Scientific-related Milestones and Events for 2015

The following list of select science-related milestones provides opportunities for creating social media, media, and congressional activities that highlight the importance of science and federal policy and investments in science.

January

Last Updated 12/17/14

4 Isaac Newton's Birthday (1643)

http://www.biography.com/people/isaac-newton-9422656

8 Physicist Stephen Hawking's birthday (1942)

http://www.biography.com/people/stephen-hawking-9331710

9 Anniversary of the release of the first iPhone (2007)

https://www.apple.com/pr/library/2007/01/09Apple-Reinvents-the-Phone-with-iPhone.html

Anniversary of the release of the first report of the US Surgeon General's Advisory Committee on Smoking and Health (1964)

http://www.cancer.org/aboutus/whoweare/cancer-awareness-calendar

14 HIV is discovered and is linked as a cause of AIDS. (1980)

http://www.timetoast.com/timelines/medical-discoveries

17 Benjamin Franklin's birthday. (1706)

http://www.famousbirthdays.com/people/benjamin-franklin.html

22 Philosopher and scientist Francis Bacon's birthday. He formulated the principles of the scientific method. (1561)

http://www.biography.com/people/francis-bacon-9194632

25 Alexander Graham Bell inaugurated U.S. transcontinental telephone service. (1915)

http://www.nytimes.com/learning/general/onthisday/big/0125.html#article

27 Thomas Edison patented the light bulb. (1880)

http://www.archives.gov/historical-docs/document.html?doc=11&title.raw=Thomas+Edison%

27s+Patent+Application+for+the+Light+Bulb

29 Scientists first treat cancer patients with human gene therapy. (1991)

http://www.nih.gov/about/almanac/historical/chronology of events.htm#seventeenhundred

February

-- National Cancer Prevention Month http://www.cancer.org/aboutus/whoweare/cancer-awareness-calendar

4 World Cancer Day

http://www.cancer.org/aboutus/whoweare/cancer-awareness-calendar

11 Inventor Thomas Edison's birthday. He invented the electric light bulb, the phonograph, and motion pictures. (1847)

http://www.biography.com/people/thomas-edison-9284349

12 Charles Darwin's Birthday (1809)

http://www.biography.com/people/charles-darwin-9266433

14 National Organ Donor Day

http://www.organdonor.gov/materialsresources/materialsntlevents.html

Penicillin is discovered by Sir Alexander Fleming, a bacteriologist. (1929)

http://www.history.com/this-day-in-history/penicillin-discovered

15 Anniversary of the completed first draft of the Human Genome Project (1991) http://www.genome.gov/12011239 Galileo Galilei's birthday (1564) http://www.biography.com/people/galileo-9305220 Anniversary of IBM Watson computer winning Jeopardy! (2011) 16 http://www-03.ibm.com/press/us/en/presskit/27297.wss Chemist Dmitri Mendeleev invented the periodic table of the elements. (1869) 17 http://www.rsc.org/education/teachers/resources/periodictable/pre16/develop/mendeleev.htm Pluto is discovered at the Lowell Observatory in Flagstaff, Arizona. (1930) 18 http://www.history.com/this-day-in-history/pluto-discovered 19 Astronomer Nicolas Copernicus's birthday. He proposed the theory that the Earth and the other planets revolve around the Sun. (1473) http://www.biography.com/people/nicolaus-copernicus-9256984 23 In 1954, the first mass inoculation of children against polio with the Salk vaccine began in Pittsburgh. http://www.nytimes.com/learning/general/onthisday/big/0223.html#article Ernest Lawrence receives his 1939 Nobel Prize in Physics at a ceremony in Berkeley, CA, for his work with artificial 29 radioactive elements. (1939) http://www.nobelprize.org/nobel_prizes/physics/laureates/1939/ March The Marine Hospital Service (now known as the Public Health Service) is urged by Congress to research leprosy in the U.S. (1899) http://www.nih.gov/about/almanac/historical/chronology of events.htm#seventeenhundred 3 Abraham Lincoln approves charter for National Academy of Sciences. (1863) http://nationalacademies.org/about/ faq/index.html **10** James L. Elliot, Edward W. Dunham, and Douglas J. Mink discover Uranus' rings. (1977) http://solarsystem.nasa.gov/planets/profile.cfm?Object=Uranus&Display=Rings 14 Albert Einstein Birthday. (1879) http://www.biography.com/people/albert-einstein-9285408 18 In 1965, the first spacewalk took place as Soviet cosmonaut Aleksei Leonov left his Voskhod 2. http://www.airspacemag.com/space/the-nightmare-of-voskhod-2-8655378/?no-ist 23 World Meteorological Day.

