

nutrition, and in this instance, the judge said, the academy was essentially acting as an arm of the government. In other words, Herbert had been wasting his time in district court and should go instead to the U.S. Court of Claims, where complaints against the government are filed.

Herbert calls this argument, first advanced by the academy's lawyers, a "devil-made-me-do-it defense." He has already filed a notice of appeal. As for the NAS, spokesman Stephen Push says: "Our position is that the academy is, at the very least, a co-owner of the copyright in the 1985 draft report [on nutrition]." If Herbert persists, the academy may yet have a chance to explain this theory in court.

Lost Fossil of the Oort Cloud?

The icy planet Pluto, loitering at the outskirts of the solar system, doesn't fit in with either the rocky inner planets or the gassy outer ones. "Why would this thing the size of Texas form out past all those gas giants?" asks astronomer Alan Stern of the University of Colorado. And why, he asks, does it spin on its side—more like a chicken on a spit than a planet—and have a moon, Charon, almost as large as the planet itself?

Stern explains these oddities by arguing that Pluto may not be so unusual after all. The planet and its moon may be relics of a swarm of proto-comets—two stragglers that got stuck in an odd place.

Stern bases his idea, which he described at a recent meeting of the American Astronomical Society, on computer simulations and speculation. He reasons that the early solar system might have included many Pluto-like icy bodies. Most of them got scattered far beyond Pluto's orbit, to the fringes of the solar system. There they ended up in the Oort cloud—a gathering of the icy snowballs that form the nuclei of comets.

Why didn't Pluto fly out into the Oort cloud too? The planet

and its moon got trapped in their unusual position, says Stern, when they fell into a gravitational resonance with Neptune, where they were poised between being pulled into their neighbor and being flung out of the solar system.

Stern compares Pluto to an ancient beast caught in a tar pit: It's the one specimen that got caught, but that's no reason to think it's one of a kind.

Muddled Signals on Biotech

In mid-May, a White House committee sent tremors through both the Environmental Protection Agency (EPA) and the biotechnology industry with a draft of a new set of guidelines for regulating the release of transgenic organisms. Both government and industry officials fear the new guidelines reflect a mid-stream shift in the White House position on biotech—a shift that could complicate and delay EPA efforts to get regulations off the ground.

The document, titled "The Scope of Federal Oversight to Regulation of Biotechnology: Planned Introductions of Organisms into the Environment," appears on stationery from the White House Office of Science and Technology Policy. But EPA and industry officials say they believe that the White House Council on Competitiveness, headed by Vice President Dan

Quayle, played a major role in the document. It instructs agencies not to regulate genetically engineered organisms unless there is "an unreasonable risk"—never defined in the draft.

EPA official Elizabeth Milewski is worried because the vaguely worded draft differs from an earlier—and somewhat more specific—document released last July, which she and her colleagues have been using for almost a year to guide regulations. "What does this mean to us?" she asks. "Do we have to go back to the drawing board?"

Richard Godown of the Industrial Biotechnology Association in Washington, D.C., worries that the new guidelines could delay the long-awaited regulations that must be issued before companies can start marketing products. Godown stresses the need for clear guidelines to help the regulating agencies—the EPA, the Food and Drug Administration, and the Department of Agriculture—come up with coherent, harmonious regulations.

White House officials say not to worry—the paper is just an early draft. But Milewski and Godown both fear that even with a lot of fixes, the document could leave regulators up in the air.

On the Paper Trail

When Helmut Abt of Kitt Peak National Observatory isn't observing stars, he says, he oc-

asionally observes scientists and their publishing habits. His own specialty, astronomy, has a distinctive publishing style, he told attendees at the May meeting of the American Astronomical Society in Seattle.

Abt attributes many of the differences to the fact that astronomy, unlike most other sciences, is a largely observational pursuit, devoid of experiment. Because those observations are made at a handful of sites around the world, astronomers publish an unusual proportion of papers jointly authored with colleagues from foreign countries. About 26% of astronomy papers are international collaborations, compared to about 12% of papers in biology and physics.

Astronomers also tend to publish longer papers than other scientists, perhaps because the scope and conclusions of astronomical observations can take longer to explain than the results of a clear-cut experiment. Another reason for the length of astronomy papers, Abt thinks, is that astronomers rarely subdivide large projects into many small papers.

Physicists, he says, are more likely to create multiple papers from a single project, sometimes calling the divisions "least publishable units." "In physics there are many people for each good idea," Abt says. "In astronomy, any researcher can get on one of about ten good projects."

Would any physicists care to do their own study?

Hot times in the LMC. Earthbound astronomers have long had difficulty seeing hot, energetic stars in the central region of the Large Magellanic Cloud (LMC), a nearby galaxy dominated by clusters of older red giants and supergiants that tend to outshine nearby younger stars. But when researchers pointed the Ultraviolet Imaging Telescope (UIT)—lofted into orbit last December aboard the Astro-1 shuttle mission—at the 30 Doradus cluster (right), they found hundreds of the hotter stars radiating furiously in the ultraviolet. Many of them are nearly 40 times brighter there than at visible wavelengths, says NASA astronomer and principal investigator Ted Stecher. By pinning down the locations of these stars, Stecher's team has laid the groundwork for future studies by the Hubble Space Telescope, the UIT during the next Astro flight (Science, 31 May, p. 1249), and two other space-based ultraviolet instruments.

