

Alan Turing (1912-1954) - British mathematician, considered the father of modern computer science. He is credited with creating the theoretical framework and design for the earliest modern computer. He also invented the Enigma machine, which deciphered the secret German military code, contributing enormously to the Allied victory in World War II [2, 11]

Leonardo da Vinci (1452-1519) - Italian artist, scientist, and engineer, researcher of human anatomy, mathematics, and the potential for human flight. He conceived of helicopters, tanks, machine guns, submarines, and solar power. [2, 3]

Bruce Voeller (1934- 1994) - American biologist and AIDS researcher who pioneered the use of nonoxynol-9 as a spermicide and topical virus-transmission preventative. He established the Mariposa foundation to conduct human sexuality research, placing special emphasis on reducing the risks of sexually transmitted diseases. At the time of his death, Voeller's research centered on the reliability of various brands of condoms in preventing the spread of diseases, and on viral leakage studies for the then-recently approved "female condom". [12]

Clyde Wahrhaftig (1919-1994) - American Geologist and Environmentalist, author of *Streetcar to Subduction* (a geological tour of San Francisco via bus and streetcar), and recipient of the Geological Society of America's Kirk Bryan Award for Geomorphology. Wahrhaftig was a versatile geologist who made notable contributions to understanding the coal deposits, geology and glaciers of Alaska and the landforms, surficial deposits and bedrock geology of the Sierra Nevada and the California Coast Ranges. [13]

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Queer Scientists of Historical Note

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Sir Francis Bacon (1561-1626) - English philosopher of science, author of *Novum Organum*; called "the high priest of modern science" for elucidating principles of the scientific method. Originator of the phrase "knowledge is power." Was also a noted lawyer and a member of Parliament. [1, 2]

S. Josephine Baker (1873-1945) - Physician who organized the first child hygiene department under government control in New York City. Her tenure led to the lowest infant death rate in any American or European city during the 1910's. She was instrumental in identifying "Typhoid Mary". Baker was a consultant to many child care organizations, and the president of several child health professional societies. [2, 3]

Allan Cox (1926-1987) - American Geophysicist, specialist in paleomagnetism, and author of two well-known books on plate tectonics. Cox and his colleagues developed a calendar showing the complicated and irregular schedule of polarity changes in the earth's past, and discovered evidence of plate tectonics. His work brought him many honors, including election to the National Academy of Sciences, and the American Geophysical Union's Fleming medal. [4]

Neil Divine (1939-1994) - American Astrophysicist, major contributor to modern theory of star formation and prediction of meteoroid and space debris environments. During his 25 years at Caltech's Jet Propulsion Laboratory, Divine made many fundamental scientific contributions, including defining the radiation belts around Jupiter, Saturn, Neptune, and Uranus, and the dust environment around Halley and other cometary targets. During his tenure at JPL, he often served as a mentor and inspiration to many younger space physicists who benefited from both his scientific incisiveness and quick wit. [5]

Alexander von Humboldt (1769-1859) - Prussian naturalist, explorer of Central and South America, author of a 23-volume work on his travels, and of the seminal *Cosmos*, which laid the foundations for modern physical geography and meteorology. Humboldt was a leading European figure of his day, considered second only to Napoleon in influence. A major Pacific current, numerous cities, counties, and other landmarks bear his name. [6]

Sonja Kovalevsky (1850-1891) - Russian mathematician, developed Kovalevsky's theorem, editor of *Acta Mathematica*. Showing aptitude in mathematics at an early age, Kovalevsky is an example of a brilliant woman who encountered barriers solely because of her gender. Women were not allowed to study in Russian universities, and her father considered it improper for her to study abroad. Kovalevsky went to Germany to study with Karl Weierstrass. For her 1888 work "On the Problem of the Rotation of a Solid Body about a Fixed Point," she was awarded the famous Prix Bordin of the French Academy of Sciences. [7]

Margaret Mead (1901-1978) - American anthropologist and psychologist, author of *Coming of Age in Samoa*, and Curator of Ethnology at the American Museum of Natural History. While President of the American Association for the Advancement of Science in 1977 she presided over the passage of a AAAS policy statement deploring discrimination against gay and lesbian scientists. Mead helped pioneer, through cross-cultural studies, greater understanding for the natural variety of sexual behaviors that occur in human societies. [8]

Florence Nightingale (1820-1910) - British Nurse, organized the world's first school for nurses, expert and reformer for hospital hygiene, sewage treatment, and regularized medical practices, as well

as making advances in the graphical presentation of statistical data. She became the first woman ever to be awarded the Order of Merit by the British government. Nightingale played a vital role in the opening up of legitimate careers for women outside the home and, in this way, helped create the social and economic conditions that made the modern lesbian (and heterosexual working woman) possible. [3]

Louise Pearce (1885-1959) - Pathologist at the Rockefeller Institute who helped develop a treatment for African sleeping sickness. She, along with fellow pathologist Wade Hampton Brown, and two chemists, developed tryparamide. The Rockefeller Institute sent Pearce to the Belgium Congo in 1920 "trusting her vigorous personality to carry out an assignment none too easy for a woman physician and not without its dangers". For her service, Pearce received the order of the Crown of Belgium, and in 1953, the Royal Order of the Lion. Pearce also studied syphilis, for which tryparamide was standard treatment until penicillin replaced it. With Brown, she discovered and developed the Brown-Pearce tumor, systematically studied syphilis in rabbits, explored how a virus might spread cancer, and researched immune reactions to rabbit pox. [9]

Jim Pollack (d. 1994) - American astrophysicist, senior space research scientist at NASA Ames Research Center. Pollack was a world-renowned expert in the study of planetary atmospheres and particulates whose work led to many advances in our understanding of the solar system. He and Carl Sagan postulated that the seasonal color variations on Mars were caused by wind storms and dust, rather than plant life. He specialized in evolutionary climate change of terrestrial planets, and evolution of the giant gas planets. [10]

(continued on next panel)