

RANDOM SAMPLES

edited by CONSTANCE HOLDEN

Koprowski Sues Rock Mag

When *Rolling Stone* magazine published an article last year postulating that a largescale polio vaccine experiment in Africa might be the origin of AIDS, many scientists shrugged—they already had seen the speedy collapse of a dozen other startling AIDS-origin theses. But Hilary Koprowski, the researcher who developed the polio vaccine that the article singled out, was outraged. So much so, in fact, that on 16 December he filed a libel suit.

The complaint names *Rolling Stone* publisher Jann Wenner and the author of the piece, free-lance writer Tom Curtis. The suit demands an unspecified amount for "the destruction of [Koprowski's] professional and personal reputation, for mental and emotional suffering, and for...humiliation and embarrassment...." In the article, Curtis details how Koprowski's polio vaccine, which was tested in Africa during the late 1950s, might have been contaminated with the AIDS virus, which was then introduced to humans. Koprowski's suit states that this is a "bogus theory" for which there is "no scientific evidence."

Rolling Stone has not yet responded to the suit. Curtis, when asked to comment, said his article reached no conclusion about the origin of AIDS but simply attempted to investigate a theory. "It's as valid as any theory about the origin of AIDS that has been discussed in scientific journals," he says. "I think it's a terrible precedent if theories are not permitted to be discussed because of their possible consequences."

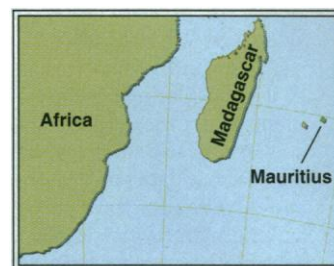
Two months earlier Koprowski, former head of Philadelphia's Wistar Institute and now a professor at the University of Pennsylvania, made similar charges against the Associated Press (AP) wire service in a separate libel suit over AP's version of the *Rolling Stone* story. In that suit (*Science*, 4 December 1992, p. 1567), Koprowski alleged that AP had "blackened and injured" his reputation by characterizing him

as careless and incompetent. In an 18 December answer to the complaint, AP argued that its dispatch was not defamatory and "sets forth no more than scientific speculation and hypotheses being investigated."

Celestial Science in Mauritius

Who says that a tiny developing nation has to team up with researchers from the industrialized West if it wants to host a world-class piece of scientific equipment? Not the government of Mauritius, an island state in the Indian Ocean, which is now the proud joint owner—with India—of a low-frequency radio telescope array unique in the Southern Hemisphere.

The Indo-Mauritian Radio Telescope, a 2 km by 1 km "T"-shaped array of antennas situated at Bras d'Eau in the northeastern part of the island, is the first major basic research collaboration between two developing countries that has eschewed money or technical aid from the industrialized world, claims project leader Chelury Viswapathi Sastry, a radio astronomer at the Institute of Astrophysics in Bangalore. Not that Western observers are surprised at the feat, given India's abundant supply of engineers and astronomers who are well versed in the art of radio telescope construction. But for researchers at the University of Mauritius, the project represents a debut into the world of Big Science.



Mauritian astronomers owe their good fortune to their island's position at a latitude of 20 degrees south, where the center of the Milky Way appears almost directly overhead. Sastry's priority is to make the first detailed low-frequency (151 MHz) observations, looking toward the clouds of ionized hydrogen at the galactic center. Those observations, along with studies of other radio sources such as pulsars and quasars, should begin in a couple of months, once Sastry's team has finished calibrating the array. There's every chance of a rich harvest of results: John Baldwin, who heads a Cambridge University team that operates a similar, Cambridge-based, array in the Northern Hemisphere, says the southern sky is virtually unexplored at low radio frequencies.

Transgenic Escargots

Does the world need a transgenic snail? Or, for that matter, a genetically engineered mosquito or shrimp? Several prominent French institutions think so, and ever since a delegation of French researchers came to Washington last month to drum up collaborations, U.S. researchers have become among the most enthusiastic supporters.

