Bearer, Elaine

Elaine Bearer was appointed as Honorary Professor of Strömstad Academy 21st March 2020.

Elaine Bearer is a neuroscientist and composer of music. Bearer received her Bachelor's of Music from The Manhattan School of Music in Theory and Composition in June 1970.). Prior to her studies at The Manhattan School, Bearer was a pupil of Nadia Boulanger, first at the Ecole Americaine des Beaux Arts in Fontainebleau and continuing in Boulanger's home on Rue Ballu in Paris. She received the Masters of Art from New York University, where her thesis was Structural Innovation in the String Quartets of Haydn.

Then, after being a professor of music at Lone Mountain College and at San Francisco State University, she turned to neuroscience. After service as a Teaching Assistant for Don Kennedy in the Program in Human Biology at Stanford University and a graduate research assistant for John G. Nicholls, she was accepted into the nascent prestigious Medical Scientist Training Program where received the MD-PhD degree from University of California San Francisco (UCSF) in 1983, after a record 6 years. During MD-PhD training, she also bore two children, Ned and Jeremy. Upon graduation with the MD-PhD, UCSF awarded her both the Chancellor's Award for Medical student research and the Graduate Student Award for research. Bearer left UCSF after graduation for a Swiss National Science Foundation post-doctoral fellowship to work with Lelio Orci at the CMU in Geneva, Switzerland. Returning to UCSF for medical residency and fellowship training in pathology and in Bruce M. Alberts' laboratory as a post-doctoral fellow. She obtained California Medical License and Board Certification in Pathology and fellowship awards from Bank-of-America Giannini Foundation and America Cancer Society. During this time she studied the emotional experience of music, using imaging to understand the biochemistry of synaptic vesicle release, and biochemistry, molecular biology and genetics to understand the cytoskeletal underpinnings of membrane topology and axonal transport. She identified a critical protein for formation of the hearing apparatus, "Kaptin, kptn". During this time at UCSF she also was a lecturer at San Francisco Conservatory of Music, and composed many musical works, including her award-winning piano concerto, Ode to the White Crown Sparrow, Ah Toosh-mit Overture, several string quartets and other chamber music--all of which received performances with media reviews.

After completing her fellowships in Biochemistry and Biophysics and in Pathology, Bearer left UCSF to accept a tenure track professorship at Brown University in the Division of Biology and Medicine with a secondary appointment in Music. At Brown, Fenestrae, one of her string quartets, her Nicholls Trio, and the Toccata were recorded and issued commercially on CD by Albany Records. Her ballet scores for "Torso suspended' and "i Corpi Celesti" were choreographed by Colleen Cavanaugh and performed multiple times by Festival Ballet Providence, multiple choral works were performed, including her greatest work, The Magdalene Passion, by the Providence Singers under Julian Wachner. Bearer's Seaselves, an orchestral work with narration of a poem written by Bearer's friend, the San Francisco poet Lawrence Ferlinghetti, was premiered by the Brown University Orchestra under the baton of Paul Phillips, and received an ASCAP award.

In 2004 Bearer was named Moore Distinguished Scholar at California Institute of Technology where she worked with Russell E. Jacobs and Scott E. Fraser to develop methodology to witness emotional circuitry in the deep brain by magnetic resonance imaging (MRI). While collaborating on the neuroscience of emotion at Caltech, Bearer connected up with Pasadena Promusica and Steven Grimm, the Music Director. They performed a number of her works written from 2004 to 2018, many for chorus, soloists and instrumental accompaniments. For the Pasadena Science and Art Festival, Bearer got together with John B. Carpenter, a media artist, and they created a series of works with video projections driven by the music. These have received subsequent performance in Santa Fe for the Currents New Media Festival and in Albuquerque for the John Donald Robb Composers' Showcase. As a member of the American Chemical Society, Bearer was invited to give talks at the "Chemist Composer" Sessions in the national ACS meetings, and commissioned to write a piano piece for Chemist-Pianist, Victoria Bragin. This piece, "Deep," was premiered at the San Francisco Palace Hotel in 2006 by Bragin accompanied by photographic projections of Antelope Canyon by Russ Jacobs. A video is posted on YouTube https://www.youtube.com/watch?v=gLML139NOo4.

After ascending to full tenured professor at Brown, Bearer was recruited to University of New Mexico in 2009 to an endowed chair with tenure in the department of pathology with a secondary appointment in music. While in New Mexico, as the Director of Training and Outreach for the Spatiotemporal Modeling Center, funded by National Institutes of Health, Bearer organized annual Science and Art events at Santa Fe Art Galleries. Her talk, Music and Mind, from one of those events is posted on YouTube. US National Institutes of Health have funded Bearer as the principal investigator on multiple grant awards for over 25 years for her scientific investigations. Most recently for her study of how acute fear leads to anxiety. Bearer has received multiple teaching awards for her classes, including Responsible Conduct of Research, Systemic Pathology, and Computational Biology, from both Brown and UNM. She was elected a fellow of the American Association for the Advancement of Science (AAAS), the largest scientific society in the world, in 2011, received the Distinguished Alumni Award from Manhattan School of Music in 2019, and a UCSF Alumni Award in 2020. She has published over 80 peer-reviewed scientific original articles in high impact journals, and trained over 70 young scientists at the bench.

More about her works can be found on Wikipedia https://en.wikipedia.org/wiki/Elaine_Bearer, on YouTube, and on her faculty website at UNM https://hsc.unm.edu/medicine/departments/pathology/research/labs/bearer.html