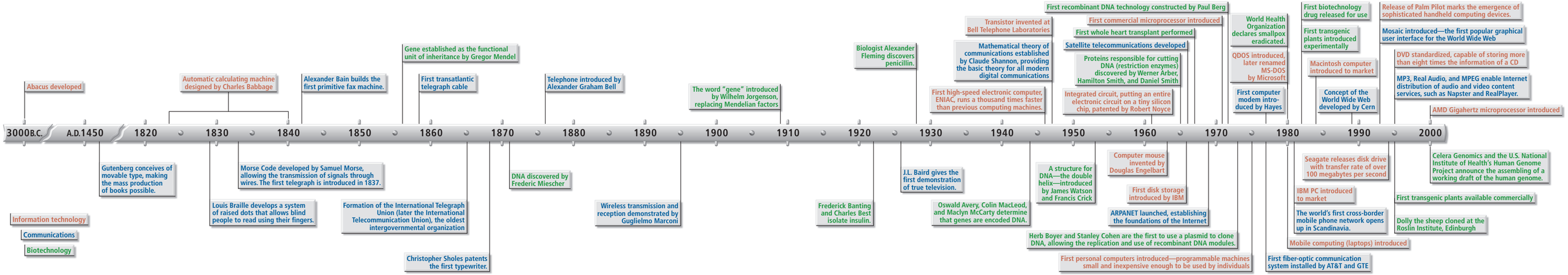
3000B.C.
A.D.1450
1820
1830
1840
1850
1860
1870
1880
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
Abacus developed
Automatic calculating machine designed by Charles Babbage
Alexander Bain builds the first primitive fax machine.
Gene established as the functional unit of inheritance by Gregor Mendel
First transatlantic telegraph cable
Telephone introduced by Alexander Graham Bell
The word "gene" introduced by Wilhelm Jorgenson, replacing Mendelian factors
Biologist Alexander Fleming discovers penicillin.
Transistor invented at Bell Telephone Laboratories
First recombinant DNA technology constructed by Paul Berg
First commercial microprocessor introduced
First whole heart transplant performed
Mathematical theory of communications established by Claude Shannon, providing the basic theory for all modern digital communications
Satellite telecommunications developed
Proteins responsible for cutting DNA (restriction enzymes) discovered by Werner Arber, Hamilton Smith, and Daniel Smith
First high-speed electronic computer, ENIAC, runs a thousand times faster than previous computing machines.
Integrated circuit, putting an entire electronic circuit on a tiny silicon chip, patented by Robert Noyce
World Health Organization declares smallpox eradicated.
QDOS introduced, later renamed MS-DOS by Microsoft
First computer modem introduced by Hayes
First biotechnology drug released for use
First transgenic plants introduced experimentally
Macintosh computer introduced to market
Concept of the World Wide Web developed by Cern
Release of Palm Pilot marks the emergence of sophisticated handheld computing devices.
Mosaic introduced—the first popular graphical user interface for the World Wide Web
DVD standardized, capable of storing more than eight times the information of a CD
MP3, Real Audio, and MPEG enable Internet distribution of audio and video content services, such as Napster and RealPlayer.
AMD Gigahertz microprocessor introduced
Information technology
Communications
Biotechnology
Gutenberg conceives of movable type, making the mass production of books possible.
Louis Braille develops a system of raised dots that allows blind people to read using their fingers.
Morse Code developed by Samuel Morse, allowing the transmission of signals through wires. The first telegraph is introduced in 1837.
Formation of the International Telegraph Union (later the International Telecommunication Union), the oldest intergovernmental organization
Christopher Sholes patents the first typewriter.
DNA discovered by Frederic Miescher
Wireless transmission and reception demonstrated by Guglielmo Marconi
Frederick Banting and Charles Best isolate insulin.
J.L. Baird gives the first demonstration of true television.
Oswald Avery, Colin MacLeod, and Maclyn McCarty determine that genes are encoded DNA.
A structure for DNA—the double helix—introduced by James Watson and Francis Crick
Computer mouse invented by Douglas Engelbart
First disk storage introduced by IBM
ARPANET launched, establishing the foundations of the Internet
Herb Boyer and Stanley Cohen are the first to use a plasmid to clone DNA, allowing the replication and use of recombinant DNA modules.
First personal computers introduced—programmable machines small and inexpensive enough to be used by individuals
First fiber-optic communication system installed by AT&T and GTE
Seagate releases disk drive with transfer rate of over 100 megabytes per second
IBM PC introduced to market
The world's first cross-border mobile phone network opens up in Scandinavia.
Mobile computing (laptops) introduced
Celera Genomics and the U.S. National Institute of Health's Human Genome Project announce the assembling of a working draft of the human genome.
First transgenic plants available commercially
Dolly the sheep cloned at the Roslin Institute, Edinburgh