



## **Tribeca Film Festival documentary debut features BrainGate2 neurotech subject**

Research is consortium of Case Western Reserve University, the Cleveland Functional Electrical Stimulation Center at the Louis Stokes Cleveland VA Medical Center and University Hospitals Cleveland Medical Center



CLEVELAND—MAY 2, 2019—I AM HUMAN, a documentary debuting today at the 2019 Tribeca Film Festival in New York, examines the realities of neurotechnology, chronicling three research participants with experimental implantable brain treatment. (<https://youtu.be/8SZbSimAHs0>)

One of the participants was Bill Kochevar, who, two years ago, was the focal point of published BrainGate2 research led by Case Western Reserve University, the Cleveland Functional Electrical Stimulation (FES) Center at the Louis Stokes Cleveland VA Medical Center and University Hospitals Cleveland Medical Center (UH).

Kochevar, a U.S. Navy veteran who was paralyzed below his shoulders in a bicycling accident, worked with investigators regularly down the hall from his home at the Cleveland VA Medical Center in the Spinal Cord Injury Long Term Care Unit.

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### **About the FES Center**

The Cleveland FES Center is a consortium of the Louis Stokes Cleveland VA Medical Center, MetroHealth Medical Center, Case Western Reserve University, University Hospitals, and the Cleveland Clinic Neurological Institute. With their support, researchers, engineers and clinicians collaborate together to develop innovative solutions that improve the quality of life of individuals with neurological or other muscular skeletal impairments. Through the use of neurostimulation and neuromodulation research and applications, the Cleveland FES Center leads the translation of this technology into clinical deployment.



He is believed to have been the first person with quadriplegia in the world to have arm and hand movements restored with the help of two temporarily implanted technologies: A brain-computer interface with recording electrodes under his skull, and a functional electrical stimulation (FES) system\* activating his arm and hand, reconnect his brain to paralyzed muscles.

Bob Kirsch, the Allen H. and Constance T. Ford Professor, chair of Case Western Reserve's Department of Biomedical Engineering and executive director of the FES Center, and Bolu Ajiboye, assistant professor of Biomedical Engineering, are principal investigators of the ongoing research.

Dustin Tyler, the Kent H. Smith Professor of Biomedical Engineering, was also interviewed for the film and appears as a "subject matter expert" commenting on the field of neurotech research.

The documentary, directed and produced by Taryn Southern and Elena Gaby, examines the promises, as well as the challenges, of neurotechnology, according to the production's press materials. Screenings are scheduled today through May 4 during the Tribeca Film Festival. A Cleveland premiere is being discussed for later this year.

"Advancements in neurotechnology are revolutionizing what it means to be human," according to the festival's description of the film. "Following three subjects who undergo brain interface (research to restore lost function), I AM HUMAN examines the ethical quandaries in brain exploration and cognitive evolution."

Along with Case Western Reserve, the Louis Stokes Cleveland VA Medical Center and the Cleveland FES Center, the film features institutions including Duke University, the University of Washington and The Wyss Center in Geneva, Switzerland.

After the premier screening, Ajiboye will participate in a discussion moderated by Alex Klokus, chief executive officer of Futurism, with fellow panelists Southern, Gaby, neurotech entrepreneur Bryan Johnson, Toronto Western Hospital neurosurgeon Andres Lozano and Duke University Professor of Law and Philosophy Nita Farahany.

The other two participants featured in the film are a former Canadian government information technology officer, who undergoes a novel bionic eye implantation to regain sight, and a former artist with degenerative Parkinson's Disease, who considers deep-brain stimulation as a solution to her worsening symptoms.

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