http://www.wmo.int/worldmetday/

26 Successful test of the polio vaccine. (1953)

http://www.history.com/this-day-in-history/salk-announces-polio-vaccine

April

TIROS 1, NASA's first successful weather satellite, is launched. (1960)

http://www.nasa.gov/topics/history/milestones/index.html

3 Luna 10, the first artificial satellite of the moon, enters lunar orbit. (1966)

http://nssdc.gsfc.nasa.gov/nmc/spacecraftDisplay.do?id=1966-027A

4 - 12 National Robotics Week.

http://www.nationalroboticsweek.org/

The Human Genome Project is launched, a joint effort of the National Institutes of Health and the Department of Energy.

http://www.genome.gov/25520329

7 World Health Day.

http://www.cancer.org/aboutus/whoweare/cancer-awareness-calendar

14 John Scopes, a high school teacher in Dayton, TN, taught his class about evolution, which led to the Scopes Monkey Trial. (1925)

http://law2.umkc.edu/faculty/projects/ftrials/scopes/evolut.htm

The Human Genome Project, the world's largest collaborative biological project, was declared completed. It was conceived of and funded by the U.S. government with international collaborators. (2003)

http://www.nytimes.com/2013/04/16/science/the-human-genome-project-then-and-now.html? r=0

15 Leonardo da Vinci's birthday. (1452)

http://www.biography.com/people/leonardo-da-vinci-40396

Marie Curie is offered a position in the physics department at the University of Paris, becoming the first female professor at the university. (1906)

http://www.aip.org/history/curie/trag2.htm

Naturalist John Muir's birthday. He advocated establishment of Sequoia & Yosemite national parks, and was the first president of Sierra Club. (1838)

http://www.biography.com/people/john-muir-9417625

23 Max Planck's Birthday. He was a theoretical physicist who originated quantum theory (1858)

http://www.nobelprize.org/nobel prizes/physics/laureates/1918/planck-bio.html

24 Launch of the Hubble Telescope. (1990)

http://hubblesite.org/the_telescope/hubble_essentials/

25 Publication date of the issue of *Nature* that contains Francis Crick and James Watson's ground-breaking paper describing the double helix structure of DNA. (1953)

http://www.nature.com/nature/dna50/watsoncrick.pdf

26 Geologist Charles Richter's birthday. He invented the Richter scale for measuring earthquake intensity. (1900)

http://www.who2.com/bio/charles-richter

30 The "World Wide Web" is launched to the public by CERN

http://home.web.cern.ch/topics/birth-web

May -- Cancer Research Month http://www.cancer.org/aboutus/whoweare/cancer-awareness-calendar

2 NIH dedicated a new research facility for researching globally important infectious diseases. (2006)

http://www.nih.gov/about/almanac/historical/chronology of events.htm#twothousand

5 First American, Alan Shepard, Jr. in space. (1961)

http://www.space.com/17385-alan-shepard-first-american-in-space.html

10 The National Science Foundation is founded. (1950)

http://www.nsf.gov/news/special_reports/history-nsf/timeline/index.jsp

11 Theoretical Physicist Richard Feynman's birthday. He won the 1965 Nobel Prize in Physics for the development of quantum electrodynamics. (1918)

http://www.biography.com/people/richard-feynman-9294220

14 Physician Edward Jenner administered the 1st vaccination against smallpox using live cowpox virus. (1796)

http://discovery.yukozimo.com/who-discovered-smallpox-vaccine/

26 Astronaut Sally Ride's birthday. She was the first American woman to travel into space. (1951)

http://www.biography.com/people/sally-ride-9458284

Biologist Rachel Carson's birthday. She warned about introducing chemicals into the environment and wrote the book *Silent Spring*. (1907)

http://www.rachelcarson.org/

June

1 National Cancer Survivors Day

http://www.cancer.org/aboutus/whoweare/cancer-awareness-calendar

3 James Hutton's birthday. He proposed all geological features can be explained as result of slow changes taking place over many years. (1726)

http://www.todayinsci.com/H/Hutton James/HuttonJames-Quotations.htm

Astronaut Edward White became the first American to "walk" in space, during the flight of Gemini 4. (1965)

