

A short history of our department

The department was formed during the recent reorganisation of the Faculty of Life Sciences that brought together scientists with shared interests in biology, genetics, environmental and evolutionary biology who had previously been scattered among a variety of distinct departments. It traces its origins to the now extinct Department of Comparative Anatomy, founded in 1826, and the first in Britain to offer a Zoology degree. It also incorporates the Galton Laboratory, the first institution in the world to study human genetics as a science and previously named Departments of Biology, Botany, Genetics & Biometry, Microbiology and Zoology.



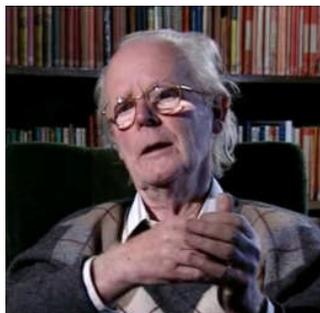
Robert Grant

Some great figures of the past have been associated with the Department - whose main building stands on the site of Charles Darwin's home, on Gower Street. They include [Robert Grant](#) (who taught Darwin in Edinburgh and whose extraordinary collection of animal specimens are now held in the [Grant Museum](#)), [Sir Francis Galton](#) (Darwin's cousin, and the founder of the modern study of human genetics and - less creditably - of eugenics, whose legacy helped establish the Galton Laboratory). Its early members included [Karl Pearson](#) and [R A Fisher](#) (jointly the founders of modern statistical science), [J B S Haldane](#) (the eccentric genius who worked on submarine escape methods and helped to place the theory of evolution on a mathematical basis), and [F R Weldon](#), who carried out the earliest experimental studies on natural selection in action. Later, the Nobel Prize winner, [Sir Peter Medawar](#), who worked out the genetics of tissue recognition and was central to the development of organ transplantation.



Ray Lankester

Other eminent members include the embryologist [Sir Gavin de Beer](#) who helped found what became today's evolutionary developmental biology or "evo-devo", [Alex Comfort](#), a pioneer in the study of the biology of ageing (albeit perhaps better known for his book *The Joy of Sex*), [Hans Gruneberg](#), the first to use mutations in mice to understand the basis of human developmental abnormalities, [Harry Harris](#) who revealed the massive extent of human genetic diversity, [Kenneth Kermack](#), the discoverer of one of the earliest pre-mammalian fossils and the marine biologist [Sir Ray Lankester](#), who became Director of the Natural History Museum. [Lionel Penrose](#) was one of the first to work on the genetics of mental retardation, [Sir Edward Salisbury](#) was a pioneer in plant ecology and became Director of Kew Gardens, [Francis Wall Oliver](#) established the first ecological research centre in the UK at [Blakeney Point](#), Norfolk, which is still being used by our students today and [D M S Watson](#) who played an important part in early work on plant and lizard fossils.



John Maynard Smith

More recently, several luminaries have contributed fundamental insights to evolutionary biology, [John Maynard Smith](#) pioneered the use of game theory in understanding the evolution of animal behaviour and famously posed the enigmatic two-fold cost of sex, [W D Hamilton](#) set out his ideas about inclusive fitness and the evolution of altruism, [George Price](#) developed his interpretation of Fisher's fundamental theory of natural selection now known as the Price equation. [Anne McLaren](#) was a leading figure in reproductive biology who helped establish the principles that led to in vitro fertilisation and [Avrion Mitchison](#) was instrumental in disentangling the complexities of the human immune system. [Robert Race and Ruth Sanger](#) made the first maps of the distribution of the human blood groups and elucidated the genetics and biochemistry of the Rhesus groups, while [Cedric Smith](#) invented some of the mathematical methods used to map human genes.