RANDOM SAMPLES

edited by RICHARD STONE

Physics Parts the Red Sea

For whatever reason, the Bible's authors fail to mention vertically integrated nonlinear equations of motion. If they had, scholars would have realized millennia ago that God needn't have violated any laws of nature when he parted the waters for the fleeing Hebrew people.

In the first mathematical analysis of the Exodus, published in the March *Bulletin of the American Meteorological Society*, a pair of oceanographers create their own model of that Biblical scene from equations describing the sea, the wind, and the drag of wind on sea. Lo and behold, the miracle would have been in the timing: Let the Hebrews pass during a strong blow from the north-northwest; then shift those winds just as the Pharaoh's armies get halfway across the sea bottom.

For Doron Nof of Florida State University and Nathan Paldor of the Hebrew University of Jerusalem to be correct, there would have to have been something like a 72-kilometer-per-hour wind blowing down the Gulf of Suez for a good 10 hours. Such a gale could have shifted the gulf's northern waterline more than a kilometer south, up to the point where the shallow sea reached 2.5 meters deep. Moses would have more than a kilometer of freshly exposed gulf bottom to make good his escape. And if the wind suddenly abated, the amount of displaced water would have been more than enough to drown the Egyptians, chariots and all.

In Absentia Besmirched, Bloch Battles Back

Erich Bloch, former director of the National Science Foundation (NSF), has sent a stinging letter of rebuke to Representative Howard Wolpe (D–MI) over the conduct of a hearing the congressman chaired this month. At the 8 April hearing into alleged misuse of statistics to project a "shortfall" of scientists and engineers in the next century (*Science*, 10 April, p. 172), Wolpe's subcommittee on investigations and oversight took to task Peter House, who had served Bloch as NSF's top policy staffer. Not surprisingly, Bloch's name came up often in connection with the study, and not in a positive light—yet he wasn't invited to testify, making him hopping mad.

"Even a primitive sense of fairness," wrote Bloch, would suggest "my presence as a witness or at least my written statement." In his letter of 10 April, Bloch insists he would have testified that the NSF's study on the future supply of scientists and engineers was "never intended to be, nor was it billed as, a demand forecast..."

Queried about Bloch's protest, the subcommittee offered only a muted response. The point of the hearing was not to focus on the ex-NSF chief, said one staffer, but to find out "how this study got there." Why hadn't Wolpe summoned Bloch and asked him directly? "Mr. Bloch never contacted us to say he wanted to respond, and he was aware this investigation was going on," the staffer said.

JIM WALLACE

A devil of a smile. The littlest lemur.

Aye-Aye Opener

For the first time this century, an aye-aye—one of the world's most endangered primates—has been born in captivity. But it was an unplanned birth: The 5-ounce, gremlin-faced lemur surprised researchers at the Duke University Primate Center, who had captured the mother along with three other adult aye-ayes in Madagascar in December. They didn't know one of the animals was pregnant until they found the day-old infant on 6 April, says Duke Primate Center director Elwyn Simons.

The birth of the baby aye-aye, named "Blue Devil" after the Duke basketball team, is a promising start for the researchers who plan to breed the animals, the only member of the family *Daubentoniidae*, which is part of a primitive branch of primates. Although Blue Devil was conceived in the wild, another pair of aye-aye adults already has mated in captivity—and the primate center has had a good track record breeding lemurs. The aye-aye is found in the wild only in Madagascar, where its habitat is shrinking and people kill the creatures out of fear that they're harbingers of death, says Simons. He hopes to reverse the species' fortunes: "This birth represents a critical first step in building a large captive population to become stock for repopulating Madagascar."

Healy Calls for Glasnost on Gallo Case

The NIH Office of Scientific Integrity has completed its inquiry into allegations of misconduct against Robert Gallo and his associates, and the report is now being scrutinized in the Office of the Assistant Secretary of Health. But NIH director Bernadine Healy, speaking to a gathering of science writers in Washington, D.C., said the report doesn't really address the "big questions" that have been raised about Gallo's early work with HIV. To remedy this, she suggests holding an "administrative meeting in which all of those questions are discussed in an open forum."

The questions aren't exactly nit-picking either: "Was this virus somehow stolen by the Gallo laboratory? Was credit stolen? Did the Gallo laboratory really develop the blood test for AIDS—did they really save the blood supply? Did they give appropriate credit for those cell lines [used to grow the virus in the laboratory], and were they generous with those cell lines?" Healy asked. "These are the questions that the American public wants to know, and I believe that we have an obligation, one way or another, to make sure that the answers to at least those questions are answered."

Lincoln's hair.

Taking Honest Abe's DNA Fingerprint

Did lanky Abraham Lincoln suffer from Marfan's syndrome, a genetic disorder affecting connective tissue? We won't know for at least 2 to 3 years, because a scientific panel convened by the National Museum of Health and Medicine in Washington, D.C. advised last week to delay a controversial strategy to search the few remaining bits of Lincoln's blood, bones, and hair for the defective gene that causes Marfan's.

Marfan's syndrome, which afflicts about 40,000 Americans, occurs when a gene on chromosome 15 produces an altered version of fibrillin, a major protein in connective tissue. This leads to elongated limbs and a weak aorta that can rupture suddenly.

"We need to know more about the gene before proceeding" to a full investigation of Lincoln's DNA, says panel member Phillip Reilly of the Eunice Kennedy Shriver Center for Mental Retardation in Boston. Researchers believe that the major defect underlying Marfan's is hiding in the 30% of the gene yet to be cloned, says Clair Francomano, a Marfan's expert at Johns Hopkins.

The panel recommended that scientists begin with a more limited research strategy: construct a DNA fingerprint of mitochondrial genes taken from the 16th president's hair. Scientists could then use the DNA fingerprint to authenticate several pieces of bloodied Lincoln artifacts scattered throughout the world.