

to carry out an assignment none to 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. Source: *The History of the Rockefeller Institute, 1901-1953*, G.W. Corner, Rockefeller Institute Press, NY, 1964

**Jim Pollack** - 20th century 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 (correctly) 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. He participated in every major NASA flight mission since Apollo. Source: *Carl Sagan, A Life*, Keay Davidson, John Wiley & Sons, 1999

**Alan Turing** - 20th century British mathematician, credited with creating the theoretical framework and design for the earliest modern computer. His conceptual design was dubbed the "Turing machine". He also lead the British cryptanalysis effort at Blechley Park (WW II British Intelligence) to break the secret German military codes of the Enigma machine, which meant that critical war time messages were deciphered. His work contributed enormously to the Allied victory in World War II. In the 1950's he was hounded by police for being found in the company of a male hustler. He was forced to undergo hormone "treatment". Distracted with the stigmatization he faced as a result of exposure of his homosexuality,

Turing reportedly committed suicide in mid-career. Source: *Alan Turing: The Enigma*, Andrew Hodges, Simon and Schuster, NY, 1983

**Leonardo da Vinci** - 15th century Italian artist, scientist, and engineer, researcher of human anatomy, mathematics, and the potential for human flight. He was publicly denounced as a "sodomite" at age 24, along with a 17-year-old friend and two other young men. He never married, and willed all his possessions to a young man, Francisco Mezi. Source: *The Gay 100*, Paul Russell, Citadel Press, Carol Publishing Group, NY, 1994

**Bruce Voeller** - 20th century American biologist and AIDS researcher who pioneered the use of nonoxynol-9 as a spermicide and topical virus-transmission preventative. A prominent gay rights activist, Voeller cofounded the National Gay Task Force, and served as its executive director for 5 years. 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. Source: *New York Times* Obituaries, 1994

**Clyde Wahrhaftig** - 20th century American Geologist and Environmentalist, author of *Streetcar to Subduction*, a geological tour of San Francisco via bus and streetcar, 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 and bedrock geology of the Sierra Nevada and the California Coast Ranges. A homosexual all his life who had a long

relationship with geologist Allan Cox, Wahrhaftig took the opportunity to "come out" during his acceptance speech for the Geological Society of America's Distinguished Career Award. In accepting that award, Wahrhaftig made a plea to his fellow scientists to accept homosexual students without bias and encourage them to enter the field of geoscience. Source: USGS Public Affairs Office press release, 1994

### Where were the lesbian scientists?

Women have long been underrepresented in science, and historically were directly discouraged to pursue such careers. In contemporary times, women typically comprise approximately 20% or less of the scientific society of their profession. The statistics were much more dismal in "the olden days." Couple this fact with the invisibility of lesbians to those who chronicled history, and the mutability of sexual orientation in women, and we're hard-pressed to come up with definitive examples of lesbian scientists. We can only read between the lines of the herstory of strong women who eschewed traditional roles and sometimes marriage, and speculate. But don't despair! As the pipeline to scientific eminence begins to fill with a more balanced proportion of women, and society becomes more aware of lesbians, we will see our statistical share of lesbian contributions to science and technology in the "Queer Scientists of Contemporary Note" sequel to this historical project.

NOGLSTP is National Organization of Gay and Lesbian Scientists and Technical Professionals, a professional society dedicated to explaining science to the LGBT community, explaining LGBT issues to the science and engineering communities, providing role models, advocating equal workplace opportunity, and fostering networking and mentoring. For more information about NOGLSTP, point your web browser to <http://www.noglstp.org>



# Queer Scientists of Historical Note

## Who Are the Queer Scientists?

Scientists strive to conduct their inquiries in a dispassionate, objective way. Yet as with any human being, the scientist's personality and social circumstances influence the framework of working life. The questions a scientist finds of interest and import, the people he or she associates with, even the places visited are influenced in part by internal and social forces. In this sense, queer scientists are those who, living in conscious recognition of their sexual orientation, are influenced by this orientation in many facets of their lives, including the creative source and social matrix of their scientific careers.