That's because genetically engineered snails—along with mosquitoes and some shellfish—could be the key to stopping diseases that strike hundreds of millions of people worldwide.

Snails, for example, carry the larvae of the parasites that cause schistosomiasis. Mosquitoes, of course, transmit malaria. If researchers can insert genes into the animals to prevent them from serving as parasite hosts, they

Scientific Papers: Top Producers of 1991

Rank	Researcher	Papers	Authors per paper
1.	Thomas E. Starzl, transplant surgery U. Pittsburgh	155	7.8
2.	Yury T. Struchkov, chemistry/crystallography Inst. Organoelemental Compounds, Moscow	83	6.0
3.	K. Ploog, condensed-matter physics Max Planck Institut für Festkörperforschung Stuttgart, Germany	81	5.0
4.	Erik de Clercq, virology Catholic University of Louvain, Belgium	80	6.0
5.	John J. Fung, transplant surgery U. Pittsburgh	72	8.1
6.	Pierre Braquet, immunology/pharmacology Institut Henri Beaufour, Le Plessis Robinson, France	61	5.4
7.	Virgil Percec, organic and polymer chemistry Case Western Reserve University, Cleveland	56	2.7
8.	Allan H. White, physical and inorganic chemistry U. Western Australia, Nedlands	51	4.9
	Stephen J. Pearton, condensed-matter physics AT&T Bell Labs, Murray Hill, New Jersey	51	5.2
9.	Hans Georg von Schnering, chemistry/crystallography Max Planck Institut für Festkörperforschung	50	4.7
	Carlo A. Maggi, pharmacology A. Menarini Pharmaceuticals, Florence, Italy	50	4.8
	Genrikh A. Tolstikov, chemistry/crystallography Inst. Chemistry, Academy of Sciences, Ufa, Russia	50	5.3

Industrious dozen. The Institute for Scientific Information (ISI) has dug into its computer base and come up with the "Paper-a-Week Club"—scientists whose names appeared on at least 50 papers during 1991. University of Pittsburgh transplant surgeon (now retired) Thomas Starzl led the pack, averaging one paper every 2.4 days, many of them with his colleague John Fung (No. 5), with whom last year he designed the controversial experiment in which a baboon liver was transplanted into a man. Starzl's also got staying power—he ranked sixth among the top 20 paper producers in the '80s, by ISI's reckoning. The top producer for the decade, Yury Struchkov, is the runner-up in the 1991 list. How did Starzl rack up his impressive total? He's done a lot of "firsts" in a lot of fields, he says, and is always working with "new drugs, new operations, new concepts." The liver, for example, for which he pioneered transplants in 1963, "is so complex, every time you blink there's another observation."

SOURCE: ISI'S SCIENCE INDICATORS DATABASE, 1991

might one day be able to wipe out the diseases the parasites cause.

Among the U.S. groups that want to get in on the action is the Department of Agriculture (USDA), which is discussing a transgenic insect collaboration with its French counterpart, the INRA. The Biomedical Research Institute in Rockville, Maryland, and Timothy Yoshino of the University of Wisconsin, Madison, school of veterinary medicine are also working up a snail collaboration with the Centre de Biologie et Ecologie Tropicale et Méditerranéenne at the Université de Perpignan. And the Center for Marine Biotechnology in Baltimore, Maryland, is planning a collaboration on transgenic shrimp and crustaceans with IFREMER, the Paris-based center for marine research.

Rather than setting up physical centers for the projects, the U.S. and French teams hope to create "laboratories without walls"—research agreements under which scientists share data and personnel while still based at their home institutions—according to Michele Durand, a science attaché at the French Embassy in Washington. The first such agreements are likely to be on transgenic insects, where the science is furthest along, says Richard Soper of USDA's Agricultural Research Service.

The next step in the collaboration is a meeting in Paris in February to work out intellectual property rights agreements and collaboration details. Eventually, the researchers hope to develop techniques applicable to invertebrates in general—which could lead to such economic gold mines as disease-resistant shrimp, sterile crop pests, and superproductive silkworms.

