

the disease such as atherosclerosis, gangrene, and blindness.

Two promising strategies have emerged for reducing the threat of complications: transplanting human pancreatic tissue into diabetics and creating artificial beta cells, says Christopher B. Newgard, a biochemist at the University of Texas Southwestern Medical Center. Now Newgard's team has announced progress in the beta route.

Working with a line of pituitary cells that University of California at San Francisco researchers engineered to secrete insulin, but which failed to respond to glucose, Newgard and his colleagues inserted the gene that codes for GLUT-2, a glucose transport protein. The second generation of engineered cells are sensitive to "sub-physiological" levels of glucose, Newgard says, and he published his findings in the 15 January *Proceedings of the National Academy of Sciences*.

One knowledgeable observer, University of Chicago biochemist Graeme Bell, who in 1979 helped clone the human insulin gene, calls the work "potentially very exciting." Newgard too is remaining cautious. "We're not claiming the cell that will save diabetics is here today," says Newgard. He recognizes that two major problems need to be solved before the cells might become therapeutically useful: increasing the cells' responsiveness to glucose and coating the cells with a polymer that protects them from being destroyed by the body's immune system.

Cold Confusion

Cold fusion codiscoverer Martin Fleischmann, who has been trying to breathe new life into his subject with claims of fresh supporting data (*Science*, 13 December 1991, p. 1582), came up with a bit of revisionist history when he gave a speech at MIT shortly after Christmas.

When a skeptical questioner, MIT fusion researcher Ian Hutchinson, asked Fleischmann why he did not seek a chemical

explanation for the cold fusion reaction, he responded that, in fact, "I didn't call it fusion." Fleischmann went on: "The paper [published in the *Journal of Electroanalytical Chemistry*] was supposed to have a question mark. The mark was deleted and we never saw the galley proofs. We never made such an assertion."

MacArthur Fellows Director Resigns

The John D. and Catherine T. MacArthur Foundation Fellows Program, renowned for its gen-



Ken Hope

erous "genius awards," will lose its longtime director when 44-year-old Ken Hope departs this summer. During Hope's 11-year tenure, the MacArthur Fellows Program has awarded 350 5-year, no-strings-attached awards ranging from \$160,000 to \$385,000 to scientists, artists, and public servants.

In a letter to MacArthur award recipients, Hope does not reveal his specific reason for resigning, but writes, "There is little I can do now to improve [the program]." Some sources, though, are hinting that the resignation wasn't entirely Hope's decision.

"It seems the right time to go," Hope told *Science*. He says he plans to write a book on "what makes the most fertile minds tick." Meanwhile, the program has begun its search for a new director, says spokesman Woodward A. Wickham, adding: "The fellows program will continue essentially as it has in the past."

UC to Standardize DOE Contracts

Every 5 years for most of the last half-century, the University of California (UC) and the Department of Energy (DOE) have danced a complicated waltz in order to renegotiate the contract under which the university runs the Lawrence Berkeley, Lawrence Livermore, and Los Alamos national laboratories. Ordinarily, the university leads the dance, since it can threaten to bolt if DOE attempts to impose too many onerous conditions.

This year, though, the negotiations come in the wake of a recent report* by the General Accounting Office (GAO) that recounts problems GAO auditors identified at Livermore, and blames them on "nonstandard" clauses in the existing management contracts. Now the university appears ready to accept a contract that will give DOE

*"DOE Has an Opportunity to Improve Its University of California Contracts," GAO/RCED-92-75, December 1991.

more say in how the university runs the three facilities.

GAO's complaints included the charge that Livermore managers were granting contracts without competitive bids and keeping a large, expensive car and truck fleet that DOE had not approved. Because the contracts for Los Alamos and Lawrence Berkeley are nearly identical to the Livermore contract, the report states, "the potential for abuse also exists at these laboratories."

University of California officials disagree that a standardized contract would have prevented the problems listed by GAO, but say they are moving toward accepting several of the recommended standard clauses anyway. Why the change? "There's quite a different mood in Congress and DOE regarding contractor accountability," says Tommy Ambrose, a member of the university's negotiating team. Accepting some standard clauses "would make life easier for both sides."

The World's Most Prolific Scientists

| Name, field, nation | No. of papers, 1981-90 | Days Between Papers |
|---|------------------------|---------------------|
| 1. Yuri T. Struchkov, chemistry, USSR | 948 | 3.9 |
| 2. Stephen R. Bloom, gastroenterology, UK | 773 | 4.7 |
| 3. Mikhail G. Voronkov, chemistry, USSR | 711 | 5.1 |
| 4. Aleksandr M. Prokhorov, physics, USSR | 589 | 6.2 |
| 5. Ferdinand Bohlmann, chemistry, Germany | 572 | 6.4 |
| 6. Thomas E. Starzl, surgery, USA | 503 | 7.3 |
| 7. Frank A. Cotton, chemistry, USA | 451 | 8.1 |
| 8. Julia M. Polak, histochemistry, UK | 436 | 8.4 |
| 9. Robert C. Gallo, cell biology, USA | 428 | 8.5 |
| 10. Genrikh A. Tolstikov, chemistry, USSR | 427 | 8.6 |
| 11. John C. Huffman, crystallography, USA | 403 | 9.1 |
| 12. Alan R. Katritzky, chemistry, USA | 403 | 9.1 |
| 13. David J. Greenblatt, pharmacology, USA | 383 | 9.5 |
| 14. John S. Najarian, surgery, USA | 345 | 10.6 |
| 15. Willy Jean Malaisse, endocrinology, Belgium | 344 | 10.6 |
| 16. Charles D. Marsden, neurology, UK | 339 | 10.8 |
| 17. Anthony S. Fauci, immunology, USA | 338 | 10.8 |
| 18. E. Donnall Thomas, oncology, USA | 328 | 11.1 |
| 19. Noboru Yanaihara, biochemistry, Japan | 322 | 11.3 |
| 20. Timothy J. Peters, biochemistry, UK | 322 | 11.3 |

Source: *Science Watch*, Institute for Scientific Information

According to *Science Watch*, a publication produced by the Institute for Scientific Information (ISI), these 20 scientists are the most prolific of the past decade. Of the 20, nine are American, four are (formerly) Soviet, four are British, one is German, one is Belgian, and one is Japanese. These figures are based upon a study of the papers of each scientist listed in ISI's article databases.