience of dealing with Alzheimer’s is not consistent from one person or family to another, the constantly changing nature of the disease takes a tremendous emotional and physical toll on all affected. Much of the emotional content of this piece is based on listening to the stories of caregivers who have watched their loved ones change, lose their cognitive abilities and ultimately pass away. Despite these challenges, however, moments of peace and sweetness can be found in the lives of those caring for Alzheimer’s patients, and these moments have been appropriately represented in corresponding places in the music as well.

One common thread I have discovered in many stories about living with Alzheimer’s disease is that while the sufferer undergoes dramatic changes in behavior over time, some elements of his or her personality come through in ways that are often unexpected. For this reason, I have chosen a 12-note theme (first heard in the clarinet) that represents the personality of the affected person, which undergoes a variety of permutations over the course of the piece. The support of loved ones, community members and specialists can also be heard in various countermelodies played by the flute and strings. Stages ends on a chord that can only be described as bittersweet. Its lack of complete resolution is both a nod to the fact that the effects of Alzheimer’s linger on in the lives of caregivers long after the death of a loved one, and to the fact that the disease represents an immense societal and cultural problem that has yet to be solved.

MUSICIANS

STEPHANIE HOECKLE Flute
KRISTI HANNO Clarinet
JUN LEE Cello
SARAH KNIGHT Viola

BYRNN VANCE Violin
STEPHAN MITTON Composer
ZACHARY BUSH Composer

科学 exposed

Bringing Science to Life through the Arts
Experiment with us as we discover what can happen when artists and scientists come together to CREATE something entirely new.

When I walk through the glass doors of Biodesign 2, I step into the peaceful atrium, and notice a rising feeling of being at home. I feel oriented, and breathe easy. My parents immigrated to the U.S. for science and education; I grew up in labs, playing with “toys” like gels and 3-D molecular structures. I know my way around here, instinctively.

I climb the bright floors of Biodesign towards Wei Kong’s lab on the third floor. On my way, I smell lunches heating up, they smell like resilience and nostalgia. I know these smells, I cook like this too.

Step by step, I drink in the photo mosaics of researchers displayed like welcome signs at the front door of every buzzing lab. I see my own brown face in theirs. I see my parent’s faces.

There they are now, new immigrants, white coated, bent over a centrifuge behind the glass. Science is why I was the first person in my vast family lineage to be born outside of India. Science raised me to know about the delicate balance between insider and outsider. Science served as a sanctuary to my family.

My parents were born into colonized India; subject to various kinds of generational warfare, they were the only ones of their generation to immigrate. Science.

In my doctoral work on wellness and race, I advocate for science to continue to be a sanctuary for these faces in the glass. As an artist-scholar in Liz Lerman’s Animating Research project, I rejoice in the chance to dance again with science. I feel at home at this intersection. Transparency, connection, right actions, and mindful pursuits; these are values that I closely associate with home. These are values that I encounter walking through this building and semester. Candidly, I imagine home at least as much as I encounter it. Like a spider, I create it from within wherever I go. This semester, I made a home here at Biodesign; here at the intersection of glass and light, migration and desert sediment. For this feeling of home, I offer my art as a prayer of gratitude. I wish for all to feel at home in their bodies, for all to know the power of science, art and sanctuary.

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SEE:
Contemporary movement, dance and theater

See what happens when a molecular virologist, an evolutionary biologist and a hip-hop dancer visit a laboratory. We’ll find out when dance legend Liz Lerman, choreographer and MacArthur fellow, brings her students and her craft out into the open at the Biodesign Institute.