BIOGRAPHICAL SOURCES IN THE SCIENCES--
LIFE, EARTH AND PHYSICAL SCIENCES (1989-2006)
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TB 06-4

SCOPE: This guide offers a systematic approach to the wide variety of published biographical information on men and women of science in the life, earth and physical sciences, primarily from 1989 to 2006, and complements TB88-3 (Biographical Sources in the Sciences, compiled 1988) and TB06-7 (Biographical Sources in the Sciences -- General Works and National Sources, compiled 2006). Works previously listed in TB88-3 have not been retained, but older works which did not make it into the previous bibliography have been included. Both historical and contemporary scientists are covered, with emphasis on Americans. As in TB88-3, bibliographic citations include the indication of illustrations, particularly portraits, and the inclusion of preliminary pagination extending to more than 13 pages and unnumbered as well as numbered series notes.

Departing from the usual Tracer Bullet format, where one subject is treated per publication, Biographical Resources in the Sciences instead is being issued in three parts, General Works and National Sources; Life, Earth and Physical Sciences (1989-2006); and Technology and Computer Sciences (1989-2006). Each Tracer Bullet contains an introduction to the topic that includes basic works on biography and a general listing of subject headings. This part, TB06-4 includes Agriculture, Veterinary Medicine Conservation; Astronomy; Biological Sciences; Chemistry; Geology, Mineralogy, Paleontology; Mathematics; Medical Sciences; Physics; Abstracting and Indexing Services; Journals; and Selected Internet Resources.

INTRODUCTION TO THE TOPIC

On Searching for Biographical Information

In seeking biographical information about scientists, one is apt to encounter contrary difficulties, most easily described as "feast or famine." Dozens of book-length biographies may be available for the great figures, such as Newton or Darwin, while little or nothing is ready to hand for less well known or obscure individuals. A few suggestions may be in order for
searchers confronted with the latter situation. Look for journal articles; nowadays, authors' affiliations are usually given, and these can provide a useful starting point. Check membership directories of societies in the scientist's field where varying amounts of biographical information can often be found—at the very least, an address. If the individual is no longer living, a death date will facilitate the search for newspaper obituaries. If only the year of death is known, an obituary may be found by browsing journals and/or society newsletters in the scientist's field. The organization or institution that last employed the scientist may be able to offer advice or assistance. If the location of the person's home at the time of death is known, consider addressing a query to the local library. Many libraries keep clipping files devoted to noteworthy local residents, and may even be able to supply addresses of surviving family members. Published genealogies and local histories can be consulted as well. If the scientist's educational background is known, examination of college and university alumni magazines may produce information; if these are not readily available, one can try contacting the institution's alumni office.

**SUBJECT HEADINGS** used by the Library of Congress, under which biographical materials on scientists and engineers can be located in most library catalogs, include the following:

**Highly Relevant**

SCIENTISTS--BIOGRAPHY
SCIENTISTS--BIOGRAPHY--DICTIONARIES
SCIENTISTS--BIOGRAPHY--DIRECTORIES
SCIENTISTS--BIOGRAPHY--INDEXES
See also subdivision "Biography" under headings for groups of scientists, e.g., "African American Mathematicians;" "African American Scientists;" "Women Astronomers;" "Women Scientists;" "Scientists with Disabilities;" "Jewish scientists;" "Catholic scientists;" "Muslim scientists."

SCIENTISTS--UNITED STATES--BIOGRAPHY
See also subdivisions for other countries or geographic areas, e.g., "Scientists--China--Biography;" "Scientists–India--Biography;" "Scientists–Europe--Biography;" "Scientists–Latin America--Biography."

**Relevant**

MEDICINE--BIOGRAPHY
See also subdivision "Biography" under headings for other scientific disciplines, e.g., "Aeronautics;" "Electronic Data Processing;" "Photography." Note: these headings are used for collective biography only.

