

DNArt

If a steady stream of news about cloning and genetic engineering doesn't already have the public feeling jittery, a new art exhibit opening tomorrow in Seattle, Washington, should help push viewers out of their comfort zone. Called Gene-sis, it features some 50 artworks inspired by progress in human genetics and the completion of the human genome project.

But some of the displays were vetoed by a panel of biosafety reviewers at the University of Washington, where the show is installed. One was a performance art piece that would have fed "sacramental" beer and wafers spiked with human DNA to audience members, which was nixed because human DNA is not an FDA-approved substance, says curator Robin Held. Another was



"Leopard King," painting in Gene-sis inspired by transgenics and chimeras.

part of an "interactive" performance that would have allowed audience members to take home

vials of transgenic bacteria that they helped to create. That performance will still have audience members spinning a "roulette" wheel, which, if they hit the jackpot, will release a sample of transgenic *Escherichia coli* at the site. (Risks from such a release are minimal, the panelists concluded, because the bacteria are found in the digestive tracts of humans and die upon exposure to air.)

Fusing art and science can be a messy business, says artist Paul Vanouse, who is presenting a piece depicting a race between snippets of DNA through an agar gel: "When you start getting into wet biology, it's crazy how much more difficult it is to work with than any other art form."

e-Grants: e-as-y or e-lusive?

When it comes to electronic grants submission, there's the National Science Foundation (NSF)—and then there's the rest of the federal government.

This year NSF declared victory in processing all research proposals through FastLane, its electronic portal—from submission through an investigator's final report. But the rest of the government is still bogged down in the 20th century. Only last month did the Bush Administration unveil a new "e-government strategy" that includes the modest goal of drafting by fall government-wide standards for accepting grant applications over the Internet. And that's only the first step in full-service e-grants management. The National Institutes of Health (NIH) is still by and large managing grants the old-fashioned way. It hopes by this summer to begin registering institutions so that faculty members and administrators can at least check online the status of their proposals, with no firm deadline for the rest of the pieces to fall into place. "NIH is bigger and more complex [than NSF]," notes Jerry Stuck, on loan from NSF to NIH's electronic research administration project.

Charles Havekost of the Department of Health and Human Services, who's directing the government-wide e-grants project, says that October 2003 is the target for a "single unified system for all agencies" to accept applications. Such a system would greatly reduce the paperwork for applicants, who now must complete a different form for each agency.

Why have e-grants become the norm at NSF but nowhere else? It has a corporate culture that encourages innovation, notes former NSF director Neal Lane. Also, he says, "we were lucky enough to find some guinea pigs willing to put up with a lot of pain and suffering."

Fauci Honored

AIDS researcher and, lately, bioterrorism chief Anthony Fauci has just accrued another, rewarding honor. He has been chosen as the second recipient of the latest aspiring Nobel-style prize: the Albany Medical Center Prize in Medicine and Biomedical Research, worth

\$500,000. He was cited for his "seminal" research on immune disorders as well as his public service. Fauci, 61, has been director of the National Institute of Allergy and Infectious Diseases since 1984. He will be honored at a 17 April ceremony in Troy, New York.



Fauci

Spring's arrival means that toads in many parts of the world have begun their annual trip to breeding grounds, often crossing busy roads en route. Those traverses, it turns out, can be even more dangerous to a toad's health than has been supposed, says Dietrich Hummel, a professor of aerodynamics at the University of Braunschweig, Germany.

Using data from wind-tunnel tests of cars and vans, Hummel has demonstrated that even if jaywalking amphibians escape being squashed by a tire, they can be killed by sudden pressure changes produced by a moving vehicle. A rolling car creates a wave of high pressure in front of it that can do a toad in, he says. As the car approaches, the high-pressure system hits the toad like a blow, which may explain why pavement-pounding herpetologists often find dead toads whose inner organs have been forced out through their mouths, Hummel suggests in the December issue of *Natur und Landschaft*. Low-riding sports cars may be worse offenders, he speculates, because very low pressure systems are created under the car that may cause toads to burst.

Birgit Rödder, a conservation biologist at the German Society for Herpetology, says pressure shock is a real risk to all slow-moving amphibians. But Hummel says there may be an answer to the problem: Go slow. His data suggest that amphibians are safe from cars traveling at speeds below 30 km/h.



Toad with innards coming out.

Spring Road Peril: Toad Blowout