

# RANDOM SAMPLES

edited by JOCELYN KAISER

## New Head for French Biomedical Agency

France's 2000-researcher-strong biomedical research agency has a new chief. On 24 July, Claude Griscelli, 60, was tapped to be director general of the Institut National de la Santé et de la Recherche Médicale (INSERM), which has a yearly budget of \$550 million. Griscelli, a well-known pediatric immunologist, replaces Philippe Lazar, 60, who had held the post for more than 14 years.

The government gave no explanation for Lazar's departure. He is returning to research in human reproduction at INSERM.

Many French scientists were surprised that he hung onto the job for so long, lasting through socialist and conservative governments in a highly political post. The explanation, says one prominent French researcher, "is that he has done a good job." During Lazar's tenure, INSERM played a leading role in AIDS research, and, recently, in studying the possible transmission of "mad cow disease" to humans. The agency has also greatly expanded its relations with industry, fulfilling a ma-



Griscelli

jor government priority.

On the other hand, the researcher says, Lazar's reluctance to trim INSERM's research activities during the budget crisis now afflicting all French science likely played a key role in the decision to replace him: "They know that he would never agree to decrease the number of labs."

Griscelli is expected to take a more pragmatic approach. "We must fight for the [research] budget," Griscelli told *Science*. "But during this difficult period, we must also try to adapt by optimizing the means we have available."

## Exoplanet Pics by 2000?

Actual pictures of planets orbiting sunlike stars—the first shots ever taken—could be snapped within 3 years for a relatively cheap \$25 million, says Richard Terrile, a planetary astronomer at NASA's Jet Propulsion Laboratory (JPL). Terrile has hatched a plan to use a balloon-borne telescope to image the growing number of "exoplanets" discovered since last year (*Science*, 26 July, p. 429). But NASA seems to be leaning toward a more costly idea.

Terrile says his High-Altitude Balloon Circumstellar Imaging Telescope (HABCIT) is "a good first step" toward NASA's official plan for imaging exoplanets. The Planet Finder, a large, expensive (\$1 billion to \$2 billion) array of space telescopes called an infrared interferometer, is to start capturing images by the year 2015 as part of NASA's Origins program. But Terrile says a 1.5-meter telescope with a low-scattering mirror, an efficient coronagraph to block starlight, and a 3-week balloon flight in the upper atmosphere is all you need to image Jupiter-sized planets around the 70 nearest stars. HABCIT wouldn't provide the spectrographic data that Planet Finder could, but it wouldn't take 20 years, either, says Terrile, who described the plan in July at the Fifth International Bioastronomy Conference in Capri, Italy.

His idea, however, was given short shrift by a NASA team that reviewed proposals for exploring exoplanets in January. One NASA scientist says the decision wasn't based on technical merit, and some research groups had a stake in the interferometry project. But JPL's Charles Elachi, the team's chair, says HABCIT "was limited in its capacity."

HABCIT may still have a chance. Michael Mumma of NASA's Goddard Space Flight Center, who's on the Origins advisory panel, says he was impressed by Terrile's plan in Capri, and adds "I'll probably bring it up" when the panel meets this fall.

## Bioethics Panel

The White House has appointed a new bioethics committee, a group of 15 geneticists, ethicists, and others who will advise the government about ethical issues in human experimentation.

Such panels can be important: Recommendations made by two earlier panels helped shape regulations for research with human fetuses and the current definition of brain death, for instance. But the most recent federal bioethics panel, appointed in 1985, came up empty in terms of guidelines

because it became mired in a debate—involving Congress—over abortion and embryo research.

The National Bioethics Advisory Commission, named on 19 July, may not go near abortion for a while. Its charter says its first priority should be the rights of human research subjects and the use of genetic information. Chair Harold Shapiro, president of Princeton University, says the group will tackle less controversial topics—particularly informed consent for research subjects and genetic privacy—before taking up

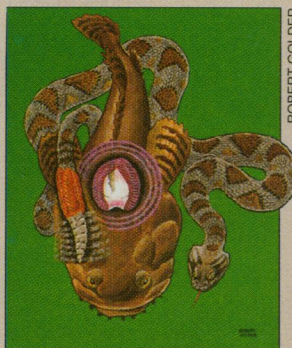
"very difficult, very contentious issues" such as embryo research or gene patenting. Robert Cook-Deegan of the National Research Council agrees that if this committee steers clear of election-year politics, it has a good chance of success.

Other panelists include University of Virginia bioethicist James Childress; Alexander Capron, a professor of law and medicine at the University of Southern California; and Stanford University School of Medicine geneticist David Cox.

## Muscle Behind the Twitchiest Fish

The fastest muscle among vertebrates isn't used for fleeing predators or capturing food, but for sex—the courtship part, that is. The toadfish's swim-bladder muscle contracts and relaxes 200 times per second (hertz) as it makes its boat whistle-like mating call—compared to 0.5 to 5.0 hertz for the fish's locomotory muscles. Another famously fast muscle, the western diamondback rattlesnake's shaker, vibrates at just 90 hertz. Now physiologists have uncovered three mechanisms behind the fish's bladder-muscle speed.

Lawrence Rome and Stephen Baylor of the University of Pennsylvania and the Marine Biological Lab in Woods Hole, Massachusetts, and their colleagues report in the 23 July *Proceedings of the National Academy of Sciences (PNAS)* that calcium—which triggers contraction—cycles through



**Sounding off.** Muscles in toadfish swim bladder (center of cross section) and rattlesnake shaker (left) have adaptations for making noise.

techniques such as a special dye to track very fast calcium fluxes—"advances this descriptive thinking to a mechanistic level."

the bladder muscle 50 times faster than in locomotory muscle. They also found that the muscle may have an unusually fast version of a protein, troponin, that binds and releases calcium; and the rate at which myosin crossbridges detach from actin filaments in the muscle is 100 times faster than in locomotory muscle. These mechanisms also appear to operate in the rattlesnake shaker muscle, at warmer temperatures. "This shows the importance of these three steps in muscles designed for high frequencies," Rome says.

Physiologist Jack Rall of Ohio State University Medical Center says that scientists already knew a lot about the structure of fast muscle, but the *PNAS* work—which relies on new