A Sampling of Women Inventors and Their Inventions

from a shower curtain, and later with surplus parachute nylon). Donovan then developed a completely disposable diaper.

ELION, GERTRUDE

Gertrude Belle Elion (January 23, 1918 - February 21, 1999) was a Nobel Prize winning biochemist who invented many life-saving drugs, including 6-mercaptopurine (Purinethol) and 6-thioguanine (which fight leukemia), Imuran, Zovirax, and many others. Elion worked at Burroughs-Wellcome (now called Glaxo Wellcome) for decades (beginning in 1944) with George Hitchings and Sir James Black, with whom she shared the Nobel Prize. She is named on 45 patents for drugs and her work has saved the lives of thousands of people.

GOODE, SARAH S.

Sarah E. Goode was a businesswoman and inventor. Goode invented the folding cabinet bed, a space-saver that folded up against the wall in a cabinet. When folded up, it could be used as a desk, complete with compartments for stationery and writing supplies. Goode owned a furniture store in Chicago, Illinois, and invented the bed for people living in small apartments. Goode’s patent was the first one obtained by an African-American woman inventor (patent #322,177, approved on July 14, 1885).

HOPPER, GRACE M.

Rear Admiral Grace Murray Hopper (1906 - 1992) was a US naval officer and mathematician who invented the computer compiler (called the A-O) in 1952. Her compiler revolutionized computer programming, automatically translating high-level instructions (easier to understand by people) into machine code (the cryptic, native language of the central processing unit). Hopper and a team developed the first user-friendly business programming language, COBOL (Common Business-Oriented Language). There is an unconfirmed story that Hopper determined an error in the early Mark II computer was caused by a moth that was trapped in it; she then coined the term “computer bug.”

HYDE, IDA HENRIETTA

Ida Henrietta Hyde (1857-1945) was an American physiologist who invented the microelectrode in the 1930’s. The micro-electrode is a small device that electrically (or chemically) stimulates a living cell and records the electrical activity within that cell. Hyde was the first woman to graduate from the University of Heidelberg, to do research at the Harvard Medical School and to be elected to the American Physiological Society.

KARLE, ISABELLA L.

Isabella Helen Lugoski Karle (1921- ) is a American physicist who invented the electron diffraction method that allows her to identify and show the structures of hundreds of complex and important molecules (including alkaloids, ionophores, steroids, toxins, and peptides [amino acid compounds]). Because of Karle’s process, the number of published molecular analyses has jumped from about 150 to over 10,000 per year. Karle received the National Medal of Science in 1995. Karle is a senior scientist and head of the Naval Research Laboratory’s (NRL) x-ray diffraction section in the Laboratory for the Structure of Matter. Karle’s husband, Jerome Karle, is a Nobel Prize winner in chemistry.

KWOLEK, STEPHANIE LOUISE

Stephanie Louise Kwolek (1923- ) is an American chemist who discovered kevlar and many other para-aramid fibers. Kevlar (poly[p-phenyleneterephthalamide]) is a polymer fiber that is five times stronger than the same weight of steel. Kevlar is used in bullet-proof vests, helmets, trapontines, tennis rackets, and many other commonly-used objects. Kevlar was first marketed by DuPont in 1971.

NESMITH, BESSIE

Liquid Paper was a quick-drying, paper-colored (white) liquid that is painted onto paper to correct printed material. Liquid Paper was invented in 1951 by Bessie Nesmith (1922-1980). It was based on white tempera paint (Nesmith was also an artist).