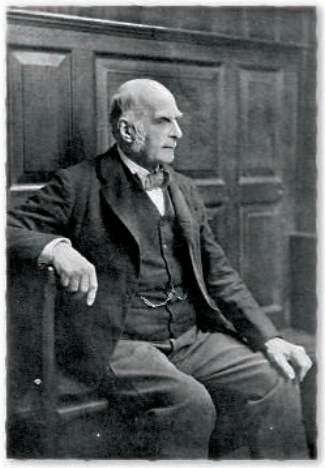
NetWatch

edited by Mitch Leslie



EXHIBITS

Born to Count

Francis Galton (1822–1911) boasted a hefty fortune, wide-ranging curiosity, and the compulsion to measure or count almost everything, from the visual acuity of Londoners to the number of attractive women he passed on the street. The combination helped the English gentleman-scientist make a mark in fields as diverse as statistics, meteorology, and genetics. This virtual library from software engineer Gavan Tredoux of Rochester, New York, who's writing a book on the Victorian polymath, houses all of Galton's major texts and about 300 of his papers, letters, and other writings.

Galton's legacy includes the modern weather chart, which he created by marking locations on a map with the same barometric pressure. He gave fingerprinting a scientific foundation by showing that each person's prints are unique, and he devised the statistical techniques of correlation and regression. You can browse the paper in which he shot down his cousin Charles Darwin's hypothesis for inheritance. Galton, who coined the term "eugenics," was an early apostle of efforts to breed better humans. Readers can page through his 1869 work *Hereditary Genius*, in which he marshaled the pedigrees of English luminaries, including Darwin, to argue that ability was innate.

galton.org

DATABASE

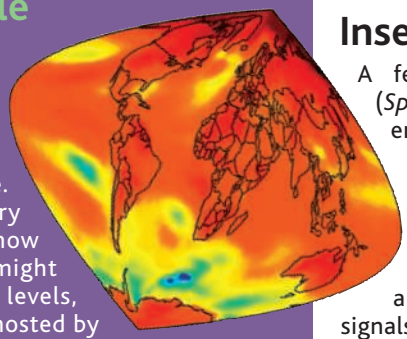
Taking Aim at CREB

By switching on certain genes, the cyclic AMP response element–binding protein (CREB) helps govern processes from cell metabolism to the wiring of the nervous system. Researchers can find out which genes the influential protein activates at the new CREB Target Gene Database from Marc Montminy of the Salk Institute in La Jolla, California, and colleagues. Users can determine whether their favorite gene carries a sequence that CREB recognizes and whether CREB actually latches onto the gene, among other info. The data are for humans, rats, and mice.

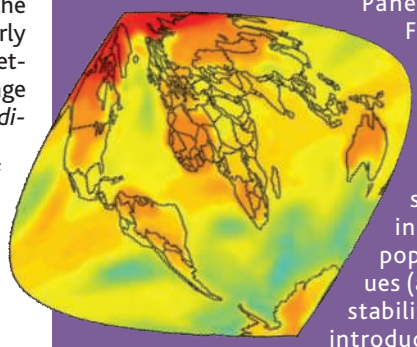
natural.salk.edu/CREB

EDUCATION

Animating Possible Worlds



Global warming's future impact depends on factors such as human population growth and fossil fuel use. High school and introductory college classes can learn how these and other variables might influence temperatures, sea levels, and more at a new tutorial hosted by California State University, Los Angeles. The Java applet helps students work through scenarios for the future sketched by the Intergovernmental Panel on Climate Change. For example, animations illustrate flooding in areas such as Florida and Indonesia under different sets of conditions. These diagrams show global temperature increases in 2300 if rapid population growth continues (above), and if population stabilizes faster and countries introduce clean technologies more rapidly.

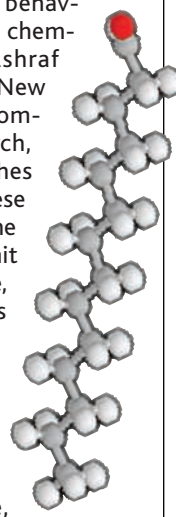


sciencecourseware.com/eec/GlobalWarming

RESOURCES

Scent of an Insect

A female African mantis (*Sphodromantis lineola*) entices males with an irresistible cocktail of the compounds pentadecanal and tetradecanal (below). Her eau de mantis is one of a multitude of chemical signals that insects deploy to announce their receptiveness for mating, mark the route to their nest, repel enemies, or induce other behaviors. Compiled by chemical ecologist Ashraf El-Sayed of the New Zealand–based company HortResearch, Pherobase matches some 3000 of these molecules with the creatures that emit them. For example, the house cricket's alarm signal contains acetic acid, isobutyric acid, and four other molecules. Click on a chemical to see its structure, a 3D model, and for some compounds, a mass spectrum.



www.pherobase.com

IMAGES

Now Showing at the MicroPlex

A *Paramecium* twirls across the microscope slide, its cilia fluttering. A startled, trumpet-shaped *Stentor* retracts into a hole and then cautiously re-emerges. These microscopic denizens are among the stars of a gallery from the Natural History Museum in London. The site lets you play nearly 1500 short clips of protists oozing, darting, pulsating, and just hanging around. The films don't include descriptions, but they do give students a chance to see the creatures in action.

internt.nhm.ac.uk/jdsml/zoology/protistvideo

Send site suggestions to netwatch@aaas.org. Archive: www.sciencemag.org/netwatch

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