DORIS TAYLOR

b. February 21, 1956

CUTTING-EDGE MEDICAL SCIENTIST

"Trust your crazy ideas. If we always listened to the world that told us we couldn't do it, we wouldn't."

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Doris Taylor, Ph.D., is a cutting-edge researcher in the field of cardiovascular regenerative medicine. She is renowned for engineering the first bioartificial beating mammalian heart—a heart replacement made from specialized stem cells and natural structures.

Taylor was born in San Francisco and moved to Europe with her family when she was 2. After her father died of cancer, they moved to Columbus, Mississippi, her mother's childhood home. Taylor's twin brother suffered from cerebral palsy and schizophrenia. Her father and brother's illnesses inspired her to pursue a career helping others.

Taylor attended Mississippi University for Women, where she studied biology and physical sciences in a pre-med program. In her senior year, she fell in love with her roommate. The dean accused them of being lesbians and called their parents. Prevented from returning to campus for an extended period, Taylor ultimately failed her senior classes, excluding her from medical school.

Despite her devastating experience with discrimination and feelings of failure, Taylor eventually earned a doctorate in pharmacology from the University of Texas Southwestern Medical Center. Thereafter, she worked at Albert Einstein College of Medicine, where she began her tissue-engineering research.

In 2008, leading a team of researchers at the University of Minnesota, Taylor used stem cells to engineer a beating rat heart and published a paper detailing the work. It was hailed as a landmark scientific breakthrough. By the time she was the director of regenerative medicine research at the Texas Heart institute, she had developed more than 100 of these biological "ghost hearts," including nearly human-sized, derived from pigs.

Taylor is credited with many significant scientific breakthroughs. More than 200 prestigious journals have published her papers. She holds numerous patents and patent applications and has received myriad leadership and faculty appointments and awards. The American Heart Association named her work among the Top 10 Research Advances. She serves as a frequent keynote speaker and has been featured on the PBS "NOVA" series, the Discovery Channel, "60 Minutes," CNN, and in countless other media.

Taylor is also a lifelong activist. During the AIDS crisis, she helped start the first buddy program, wrote the first brochure on gays and lesbians donating blood, and lectured on safe sex practices. She has advocated for the rights of individuals with HIV, among other social justice issues.

Taylor has founded several bioengineering firms dedicated to heart repair, including Organamet Bio, where she serves as CEO. Her goal is the eventual development of individually customized human heart replacements using patients' own stem cells.