WOMEN *in* SCIENCE

These portraits highlight eight women who have been part of the scientific world, from the 1700s to the present day. Each is linked to the Museum, either through an item in the collections or by their roles at the University of Oxford.

MUSEUM *of the* HISTORY *of* SCIENCE

UNIVERSITY OF OXFORD

VOTES FOR WOMEN 1918~2018

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Discovered pulsars

Jocelyn Bell Burnell

1943-
Astrophysicist

Jocelyn Bell Burnell is Visiting Professor of Astrophysics at the University of Oxford and a well-known ambassador for women in science.

In 1967, while working in radio astronomy for her Cambridge PhD, she discovered a pulsating radio source in the constellation Taurus. This turned out to be the 'Crab Pulsar', a neutron star left behind from a supernova explosion.

Part of the Crab Nebula, containing the Crab Pulsar discovered by Jocelyn Bell Burnell in 1967.
NASA, ESA, J. Hester, A. Loll (ASU)

From the Principal and Fellows of Somerville College, Oxford and the Estate of Sheila Fell

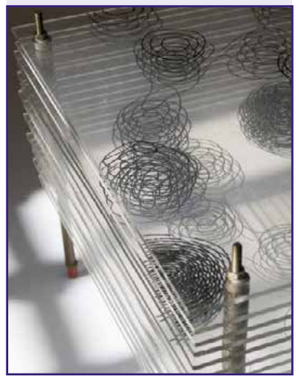
Nobel Prize winning Chemist

Dorothy Crowfoot Hodgkin

1910-1994
Crystallographer

In 1964 Dorothy Hodgkin received the Nobel Prize in Chemistry for her work with X-ray crystallography to determine the structures of important biochemical substances. This included penicillin and insulin.

As of the start of 2018, she is the only woman from the UK to have won a Nobel Prize in the sciences.



Model of the Structure of Penicillin, by Dorothy Crowfoot Hodgkin, Oxford, c.1945, inv. 17631.
Museum of the History of Science, University of Oxford

From the Museum of the History of Science, University of Oxford

Analysed earthquake data and catalogued stars

Ethel Bellamy

1881-1960
Seismologist & astronomer

Between 1912 and 1947, Ethel Bellamy worked at the Oxford University Observatory, South Parks Road. For over thirty years she collated, measured and corrected the observations sent in from hundreds of seismological stations around the world. She eventually became editor of the International Seismological Summary. She was also an astronomer and contributed to the Astrographic Catalogue, a huge photographic star catalogue.

Oxford University Observatory.
Museum of the History of Science, University of Oxford

From the Museum of the History of Science, University of Oxford

Pioneer of colour photography

Sarah Angelina Acland

1849-1930
Photographer

Sarah Angelina Acland was one of the most important photographers of the late Victorian and Edwardian periods and an early pioneer of colour photography.

She received international praise for her work using the Sanger Shepherd process. This is where separate photos are taken through red, green and blue filters and then combined to make one colour image.

Colour Photographs by Sarah Angelina Acland, early 20th century, inv 20974, 27301, 28675.
Museum of the History of Science, University of Oxford

From The New York Public Library

Computer programming pioneer

Ada Lovelace

1815-1852
Mathematician

Lovelace was famous for her work on Charles Babbage's Analytical Engine, an early design for a mechanical computer. She is often described as the first computer programmer, on the basis of her writing relating to the use of the machine.

A part of Babbage's Difference Engine (a forerunner of the Analytical Engine) can be seen on display in the Top Gallery.

Parts of Difference Engine, by Charles Babbage, c. 1822-30, inv. 94229.
Museum of the History of Science, University of Oxford

From the Nurstead Court Archives

First to publish a book illustrated with photography

Anna Atkins

1799-1871
Botanist & Photographer

Anna Atkins made cyanotype photograms by placing dried algae directly on cyanotype paper.

She self-published her photograms, with handwritten text, in three volumes of *Photographs of British Algae: Cyanotype Impressions* between 1843 and 1853. This is considered to be the first book illustrated with photographic images and the beginning of a revolution in publication and illustration.

Illustration from part one of *Photographs of British Algae: Cyanotype Impressions*, by Anna Atkins, 1843, inv. 11887.
Museum of the History of Science, University of Oxford

From the Principal and Fellows of Somerville College, Oxford

Authority on mathematical astronomy

Mary Somerville

1780-1872
Mathematician & Astronomer

Mary Somerville was the first female member of the Royal Astronomical Society, alongside Caroline Herschel. On her death, she was hailed as 'The Queen of Nineteenth Century Science' by the London Morning Post.

Her interests were wide-ranging, and included mathematics, astronomy, chemistry, geography, microscopy, electricity and magnetism. Somerville College, Oxford is named after her.

Mary Somerville's Compound Microscope, by Adie & Sons, Edinburgh, c. 1844, inv. 46235.
Museum of the History of Science, University of Oxford

From the Museum of the History of Science, University of Oxford

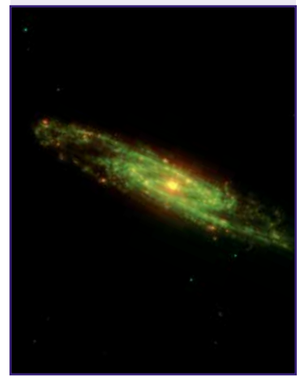
Discovered eight comets

Caroline Herschel

1750-1848
Astronomer

Caroline Herschel was Britain's first female professional astronomer.

She discovered eight comets, plus several new 'nebulae' (fuzzy objects in the night sky) and star clusters. Her discoveries of nebulae alerted her brother William Herschel to the importance of these objects. In 1798, she published her compilation of corrections to John Flamsteed's great star catalogue under her own name.



The Sculptor Galaxy (NGC 253), discovered by Caroline Herschel in 1783.
NASA/JPL-Caltech