Taxol Gains Quick FDA Approval

The drug taxol has been the subject of enormous news coverage and much hope over the past 3 years because of the promise it has shown for treating cancer, particularly ovarian cancer. But

Secrets From Tibet's Icy Peaks

An American-Chinese expedition has brought back ice cores from a Tibetan glacier that it claims may cast light on what the earth's climate was like more than 200,000 years ago.



Frozen archive. Wall of Guliya ice cap in the Western Kunlun mountains in Tibet shows stratigraphy.

annual stratigraphy...only in lower latitudes do you have a very strong seasonal cycle" in which visible dust layers form during dry seasons. Thompson can't say how far down they'll be able to discern the layers, but he says new instruments can decipher them to hundredths of a millimeter thick.

From its analysis so far, Thompson's team has detected annual layers covering the past 8000 years. And they say they have found evidence for the latest interglacial age (less dust, larger crystals from warmer weather) at 180 meters down, which would correspond with an age of 100,000 years. Since annual layers thin at an exponential rate the lower you go, says Thompson, the total core probably represents far more than 200,000 years. In fact, Thompson says that because the Guliya cap is frozen to bedrock, "we should have preserved at the base the very first snowfall associated with the formation of the cap"—which occurred about 1 million years ago.

Expedition leader Lonnie Thompson of the Byrd Polar Research Center at Ohio State University says the cores the team brought back have yet to be fully analyzed, a process that will take up to 2 years. But he says that although the longest core the group brought back—308.6 meters—is much shorter than those obtained from drilling sites in Antarctica and Greenland, the Tibetan ice can offer unique information.

That's not only because the thicker ice from polar regions suffers from pressure-induced melting, but also because the ice from lower latitudes (the Tibetan glacier, the Guliya ice cap, is 35 degrees north of the equator) shows "very marked

not many patients were receiving the drug because it was embroiled in a controversy centering on environmentalists' concern for the old-growth forests that have been taxol's main source. Those concerns have now been resolved, and last week the Food and Drug Administration (FDA) approved the drug—in a record 5 months—

for treating ovarian tumors that other therapies fail to cure.

Taxol caught the fancy of the cancer community in 1989, when researchers at Johns Hopkins showed that the drug, so far found only in yew trees, could substantially shrink tumors in about 30% of women whose ovarian cancers resisted other therapies. Later

that year the National Cancer Institute (NCI), which had been developing taxol at North Carolina's Research Triangle Institute after its discovery in the late '60s, teamed up with Bristol-Myers Squibb to speed the drug to market. The firm, however, met opposition from environmentalists. But the fuss has abated thanks to new legislation on governing logging practices as well as Bristol-Myers' efforts to find other sources of taxol.

"The indications for this are strong, so the rapidity of FDA's actions was warranted," says Bruce Chabner, director of NCI's Division of Cancer Treatment. Taxol holds promise for treating other cancers, including breast, head, and neck tumors, he says. And, says an NCI source, the institute plans to present results in May showing that taxol is effective as a primary treatment for ovarian cancer, not just a last resort.

New Accord Between U.S., Russian Academies

The former Soviet Union is plagued by money problems and political disarray, but that isn't stopping their scientific institutes from making agreements with Western counterparts. National Academy of Sciences (NAS) president Frank Press and Yuriy Osipov, president of the Russian Academy of Sciences, have signed an agreement sketching out a framework for cooperation over the next 2 years.

The accord is similar to a previous pact with the defunct Academy of Sciences of the Soviet Union, but it contains fresh provisions, such as a summer exchange program for up to 10 young U.S. and Russian investigators. And a requirement that U.S. and Russian researchers spend equal time on each others' soil will be abolished. The identification of specific research projects falls to a bilateral working group, which is expected to issue a report in April. Then, says an NAS official, the big question will be whether Russia, given its political turbulence, can follow through.