PHYSICS--BIO-BIBLIOGRAPHY
See also subdivision "Bio-bibliography" under headings for other scientific disciplines, e.g., "Geology;" "Medicine;" "Science."
ZOOLoGISTS--BIOGRAPHY
See also other occupational subject headings, with or without geographic area subdivisions, e.g., "Anatomists;" "Astronomers;" "Biochemists;" "Biologists;" "Botanists;" "Chemists;" "Computer Engineers;" "Conservationists;" "Earth Scientists;" "Ecologists;" "Engineers;" "Entomologists;" "Environmentalists;" "Geologists;" "Inventors;" "Industrialists;" "Malacologists;" "Mathematicians;" "Meteorologists;" "Microbiologists;" "Mineralogists;" "Molecular Biologists;" "Mycologists;" "Naturalists;" "Oceanographers;" "Ornithologists;" "Paleontologists;" "Physicians;" "Physicists;" "Plant Collectors;" "Psychiatrists;" "Technologists;" "Veterinarians."

Related

SCIENTISTS--ANECDOTES
SCIENTISTS--ANECDOTES, FACETIAE, SATIRE, ETC.
SCIENTISTS--CORRESPONDENCE
SCIENTISTS--CORRESPONDENCE, REMINISCENCES, ETC.
SCIENTISTS--INTERVIEWS
SCIENTISTS--PORTRAITS
See also subdivisions "Anecdotes;" "Anecdotes, Facetiae, Satire, Etc.;" "Correspondence;" "Correspondence, Reminiscences, Etc.;" "Interviews;" and "Portraits" under headings for groups of scientists, e.g., "Engineers;" "Physicists;" "Technologists", with or without geographic area subdivisions.

More General

BIOGRAPHY
OBITUARIES

SPECIALIZED TEXTS

Agriculture, Veterinary Medicine, Conservation

"... contains details of over 10,800 senior agricultural and veterinary scientists concerned with research from 132 countries." A country and subject index (p. 1125-1157) lists names under professional fields for each of the countries included.

Includes bibliographical references. S926.A2A94 1993 <SciRR>
Treats organizations as well as individuals.


"Each conservationist is striving to find a balanced and interactive relationship among people, wildlife, and the environment."


Mary Austin -- Florence Merriam Bailey -- Rosalie Edge -- Marjory Stoneman Douglas -- Helen Nearing -- Rachel Carson -- Contemporary women conservationists: Faith McNulty, Ann Zwinger, Sue Hubbell, Anne Labastille, Mollie Beattie, and Terry Tempest Williams -- Conclusion, ideas for our time.


Interviews with "28 innovators who led parts of the prodigious expansion of veterinary medicine in the 20th century."


Supplementing the biographies is an appendix providing names and brief information arranged by country, and another with listings of names under very narrow specialties.

Astronomy


Interviews with 18 astronomers.


"Società astronomica italiana."


Alternative title: Biographical index of astronomy.


**Biological Sciences**


Bibliographies cite not only each writer's publications but also biographical and critical studies.


Bibliography: p. 441-463.


Includes bibliographical references.


Contents Section Ba: Collected biographies. Naturalists; Botanists (& plant collectors); Zoologists (& anatomists); Artists (& illustrators); Portraiture--Individual biographies (& bibliographies).


Bibliography: p. 249.


Bibliography: p. 175-176.


Pt. 3 compiled by Anita L. Karg and others.


Includes a chapter on "Women in natural history of the nineteenth and early twentieth centuries" (p. 252-258) and a chronology, arranged by year of birth, of the naturalists discussed (p. 271-274).


Includes bibliographical references.

Bibliography: p. 121-122.

Includes bibliographical references.


Bibliographical references included in "Notes," p. 399-414.


Includes bibliographical references.


Includes bibliographical references.

An appendix with its own list of references provides short biographical sketches of a "miscellaneous selection of naturalists commemorated by well-known races or hybrids, by recently obsolete names, or by species that are only accidental visitors to the United States and Canada."

Bibliography: p. 218-220.

*The Naturalists' directory and almanac, international.* Baltimore, World Natural History Publications, 1980+ Q145.S4 <SciRR>
Latest ed. only in Science Reading Room.


Includes bibliographical references.
"Appendix I: Scientists by field": p. 413-415.
"Appendix II: Scientists by awards received": p. 417-424.


Includes bibliographical references.


Includes bibliographical references.


Bibliography: p. 327-344.


Bibliography: p. 335-344.


Includes bibliographical references.


Includes bibliographical references.

A lengthy introduction on the development of ornithology in the Netherlands in the 20th century is followed by 550 biographical sketches and a list of the names arranged by date of birth.


Includes bibliographical references.


Short essays for each of 655 women discuss her life and work and cite writings by and about her.

