

ID	Name	Gender	Field	Main contribution	Country	Books about the STEMist	Comments
1	Youyou Tu	F	medicine	Qinghaosu, Nobel Prize in Physiology of Medicine	China		
2	Dr. Patricia Bath	F	ophthalmologist	the inventor of laser cataract surgery. Her invention was called Laserphaco Probe	USA		
3	Dr. Marian Croak	F	engineer	VP of Engineering at Google, Women in Technology Hall of Fame	USA		
4	Maggie Gee	F	aviator, physicist	one of only two Chinese-American women to fly with the Women Airforce Service Pilots or WASP during WWII	USA	Fly Girls: The Daring American Women Pilots Who Helped Win WWII The Women With Silver Wings	
5	Dr. Gladys West	F	mathematician	created mathematical models of the Earth that became the foundation of GPS	USA		
6	Mae Jemison	F	physician, astronaut	first woman of color to travel in space	USA		
7	Bessie Coleman	F	pilot	the first african-american woman to fly an airplane	USA		
8	Dr. John Oluseun Dabiri	M	aeronautics engineer	hydrodynamics of jellyfish propulsion and the design of a vertical-axis wind farm adapted from schooling fish	Nigerian-American		
9	Juliana Rotich	F	information technologist	developed web tools for crowdsourcing crisis information and coverage of topics related to the environment	Kenya		
10	Dr. Hayat AISindi	F	medical scientist	first female members of the Consultative Assembly of Saudi Arabia	Saudi Arabia		
11	Maria Montessori	F	physician, educator	created the Montessori Method	Italy		
12	Emily Warren Roebling	F	engineer	first female field engineer, supervised construction of Brooklyn Bridge	USA	Gusty Girls Go For Science	
13	Mary Jackson	F	mathematician	one of the three protagonists in Hidden Figures, NASA's first black female engineer	USA	Hidden Figures: The American Dream and the Untold Story of the Black Women Who Helped Win the Space Race	
14	Ellen Ochoa	F	engineer, astronaut	the first Hispanic woman to go to space	USA		
15	Eunice Foote	F	biologist, botanist	theorized and demonstrated the greenhouse effect. women's rights activist	USA		
16		F	physicist	discovery of nuclear fission, escaped from Germany because she was Jewish	Germany -> Sweden		
17	Alice Ball	F	chemist	discovered treatment for leprosy; unrecognized because she died before she was able to publish results	USA		

18	Bessie Blount	F	inventor, physiotherapist, nurse	invented devices to help amputees and veterans with disabilities	USA		
19	Katherine Johnson	F	mathematician	one of the three protagonists in Hidden Figures, helped to hire and promote women in NASA careers	USA		
20	Elinor Ostrom	F	economist	first woman to win Nobel Prize in Economics after 62 males	USA		
21	Carolina Vera	F	meteorologist	voice for female and underrepresented climate scientists at the IPCC	Argentina		
22	Paula Hammond	F	Chemical Engineer	focused on synthesizing polymers with mechanochromic properties	USA		
23	Amy Prieto	F	Chemist, Entrepreneur (batteries)		Colombia		
24	mary golda ross	F	Mathematician, Engineer	one of the 40 founding engineers of the renowned and highly secretive Skunk Works project at Lockheed	USA		
25	Julian A. Banzon	F	Biochemist (alternative fuels)	Banzon is credited for his research in alternative fuel. He researched on the production of ethyl ester fuels from sugarcane and coconuts and devised a method of extracting residual coconut oil through chemical means.			
26	Percy L. Julian	M	Chemist (Synthesis of Physostigmine)	a pioneer in the chemical synthesis of medicinal drugs from plants			
27	George Washington Carver	M	biologist (agriculture)	born into slavery but later discovered uses for peanuts and other crops and ways to limit soil depletion	USA		
28	Grace Hopper	F	computer scientist	developed the first "compiler" and helped advance modern debugging systems	USA		
29	Ada Lovelace	F	computer scientist	credited with being the first programmer	Britain		
30	Chien-Shiung Wu	M	physicist	contributed to the Manhattan Project (nuclear weapon development) and made lots of discoveries in the quantum mechanics field	China & USA		
31	John Herrington	M	engineer, astronaut	the first Native American to go into space, specialized in preparation and post-landing operations of spacecraft	USA		
32	Thomas David Petite	M	engineer	invented the "smart grid" --> allows devices to operate all on one network	USA		
33	Mario Molina	M	chemist	discovered that refrigerant chemicals causes ozone depletion (implications in climate change) and was the first Mexican scientist to win a Nobel Prize in Chemistry	Mexico		