http://www.nytimes.com/learning/general/onthisday/big/0603.html#article

5 Anniversary of Dolly the Sheep being cloned. (1996)

http://www.animalresearch.info/en/medical-advances/151/cloning-dolly-the-sheep/

8 Tim Berners-Lee's Birthday. He is known as the inventor of the World Wide Web. (1955)

http://www.w3.org/People/Berners-Lee/Longer.html

10 Benjamin Franklin performed his famous kite experiment, proving that lightning is a form of electricity. (1752)

http://www.history.com/this-day-in-history/franklin-flies-kite-during-thunderstorm

Jacques Cousteau's birthday. He was an inventor and scientist credited with the invention of diving and scuba devices and the Aqua-Lung. (1910)

http://www.biography.com/people/jacques-cousteau-9259496

16 Cytogeneticist Barbara McClintock's birthday. She received the 1983 Nobel Laureate in Physiology or Medicine for her discovery of mobile genetic elements. (1902)

http://www.biography.com/people/barbara-mcclintock-9391014

20 Caroline Willard Baldwin is the first woman awarded a Ph.D. in a scientific field from an American university. (1895)

https://learni.st/boards/25978/learnings/183563-1895-first-ph-d-awarded-to-a-woman

July

3 The first MRI scan of a human is performed. (1977)

http://www.teslasociety.com/mri.htm

4 The discovery of the Higgs boson was announced at CERN, after more than 40 years of searching. (2012)

http://home.web.cern.ch/topics/higgs-boson

6 Microbiologist Louis Pasteur used a vaccine against rabies for the first time to save the life of a nine year old boy. (1885)

http://www.britannica.com/EBchecked/topic/445964/Louis-Pasteur/281417/Vaccine-development

9 Dr. Daniel Hale Williams performed the first successful open-heart surgery at Provident Hospital. (1893)

http://www.huffingtonpost.com/2012/07/09/daniel-hale-williams-perf n 1659949.html

10 Nikola Tesla's birthday. He built the first induction motor, which used rotating magnetic field to generate an alternating current. (1856)

http://www.biography.com/people/nikola-tesla-9504443

On this day the abandoned United States space station Skylab made a spectacular return to Earth, burning up in the atmosphere and showering debris over the Indian Ocean and Australia. (1979)

http://www.nytimes.com/learning/general/onthisday/big/0711.html#article

16 Atom bomb successfully tested in New Mexico. (1945)

http://www.history.com/this-day-in-history/the-first-atomic-bomb-test-is-successfully-exploded

17 Anniversary of GPS being declared fully operational (1995)

http://www.navcen.uscg.gov/?pageName=global

Georges Lemaitre's birthday. He was the first known academic to propose the theory of the expansion of the universe and the Big Bang theory of the origin of the universe. (1894)

http://education-portal.com/academy/lesson/georges-lemaitre-the-big-bang-theory-lesson-quiz.html#lesson

On this day an Apollo spaceship docked with a Soyuz spacecraft in orbit in the first superpower linkup of its kind. (1975)

http://www.nytimes.com/learning/general/onthisday/big/0717.html#article

20 Viking I landed on Mars and took the first pictures of the surface. (1976)

http://science.nasa.gov/science-news/science-at-nasa/2001/ast20jul 1/

21 Astronauts Neil Armstrong and Edwin "Buzz" Aldrin became the first people to walk on the moon. (1969)

http://news.bbc.co.uk/onthisday/hi/dates/stories/july/21/newsid_2635000/2635845.stm

22 Birthday of botanist Gregor Mendel, who discovered the laws of heredity. (1822)

http://www.biography.com/people/gregor-mendel-39282

25 Birthday of biochemist Rosalind Franklin, took first X-ray diffraction photos of DNA molecule, showed its helical structure. (1920)

http://www.biography.com/people/rosalind-franklin-9301344

29 First message sent over ARPANET (U.S. Advanced Research Projects Agency). (1969)

http://news.nationalgeographic.com/news/2009/10/091029-internet-40th-anniversary.html

