

Definition. The United States Federal **Glass Ceiling** Commission defines **the glass ceiling** as "the unseen, yet unbreachable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements."

African-American scientists Katherine Johnson, Mary Jackson, and Dorothy Vaughan overcame the barriers of gender and race to propel the U. S. space program into orbit, as documented in Margot Lee Shetterly's book "Hidden Figures

Katherine G. Johnson, portrayed by Taraji P. Henson



Katherine G. Johnson, left, and Taraji P. Henson
Courtesy of NASA; Twentieth Century Fox Film Corporation

A physicist and mathematician, Katherine G. Johnson worked with NASA in calculating trajectories, launch windows and the return paths for many famous space flights. Her background includes such projects as Project Mercury (the first man to fly into space), 1969's Apollo 11 (first flight to the Moon) and the Space Shuttle program (plans for a mission to Mars).

At the time of her work, African-Americans and women were not respected in the workplace. In 1953, she was hired by NASA and struggled to receive equal recognition for her work. During her time at NASA, she worked under segregated conditions as a "computer."

Still alive at age 98, Johnson lives in Virginia, where the movie takes place. She saw the movie and enjoyed it. "It was well done. The three leading ladies did an excellent job portraying us," she said, [according to *The Los Angeles Times*](#).

Taraji P. Henson, who portrays Johnson, said she felt pressure playing someone who is still alive and wanted to make sure she got it right. "And I owe her the truth and all of me," Henson [told *The Hollywood Reporter*](#). "I got to sit with her and started studying her mannerisms, and I asked her a lot of questions. What I did find that was parallel in our lives was math, which I hated."

It's ironic Henson is playing a math whiz, as she told *THR* she was never good at math. "I failed pre-calc," Henson said. "Not calculus, pre-calc! The class that preps you for all the math you have to do."

Dorothy Vaughan, portrayed by Octavia Spencer



Dorothy Vaughan, left, and Octavia Spencer

Courtesy of NASA; Twentieth Century Fox Film Corporation

A mathematician, Dorothy Vaughan was the first African-American woman to be promoted as a head of personnel at the National Advisory Committee for Aeronautics, later known as NASA. She was the head of the West Area Computers, leading a group of African-American mathematicians through crucial space projects.

Oscar winner Octavia Spencer, who plays Vaughan, told *THR* she knew math and science prior to the role but not to the level of a rocket scientist. "I understood her work to an extent, but she's a rocket scientist and there are very few people in the world who get that type of physics and can work interchangeably in the math disciplines," Spencer said. "It's a small group of people, and my hat is off to them. I am not a member of that club!"

Spencer said the cast wanted to present these women "in a truthful way" and "in the best light possible." Since Vaughan died in 2008, the first audience she wanted to impress was the family, and she was proud to learn she did.

"What I learned from playing Dorothy Vaughan is that I have a voice and that I have to use it for people who don't have a voice or whose voice is somehow subdued by whatever's happening in society," she told *THR*.

Mary Jackson, portrayed by Janelle Monáe



Mary Jackson, left, and Janelle Monáe

Courtesy of NASA; Twentieth Century Fox Film Corporation

Mary Jackson was a mathematician and NASA's first black female engineer in 1958. She influenced the hiring and promoting of women in science, engineering and mathematics careers at NASA. Jackson died in 2005 at age 83.

Grammy-nominated singer Janelle Monáe, who portrayed Jackson in the film, said she was proud to be a part of a story so many people didn't know about. "These [women] are our true American heroes," she told CNN. "It's because of them that we can have that as America. We can feel proud that we achieved something so extraordinary."