34	France A. Córdova	F	physicist, engineer	studied x-rays and black holes, and was the first woman to be NASA's Chief Scientist	USA		
35	César Milstein	M	chemist	looked at monoclonal antibodies --> now treatment for lots of autoimmune diseases and used in diagnoses, won the Nobel Prize	Argentina		
36	Ted Taylor	M	physicist	helped develop nuclear bombs, including the Super Oralloy Bomb (largest fission bomb detonated)	Mexico, USA		
37	Rosalind Franklin	F	chemist	took the game-changing x-ray "Photo 51" of DNA in 1952	England		
38	Maria Sibylla Merian	F	entomologist, scientific illustrator	documented evidence that insects were not born from mud (widespread belief during 17th century); documented butterfly metamorphosis	Germany	Metamorphosis Insectorum Surinamensium	
39	Mary Anning	F	paleontologist	discovered first correctly identified ichthyosaur skeleton, first two nearly complete plesiosaur skeletons, and first pterosaur skeleton (outside Germany) --> observations play key role in discovery that coprolites were fossilized faeces	England		
40	Nettie Maria Stevens	F	geneticist	developed concept of the X-Y sex-determination system	USA		
41	Esther Miriam Zimmer Lederberg	F	microbiologist	discovered lambda phage, replica plating, and the bacterial fertility factor F; husband Joshua Lederberg took credit for the couple's research --> Joshua wins Nobel Peace Prize (1958)	USA		
42	Vera Florence Copper Rubin	F	astronomer	pioneered work on galazy rotation rates --> confirmed theories that galaxies are mostly dark matter	USA		second woman astronomer elected to the National Academy of Sciences
43	Amalie Emmy Noether	F	mathematician	discovered Neother's theorem --> fundamental in mathematical physics	Germany		
44	Rita Levi-Montalcini	F	neurobiologist	discovered nerve growth factor (NGF) --> first growth factor identified	Italy		awarded 1986 Nobel Prize in Physiology or Medicine
45	Rachel Louise Carson	F	marine biologist	launched contemporary environmental movement, awakened American concern for the environment	USA	Silent Spring (1962)	
46	Ida Noddack	F	chemist, physicist	first to propose the idea of nuclear fission, discovered Rhenium (element 75)	Germany		nominated 3 times for the Nobel Prize in Chemistry
47	Jennifer Doudna	F	biochemist	pioneered work on CRISPR (gene editing) with Emmanuelle Charpentier	USA	The Code Breaker (2021)	awarded 2020 nobel prize in chemistry
48	Emmanuelle Charpentier	F	microbiologist	pioneered work on CRISPR with Jennifer Doudna	France	CRISPR: Methods and Protocols.	awarded 2020 nobel prize in chemistry

49	Dr. Michio Kaku	M	physicist	co-founded String Theory (unifying gravity with other 3 types of forces)	USA	The God Equation, The Future of Humanity, The Future of the Mind, Physics of the Future	
50	Neil deGrasse Tyson	M	astrophysicist	research in stars, structures of galaxies, Milky Way, etc.	USA	The Pluto Files (2009), Cosmos (2014)	
51	Michael Faraday	M	physicist, chemist	studied electromagnetism and electrochemistry (discovered induction)	UK		
52	Ernest Rutherford	M	physicist	revolutionized model of the atom	UK	Nobel Prize Chemistry (1908)	
53	Dr. Stephon Alexander	M	physicist	co-invented a model that helps to explain the early expansion of the universe, is the President of the National Society of Black Physicists.	USA	The Jazz of Physics	
54	Dr. Marie M. Daly	F	biochemist	is the first African-American woman in the United States to earn a Ph.D. in chemistry, discovered the relationship between high cholesterol and heart disease, conducted pioneering research on the effects of cigarette smoke on lungs.	USA		
55	Sylvester James Gates, Jr	M	physicist	did significant work on supersymmetry, supergravity, and superstring theory. First African-American theoretical physicist to be recognized in the National Academy of Sciences.	USA	(co-authored) Superspace	
56	Dr. Warren Washington	M	climate scientist	developed one of the first atmospheric computer models of Earth's climate. Was elected chair of the National Science Board in 2002 and 2004. Received National Medal of Science in 2009.	USA		
57	Dorothy Hodgkin	F	chemist	first British woman to win the Nobel Prize in chemistry for her determinations by X-ray techniques of the structures of important biochemical substances. Discovered the atomic structure of penicillin, the structure of vitamin B12, and the structure of insulin.	Britain		
58	Barbara McClintock	F	botanist	discovered that some genes can be mobile, discovered that genetic elements could sometimes move on a chromosome and thus cause nearby genes to activate. Was awarded the National Medal of Science in 1971 and won the Nobel Prize in Physiology or Medicine in 1982	USA		
59	Vera Rubin	F	astronomist	discovered dark matter, measured spectra in 1970s, uncovered the discrepancy between the predicted and observed angular motion of galaxies by studying galactic rotation curves, was passionate about spiral galaxies	USA		

60	Janaki Ammal	F	botanist	credited with putting sweetness in India's sugarcane varieties, poke against the hydro-electric project in Kerala's Silent Valley, studied the chromosomes of thousands of species of flowering plants	India		
61	Helen Taussig	F	cardiologist	founded the field of pediatric cardiology, worked on "blue baby" syndrome, worked with others to develop an operation to correct the congenital heart defect that causes "blue baby" syndrome	USA		
62	Linda Brown Buck	F	biologist	discovered how genes in our DNA code for the odorant sensors located in the olfactory sensory neurons in our noses	USA		Nobel Prize in Physiology or Medicine 2004
63	Françoise Barré-Sinoussi	F	virologist	work led to blood tests that could detect HIV, and to anti retroviral medications for AIDS	France		Nobel Prize in Physiology or Medicine 2008
64	Sabrina González Pasterski	F	theorist physicist	known for discovering the spin memory effect and the PSZ Triangle for electromagnetic memory	USA		Top of class at MIT in 2019
65	Herawati Sudoyo	F	molecular biologist, forensic scientist	identified geographical variations in genetic mutations that cause thalassaemia to help with prenatal diagnosis; significant role in perpetrator identification of the 2004 Australian Embassy bombing case	Indonesia		Kartini Award in 2009