NetWatch

edited by Mitch Leslie

EXHIBITS

Dynamic Duo

Earl and Thressa Stadtman's achievements in biochemical research won them places in the National Academy of Sciences. But the couple (below) might have had even more influence on science through their "intellectual children," the cadre of young researchers they helped train, including Nobel laureates Stanley Prusiner and Michael Brown. You can learn more about the Stadtmans' lives, accomplishments, and mentoring style at The Stadtman Way, a new Web exhibit from the National Institutes of Health (NIH), where they have worked since 1950.

The two scientists, who run independent labs at NIH, both made a mark in their fields. Earl showed that oxidation tags cellular proteins for breakdown, and Thressa uncovered the importance of the metal selenium for the synthesis and function of proteins. The Stadtmans also fostered more than 100 future scientists. The couple pushed their protégés, urging them to write papers early in their careers and forcing them to defend their ideas. But students also got credit for their work and felt that the "boss" was concerned about their well-being, as one former postdoc notes on the site. The site tells the duo's story with period photos, video interviews, documents, and other resources.

history.nih.gov/exhibits/stadtman

DATABASE

Genomes United

Scientists have sequenced the genomes of more than 150 organisms, and they polish off a new one about every week. But comparing these results can be a headache because the data are stashed on multiple Web sites that use different formats and sometimes even different names for the same proteins. Bringing order to this genomic tower of Babel is Cogent, a central storehouse from the European Bioinformatics Institute in Cambridge, U.K. Here, visitors can download a list of predicted proteins for every completed genome, from ours (the 45th sequenced) to that of *Yersinia pestis*, the bacterium responsible for bubonic plague (number 64). Moreover, the database's standard nomenclature and organization makes it easier to contrast different species.

maine.ebi.ac.uk:8000/services/cogent

IMAGES

Meet the Ants

Identifying an ant specimen can be tricky even for experts, because field guides are scarce and the original species descriptions are often buried in obscure journals. This pair of sites can help everyone from entomologists to backyard naturalists put a name to a bug. AntWeb* features an identification guide for all of the roughly 270 ant species in California as well as some Madagascar species. The growing taxonomic trove curated by Brian Fisher of the California Academy of Sciences and colleagues also profiles all of the ant genera in the world. Visitors can create a virtual mug book of specimens, lining up photos of different species, genera, or families. (Above, the insect-hunter *Anochetus* of central Africa.) Ants of Costa Rica† covers more than 400 species from this ant-rich country. Along with tips on identification, creator John Longino of Evergreen State College in Olympia, Washington, tucked in information about each species' natural history and distribution. The site also includes keys and discussions of taxonomically troublesome groups.

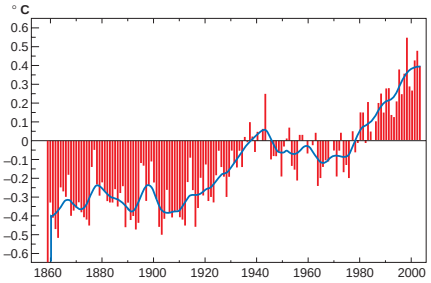
* www.antweb.org

† www.evergreen.edu/ants/AntsofCostaRica.html

WEB TEXT

Forecasting a Warming Trend

Almost everyone scoffed when Swedish chemist Svante Arrhenius first suggested in 1896 that carbon dioxide from industrial emissions might warm the globe by 5° to 6°C. Even Arrhenius didn't fret about the predicted increase, because he calculated that temperatures wouldn't reach that level for about 3000 years. To find out how human-caused climate change evolved from half-baked hypothesis to scientific consensus and pressing environmental problem, check out *The Discovery of Global Warming*, a Web text from the American Institute of Physics based on a 2003 book by science historian Spencer Weart.



The site traces more than a century of findings in atmospheric chemistry and climatology, such as geochemist Charles Keeling's discovery, starting in the late 1950s, that atmospheric carbon dioxide levels were soaring. Other chapters plumb how the U.S. government, the international community, and the public have responded to the accumulating evidence that human activities are contributing to rising temperatures. Above, temperature deviations over the last 140 years.

www.aip.org/history/climate

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

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