31 In 1964, the American space probe Ranger 7 transmitted pictures of the moon's surface.

http://www.nytimes.com/learning/general/onthisday/big/0731.html#article

August

5 Birthday of astronaut Neil Armstrong, who was the first person to walk on the moon. (1930)

http://www.nasa.gov/centers/glenn/about/bios/neilabio.html

6 Anniversary of the birth of the World Wide Web. (1991)

http://www.cnn.com/2003/US/03/10/sprj.80.1991.www/

12 Anniversary of the IBM personal computer. (1981)

http://www.pcworld.com/article/126671/article.html

Stephen Hawking (theoretical physicist and author of *A Brief History of Time*) receives a National Medal of Freedom. (2009)

http://www.whitehouse.gov/the_press_office/President-Obama-Names-Medal-of-Freedom-Recipients

24 Anniversary of Pluto as a dwarf planet. (2006)

http://news.nationalgeographic.com/news/2006/08/060824-pluto-planet.html

26 Lawrence Berkeley National Lab is founded. (1931)

http://www2.lbl.gov/Publications/75th/

28 Editor Rufus Porter published the first issue of *Scientific American*. (1845)

http://www.scientificamerican.com/pressroom/about-scientific-american/

September

1 American oceanographer Dr. Robert D. Ballard and a joint French-American team discover the wreckage of the *Titanic* in the North Atlantic Ocean. (1985)

 $\underline{\text{http://www.nytimes.com/1985/09/03/science/wreckage-of-titanic-reported-discovered-12000-feet-down.html}$

3 Alexander Fleming discovers bacteria-inhibiting penicillin. (1928)

http://www.acs.org/content/acs/en/education/whatischemistry/landmarks/flemingpenicillin.html#alexander-fleming-penicillin

4 Google was launched by two Stanford University graduate students, Larry Page and Sergey Brin. (1998)

http://www.google.com/about/company/history/

8 Oswald Avery Jr., who spent most of his career at the Rockefeller University Hospital in NYC, proved that DNA is the genetic material of the chromosome. (1943)

http://www.nature.com/scitable/topicpage/isolating-hereditary-material-frederick-griffith-oswald-avery-336

10 Eugene Aserinsky and Nathaniel Kleitman of the University of Chicago publish their seminal article on REM (rapid eye movement) sleep. (1953)

http://www.uchospitals.edu/pdf/uch 006319.pdf

13 Anniversary of the First Annual Golden Goose Award Ceremony. (2012)

http://www.goldengooseaward.org

17 NASA publically unveils its first space shuttle, the *Enterprise*. (1976)

http://www.space.com/12991-nasa-space-shuttle-enterprise-35-years.html

20 The American Association for the Advancement of Science is created. (1848)

http://archives.aaas.org/exhibit/origins.php

PBS's Cosmos: A Personal Voyage premiers as the most widely watched series in the history of American Public television up to that point. (1980)

http://www.imdb.com/title/tt0081846/

29 European Center for Nuclear Research (CERN) was founded in Geneva. (1954)

http://timeline.web.cern.ch/timelines/The-history-of-CERN

October

- -- National Breast Cancer Awareness Month http://www.cancer.org/aboutus/whoweare/cancer-awareness-calendar
- 4 Anniversary of the Soviet Union's successful launch of Sputnik I (1957)

http://history.nasa.gov/sputnik/

6 Stanley Prusiner is awarded the Nobel Prize for his discovery of the prion, a novel infectious pathogen that causes a group of fatal diseases. (1997)

http://www.nobelprize.org/nobel_prizes/medicine/laureates/1997/prusiner-bio.html

7 Invention of the Bar Code (1952)

http://www.nationalbarcode.com/articles/history.htm

Apollo 7, the first manned Apollo mission, was launched with astronauts Wally Schirra, Donn Fulton Eisele and R. Walter Cunningham aboard. (1968)

http://www.nasa.gov/mission pages/apollo/missions/apollo7.html

Baruch Blumberg, University of Pennsylvania professor, discoverer of the hepatitis B virus and inventor of the first hepatitis B vaccine, won the Nobel Prize in Medicine. (1976)

http://www.nobelprize.org/nobel_prizes/medicine/laureates/1976/blumberg-bio.html

17 National Mammography Day

http://www.cancer.gov/cancertopics/cancerlibrary/cancerobservances

Subrahmanyan Chandrasekhar (U Chicago), who first proposed the existence of "black holes" in the universe, won the Nobel Prize in Physics. (1983)

