Close-Up on the Bug

This new picture of the Bug Nebula (right), some 4000 light-years away, shows what the refurbished Hubble Space Telescope’s new Wide Field Camera 3 can do. The instrument is 10 to 30 times more sensitive than the earlier camera, which snapped a picture of the same nebula—in far less telling detail (left)—in 2004. This image, taken on 27 July and released by NASA last week, will enable astronomers to get a richer understanding of the elemental composition of the butterfly-shaped object’s gossamer wings, which span 2 light-years. Visit apod.nasa.gov/apod/image/0405/heic0407a_hst_full.jpg

A Termite’s Perspective

Termites have a reputation as building-destroyers, but it was their building expertise that was on display this month at London’s Southbank Centre. A human-scale replica of the central chimney of an African termite mound formed the centerpiece of a 3-day “Pestival” celebrating the art and science of insects.

The termite pavilion was based on the first 3D scans of termite mounds, conducted by scientists in Namibia. Its builders hope to learn the secrets of the construction, which produces self-ventilating mounds that use the wind to keep the inner chambers at just the right temperature and humidity. The pavilion and other attractions drew more than 200,000 visitors, says Pestival founder, naturalist, and writer Bridget Nicholls. More than 200 scientists, artists, and volunteers (wearing black-and-yellow bibs with “worker” on the back) came together to celebrate “how insects shape our world and how humans shape the world of insects.” This was the world’s second Pestival; the first was held in 2006.

Darwin and Dance

Birds are noteworthy not only for their wit, charm, and sartorial splendor but also for their great dancing. So, for its contribution to this year’s Darwin celebrations, London’s Rambert Dance Company is putting on a bird-inspired show.

The company has the ideal scientific adviser: Nicola Clayton, an expert on the cognitive talents of jays and crows at the University of Cambridge (Science, 23 February 2007, p. 1074) and a lifelong dancer. Clayton helped the company’s artistic director, Mark Baldwin, come up with a program that she calls a “distillation of Darwinian ideas about evolution, particularly sexual selection.” One dance, for instance, is inspired by the elaborate displays of the six-plumed bird of paradise. In the wild, males inflate “a tutu” of feathers, then vigorously shake their heads and necks while sliding across a stage—all while being critically observed by a gallery of females. “The males are so constrained in their movements by female choice that it’s comical,” says Clayton. Other dances in the program evoke blue manakins and bee hummingbirds.

Putting Nobelists to Work

Two Nobel laureates who are stepping down from high-level positions aren’t riding off into the sunset. Leland Hartwell, 69, who will retire next June as president of the Fred Hutchinson Cancer Research Center in Seattle, Washington, is heading south to lead the new Center for Sustainable Health at Arizona State University’s Biodesign Institute. Hartwell, who won the Nobel for physiology or medicine in 2001 for uncovering the genetics of cell division, will oversee the development of biomarkers for predicting disease and yardsticks for measuring health outcomes. Meanwhile, 1989 chemistry Nobelist Thomas Cech, 61, completed a 10-year stint last spring as president of the Howard Hughes Medical Institute. Not content to confine himself to his telomerase research lab, he’s also heading a biotechnology initiative at the University of Colorado, Boulder. A new building will bring together almost 600 researchers and support staff to tackle projects such as tissue engineering and virus imaging.