Today, lesbian/gay/trans people are making contributions in every branch of the physical, social, natural, engineering, and computer sciences. Many noted scientists of the past have also had extended homoerotic or homosexual relationships throughout portions or all of their lives. Some examples are noted in this pamphlet.

## Individuals of Historical Note

**Sir Francis Bacon** - 17th century English philosopher of science, author of *Novum Organum*; called "the high priest of modern science" for elucidating principles of the scientific method. Bacon was well known during his lifetime as a homosexual, and good friend of the homosexual English King, James I. At one point, it is told, Bacon's mother criticized him for inviting his young latin lover, Antonio Perez, home to live. She ordered "that bloody Perez and bed-companion of my son" out of the house. Source: *Jonathan to Gideon, The Homosexual in History*, N.I. Garde, Vantage Press, NY, 1964

**S. Josephine Baker** - 20th century 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. Baker was a consultant to many child care organizations, and the president of several child health professional societies. Personal encounters with Baker and her companion, Louise Pearce, are described in A.R. Wylie's autobiography. Baker and Wylie shared a New York apartment together, and eventually a house in Princeton where they were joined by Pearce. Source: *The Gay 100*, Paul Russell, Citadel Press, Carol Publishing Group, NY, 1994

**Allan Cox** - 20th century American Geophysicist, specialist in paleomagnetism, and author of two well-known books on plate tectonics. Cox, originally a chemistry major as an undergraduate, discovered he had an instinctive eye for geology while performing summer field studies with his mentor and (future) lover Clyde Wahrhaftig. 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. Source: [www.agu.org/inside/awards/cox.html](http://www.agu.org/inside/awards/cox.html); Clyde Wahrhaftig, address to FLAG, 1990

**Neil Divine** - 20th century 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, Neil 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. Devine died in 1994 from complications from AIDS, shortly after celebrating his 55th birthday. Source: Devine's memorial biography, 1994

**Alexander von Humboldt** - 19th century 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. Following a passionate two-year affair with a Prussian soldier (von Haefthen), Humboldt lived with von Haefthen and his wife during the first six months of their marriage. He had a close relationship with Bonpland, the French botanist who accompanied him on his travels to South America, and described with attentive detail the masculine beauty of South American Indians. Humboldt's homosexuality was widely acknowledged during his lifetime. Upon his death, Humboldt left everything to his manservant, Siefert; his sister burned Humboldt's love letters. Source: The Humboldt Society lecture, Philadelphia, 1996

**Sonja Kovalevsky** - 19th century 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 that encountered ridiculous 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 entered a marriage of convenience and 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. Source: [amazoncity.com](http://amazoncity.com) Museum of Women in

Science and Technology

**Margaret Mead** - 20th century 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 had significant sexual affairs with other women during her married lifetime, and helped pioneer, through cross-cultural studies, greater understanding for the natural variety of sexual behaviors that occur in human societies. Source: *Margaret Mead: A Life*, J. Howard, Simon and Schuster, NY, 1984

**Florence Nightingale** - 19th century British Nurse, organized the world's first school for nurses, expert and reformer for hospital hygiene, sewage treatment, and regularized medical practices. She became the first woman ever to be awarded the Order of Merit by the British government. Although there is no specific documentation that Nightingale had physical homosexual relationships, she shared her emotional life primarily with other women, and adamantly rejected any offer of marriage that came her way. 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. Source: *The Gay 100*, Paul Russell, Citadel Press, Carol Publishing Group, NY, 1994

**Louise Pearce** - 20th century pathologist at the Rockefeller Institute who helped develop a treatment for African sleeping sickness (trypanosomiasis). She, along with fellow pathologist Wade Hampton Brown, and two chemists, developed trypanamide. The Rockefeller Institute sent Pearce to the Belgium Congo in 1920 "trusting her vigorous personality