Appendices list the women in chronological order and by place of birth, place of work, and field of scientific interest, and cite references in biographical dictionaries and other collections.


Includes bibliographical references.

**Chemistry**


Includes bibliographical references.


Bibliography: p. 194-205.


"Persons were included if they died after the year 1600, or were born before 1865." Provides references to journal articles as well as books.


Includes bibliographical references.


Includes bibliographical references.

Biographical entries are listed in the "Outline of Contents," v. 1, p. xvi-xvii.


Includes bibliographical references.

Chronological arrangement with index.


Includes bibliographical references.


Includes bibliographical references.


Includes bibliographical references.
Includes bibliographical references.  

Includes bibliographical references.

Vols. 2-3 compiled by Bakos Miklós and others and edited by Kovács Gy. István.


Bibliography: p. 629-643.  
Includes a chronology of the most important events and discoveries in chemistry (p. 532-628).

Short essays for each of 75 women which discuss her life and work and cite writings by and about her.  
Appendices list the women in chronological order and by place of birth, place of work, and field of scientific interest, and cite references in biographical dictionaries and other collections.

Arrangement is by country, with a name index.

**Geology, Mineralogy, Paleontology**


G200.G43 2002 <SciRR>


Summary and table of contents also in English.

Mathematics


Provides a list of mathematicians by field and a chronology.


Includes bibliographical references.


Includes bibliographical references.

Mostly snapshots of many mathematicians taken over a period of more than 35 years. Brief texts accompany the pictures, and there is a name index.

Includes bibliographical references.
"This book presents the lives of 13 people who made a variety of important contributions to modern mathematics."

2006 Dover Publications ed. not yet in LC.

Includes bibliographical references.

A table listing milestones in the history of statistics to 1917 appears on p. xix-xxi, with a supplement covering the years 1930-89 on p. xxii.
Provides name and subject indexes.

Includes bibliographical references.


Interviews with 18 mathematicians are preceded by Martin Gardner's introduction (p. xi-xv) and a short essay by Constance Reid, "Becoming a mathematician" (p. xvii-xviii).

Reprint of a work first published in 1961 by Dodd, Mead in New York.

*Notable mathematicians: from ancient times to the present.* Robyn V. Young, editor. Detroit, Gale, 1998. xxi, 612 p. ports.  
Bibliography: p. 579-583.  
Includes a timeline, "Milestones in the history of mathematics" (p. 529-564), and lists winners of "Selected mathematics awards and prizes" (p. 565-577). There are also indexes for fields of specialization, gender, nationality/ethnicity, and subjects.

Includes bibliographical references.  
"Appendix II: Countries of employment and origin": p. 285-287.

Includes bibliographical references.  
Biographies in English, some articles in Russian.

Includes bibliographical references.

Includes bibliographical references.

**Medical Sciences**

Among the lists supplementing the biographical sketches is a "Liste des éloges et notices parus dans les Mémoires et le Bulletin de l'Académie de médecine."


America's dental leaders. Chicago, Distinction Press, 1953. 296 p. RK41.A54

Includes bibliographical references.
Volumes include bibliographies and provide indexes by decade of birth, first nursing school attended, area of special interest or accomplishment, and state and country of birth.
Vol. 2 edited by Vern L. Bullough, Lilli Sentz, and Alice P. Stein.
Vol. 3 edited by Vern L. Bullough, and Lilli Sentz, and published by Springer.

Published as American Psychiatric Association. Biographical directory of fellows & members of the American Psychiatric Association, 1940+ (title varies).

Bibliography: p. xix.
A companion volume to The man behind the syndrome, 1986.

Bibliography: p. 271.
Includes a chronology (p. 263-269).

Bibliography: v. 2, p. 943-946. RD27.34.C46 1987

Includes bibliographical references.

Davenport, Horace Willard. University of Michigan surgeons, 1850-1970: who they were and what they did. Ann Arbor, Historical Center for the Health Sciences, University of Michigan, 1993. 228 p. illus., ports. (Historical Center for the Health Sciences monographs, no. 3) RD27.34.D38 1993


*Doctors, nurses, and medical practitioners: a bio-bibliographical sourcebook.* Edited by Lois N. Magner. Westport, CT, Greenwood Press, 1997. 371 p. R153.D63 1997 <SciRR> Short essays for each of 56 individuals discuss his or her life and work and cite writings by and about them. Appendices list the names by occupation and special interest, by year of birth, and by place of birth. There is also a separate list of women practitioners.


