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Women scientists who should be in the Texas K-12 science standards

just to get the ball rolling

IDRA Recommends Accurate Inclusion of Scientific History

As of 2020, every scientist named in the Texas science standards is a white male.

As state board members consider revisions to the Science Texas Essential Knowledge and Skills (TEKS), it's past time to include the scientific achievements of women and people of color.

When students cannot see themselves as scientists, they do not pursue careers in the sciences, and we are all denied the benefits of their creativity and brilliance.

— Dr. Stephanie Garcia, IDRA



Rosalind Franklin

Rosalind Franklin should be named in the biology standard because of her discovery of the structure of DNA [B.5A]



Mae Jemison

Mae Jemison's story should be embedded in our sixth through eighth grade units on space science, because she was the first Black woman in space [6.11C, 7.9B]



Marie Curie

A famous physicist and chemist, Marie studied how unstable nucleus emit particles and release energy, calling it "radioactivity." She was awarded with a second Nobel prize in chemistry for her discovery of and research into polonium and radium. This needs to be in eighth grade science curricula about the properties of atoms [8.5B]



Wang Zhenyi

A Chinese astronomer, poet and mathematician, she created an eclipse model to help prove her theories about how the moon blocks our view of the sun during an eclipse. This could be integrated in any third through ninth grade earth and space unit [3.8C, 4.8C, 5.8D, 8.7B]



Maria Sibylla Merian

A German entomologist, she was the first to classify and understand insects, especially in dangerous rain and heat. This can be taught in science units covering the impact of environmental changes in third grade and all the way to high school lessons on dichotomous keys and classifying organisms [3.9C, 5.9A, 7.11A, B.8A]



YouYou Tu

YouYou Tu is a famous Nobel Prize winner who created a drug to inhibit the malaria parasite, saving millions of people. This contribution can be discussed when describing the classification of parasites or how they can disrupt the health of other organisms [4.9B, 6.12D, B.11A]



Gladys West

Gladys West should be discussed in an eighth-grade science unit on earth science and topography, because she was instrumental in the development of the Global Positioning System [8.9C]



Sally Ride

Sally Ride was the first U.S. woman to fly to space. She also helped to develop a robotic arm to release satellites into space. Her contributions need to be included in middle school science [6.11C, 7.9A, 8.8C]



Helen Rodríguez Trias

The first Latina president of the American Public Health Association, she helped to bring national attention to the HIV and AIDS crisis, earning the Presidential Citizen's Medal. Her story can be implemented in a biology unit covering cell differentiation and disruption, or how ethical and social decisions are involved in science [8.4C]



Katia Krafft

Katia Krafft was a famous geologist and volcanologist who documented how volcanic eruptions affected ecosystems and researched volcanic formations. This should be studied in elementary to high school science [2.7C, 4.7B, 6.10D, 8.9B]



Katherine Johnson

Katherine Johnson applied her math skills to physics where she helped calculate the path for the first manned mission to the moon. She also worked on the space shuttle program and plans for the mission to Mars. This needs to be incorporated into the history and future of space exploration in sixth and seventh grade [6.11C, 7.9A]

See article and other sources about women in STEM

<https://idra.news/nlSept20d>

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