http://www.nobelprize.org/nobel prizes/physics/laureates/1983/

21 Thomas Edison invented a workable electric light at his laboratory in Menlo Park, NJ. (1879)

http://www.nytimes.com/learning/general/onthisday/big/1021.html#article

National Biomedical Research Day

http://www.presidency.ucsb.edu/ws/?pid=62451

American Astronomer Elizabeth Roemer discovered 1930 Lucifer, a main-belt asteroid, at the U.S. Naval Observatory Flagstaff Station. (1964)

http://siris-archives.si.edu/ipac20/ipac.jsp?uri=full=3100001~!287590!0

28 Birthday of physician Jonas Salk, developed first safe & effective vaccine against polio. (1914)

http://www.biography.com/people/jonas-salk-9470147

November

6 Jane Goodall first observed a chimpanzee using a tool, changing a commonly held assumption about the separation of humans and other animals. (1960)

http://www.janegoodall.org/chimpanzees/tool-use-hunting-other-discoveries

7 Marie Curie's Birthday. (1867)

http://www.biography.com/people/marie-curie-9263538

8 Physicist Wilhelm Roentgen discovered X-rays. (1895)

http://www.nobelprize.org/nobel_prizes/physics/laureates/1901/rontgen-bio.html

9 Carl Sagan's birthday. He was an astrophysicist, professor, science communicator, Pulitzer Prize winning author of *Cosmos* and narrator of the television program of the same name. (1934)

http://www.biography.com/people/carl-sagan-9469191

17 President Franklin D. Roosevelt wrote a letter to Vannevar Bush, head of the Office of Scientific Research and Development, asking how to further scientific research post-World War II. This would lead to the creation of the National Science Foundation (NSF). (1944)

http://www.nsf.gov/news/news summ.jsp?cntn id=133384&WT.mc id=USNSF 51&WT.mc ev=click

20 Astronomer Edwin Hubble's birthday. He showed that spiral nebulas are external galaxies outside the Milky Way. (1889)

http://www.biography.com/people/edwin-hubble-9345936

24 The FBI Scientific Crime Detection Laboratory (better known as the FBI Crime Lab) officially opens in Washington, D.C. (1932)

http://www.fbi.gov/about-us/history/highlights-of-history/articles/laboratory

Discovery of the *Australopithecus afarensis* skeleton Lucy in Hadar, Ethiopia by paleoanthropologist Donald Johanson, while working in collaboration with a French-British-American team. (1974)

https://iho.asu.edu/about/lucy%E2%80%99s-story

Biologist Charles Darwin's book On the Origin of Species by Means of Natural Selection published. (1859)

http://darwin-online.org.uk/EditorialIntroductions/Freeman OntheOriginofSpecies.html

Robert Ledley is awarded a patent for "diagnostic X-ray systems" (CAT scan). (1975)

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1561796/

27 Bill Nye the Science Guy's birthday. (1955)

http://www.biography.com/people/bill-nye-20950589

29 The first video game, Pong, is released. (1972)

http://www.computerhistory.org/tdih/November/29/

December

1 World AIDS day

http://aids.gov/news-and-events/awareness-days/

Representatives of 12 countries, including the United States, signed a treaty in Washington setting aside Antarctica as a scientific preserve, free from military activity. (1959)

http://www.nytimes.com/learning/general/onthisday/big/1201.html#article

Nobel Laureate Enrico Fermi and his colleagues at the University of Chicago conducted the first controlled, self-sustaining, nuclear chain reaction, and initiated the modern nuclear age. (1942)

http://www.pbs.org/wgbh/aso/databank/entries/dp42fe.html

10 The first Nobel prizes were awarded, in accordance with the will of the Swedish chemist Alfred Nobel, who invented dynamite. The prizes were in five subjects: physics, chemistry, physiology or medicine, literature, and peace. (1901)

http://www.nobelprize.org/ceremonies/eyewitness/henschen/

Albert A. Michelson's measurements of the speed of light made him the first scientist from the United States to win the Nobel Prize. (1907)

http://www.nobelprize.org/nobel_prizes/physics/laureates/1907/michelson-bio.html

Melvin Calvin is awarded the Nobel Prize in Chemistry for his research on photosynthesis. The Calvin cycle is named for him. (1961)

http://www.nobelprize.org/nobel prizes/chemistry/laureates/1961/calvin-bio.html

25 The Wright brothers' first successful powered flight at Kitty Hawk, North Carolina. (1903)

http://www.nps.gov/wrbr/historyculture/thefirstflight.htm