Heritage of leadership: Army Nurse Corps biographies. Edited by Dorothy B. Pocklington. Ellicott City, MD, ALDOT; Washington, distributed by Women in Military Service for America Memorial Foundation, 2004. 188 p. col. illus., ports.


Mattson, James, and Merrill Simon. The pioneers of NMR and magnetic resonance in medicine: the story of MRI. Ramat Gan, Israel, Bar-Ilan University Press; Jericho, NY, Published in the U.S.A. by Dean Books Co., 1996. xxxi, 838 p., 64 p. of plates. illus., ports.

"... contains details of over 10,300 senior medical and biomedical scientists from 98 countries." A country and subject index (p. 1211-1235) lists names under professional fields for each of the countries included.


Includes bibliographical references. Z6660.5.M67 2005 <SciRR>

Includes bibliographical references.
Alphabetical arrangement with a chronological listing (through 1989) on p. xi-xv.

Includes bibliographical references.

Includes bibliographical references.
Volume 5, 1971-1980, not in LC.

Bibliography: p. 6.


Bibliography: p. 233-234.


Historical and current directory information. Biographical section gives name and address.


Bibliography: p. 205-212.

**Physics**

Biographies of eight physicists are preceded by an introduction, "Standing on the Shoulders of Giants," and followed by an epilogue, "The Why of Physics."


Includes bibliographical references.

Includes a box, "Trying Times at Oak Ridge and Beyond," by Beth Horning.

Includes bibliographical references.  
Biographical entries are listed in the "Reader's Guide," v. 1, p. ix-x.

(International catalog of sources for history of physics and allied sciences, report no. 7)  
Includes descriptions of collections of the papers of individual scientists, manuscript biographies, and oral history interviews. There is an exhaustive index.

Includes bibliographical references.  

Includes bibliographical references.  
"Appendix II: Scientists by honors and awards received": p. 449-459.
Includes bibliographical references.

Includes bibliographical references.

Includes bibliographical references.


ABSTRACTING AND INDEXING SERVICES that index relevant journal articles and other literature of a biographical nature are listed below. Please consult a reference librarian for the location and format of abstracting and indexing services in the Science Reading Room.


Applied Science & Technology Index (1913- ) Z7913.I7 <SciRR A&I> and Electronic format


Bibliography and Index of Geology (1933- ) Z6031.G4 and Electronic format

Bibliography of Agriculture (1942- ) Z5073.U572 <SciRR A&I> and Electronic format
URL: http://agricola.nal.usda.gov/

Biography and Genealogy Master Index (1975- ) Z5305.U5B57 <MRR Biog> <BRS Biog> and Electronic format

Biography Index (1946- ) Z5301.B5 <MRR Biog> <BRS Biog> and Electronic format

Biological Abstracts (1926- ) QH301.B37 <SciRR A&I> and Electronic format

Biological and Agricultural Index (1916- ) Z5073.A46 <SciRR A&I> and Electronic Format
The following electronic resources may only be available at a large public or academic library. The Library of Congress has subscriptions to these resources which are available to on-site researchers at the Library of Congress. Some titles may be available exclusively in electronic format, while others have components that are represented in book or microfiche formats. **Consult a reference librarian for the location and format of abstracting and indexing services in the Science Reading Room.**

**African American Biographical Database**

- Electronic format
- Includes Chadwyck-Healey's *Black Biographical Dictionaries 1790-1950*, obituary files, slave narrative collections, photographs, illustrations, and other sources.

**American National Biography**

- CT213.A68 1999 <MRR Biog> and Electronic format
- Portraits of more than 17,400 men and women from all areas and walks of life whose lives have shaped the nation.

**Biography Resource Center**

- Electronic format
- Database of biographical information on more than 150,000 individuals from all parts of the world. The information is taken from standard biographical resources, many of which are also available in print format in the Library.

**Chambers Reference Online**

- CT103.C4 <MRR Biog> and Electronic format
- Contains *Chambers Biographical Dictionary* (1997 ed. with amendments)
German Biography

Elektronische Allgemeine deutsche Biographie (E-ADB and E-NDB) is a database for German biographies.

JSTOR Arts & Sciences I, II, III, and Health & General Science

JSTOR is a collection of full-text, keyword-searchable academic journals dating back to the late 17th century.

Oxford Dictionary of National Biography

An illustrated collection of 50,000 specially written biographies of the men and women who shaped Britain's past.

Proquest Historical Newspapers

World Biographical Information System

Current component indexes and archives include the following, with more added yearly:
- American Biographical Archive (ABA Series I and II)
- Biographical Archive (ABEP Series I and II)
- Biographical Archive of the Benelux Countries/Archives biographiques des pays du Benelux (BAB I)
- British Biographical Archive (BBA Series I and II)
- Archives biographiques françaises/French Biographical Archive (ABF Series I and II)
- Deutsches biographisches Archiv/German Biographical Archive (DBA Series I and II)
- Archivio biografico italiano/Italian Biographical Archive (ABI Series I and II)
- Russisches biographisches Archiv/Russian Biographical Archive (RBA)
- Scandinavian Biographical Archive (SBA I)
- Archivo biográfico de España, Portugal e Iberoamérica/Spanish, Portuguese and Latin-American Archive (ABEP Series I and II)

Xreferplus: Biography


JOURNALS that often contain biographical articles on scientists, or bibliographic listings of relevant books and articles, include:

- Agricultural History S1.A16
- American Heritage of Invention & Technology T1.A455
- American Scientist LJ85.S502
- British Journal for the History of Science Q125.B77
- Bulletin of the History of Medicine R11.B93
- Historia Mathematica QA21.H54
- Historical Studies in the Physical and Biological Sciences QC7.H69
- History of Science Q125.H63
History of Technology T14.7.H57
Industrial Archaeology T37.15
Isis Q1.17
Journal of Chemical Education QD1.J93
Journal of Medical Biography R134.K33
Journal of the History of Ideas B1.J75
Osiris Q1.07
Science Q1.S35
Scientific American T1.S5
Scientific Monthly Q1.S817
Studies in History and Philosophy of Science Q125.S94

SELECTED INTERNET RESOURCES

The Internet offers a growing number of sources that provide information on scientists in virtually every scientific discipline. Use your favorite search engine and the name of the individual or terms such as those provided in the section on subject headings at the beginning of this compilation. Some Internet addresses that may be of interest include:

Biographies of Women Mathematicians
   URL: http://www.scottlan.edu/lriddle/women/women.htm

The Bruce Medalists (astronomy)
   URL: http://yorty.sonoma.edu/BruceMedalists/index.html

Chemical Heritage Foundation: Chemical Achievers
   URL: http://www.chemheritage.org/classroom/chemach/index.html
   Contains biographical, scientific, and pictorial material about famous chemists.

History of Astronomy: Persons
   URL: http://www.astro.uni-bonn.de/~pbrosche/hist_astr/ha_pers.html
   See also “Finding List of Obituaries of Astronomers (1900-1997) and list of other sources.

The History of Chemistry

History of Geology Resources on the Web: a Selection by the History of Geology Group (HOGG)
   URL: http://www.geolsoc.org.uk/template.cfm?name=HOGG_links
   Includes links to geological organizations and online biographies of earth scientists.
The MacTutor History of Mathematics Archive
URL: http://www-groups.dcs.st-and.ac.uk:80/~history/

Mathematicians of the African Diaspora
URL: http://www.math.buffalo.edu/mad/mad0.html

Natural History and Biology in the Nineteenth Century: A Bibliography
URL: http://www.hps.cam.ac.uk/research/nhbnc.html

Prizes Named After People
URL: http://www.answers.com/topic/prizes-named-after-people

Science Subject Guide: Biography, History of Science
URL: http://www.loc.gov/rr/scitech/subjectguides/biographysg.html

Scripps Institute of Oceanography Archives
URL: http://scilib.ucsd.edu/sio/archives/

WWW Virtual Library: Chemistry
URL: http://www.liv.ac.uk/Chemistry/Links/refhistory.html

Location Codes for Items in the Library of Congress Reference Collections

<BRS> Business Reference Services
<BRS Biog> Business Reference Services Biography
<EurRR> European Reading Room
<MicRR> Microform Reading Room
<MRR> Main Reading Room
<MRR Biog> Main Reading Room Biography
<N&CPR> Newspaper and Current Periodicals Room
<SciRR> Science Reading Room
<SciRR Desk> Science Reading Room reference desk collection
<SciRR Dict> Science Reading Room dictionary collection