RANDOM SAMPLES

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Black and White View of Veins

African-Americans suffer higher rates of hypertension, heart disease, and stroke than do white Americans. Now pharmacologist Randall Tackett of the University of Georgia and his colleagues have come up with direct evidence that African-Americans may have less flexible veins, a finding that could help explain the disparity and lead to more effective therapies for African-Americans.

The new findings support "the suspicions that we've had" about black-white differences in blood-vessel reactivity, says Elijah Saunders, a cardiologist at the University of Maryland Medical School. Other research has revealed that in response to mental and physical stress, African-Americans show greater blood pressure increases than do whites; reduced flexibility would narrow the vessels, which increases blood pressure.

Tackett described the new study at the Ninth International Interdisciplinary Conference on Hypertension in Blacks held last month in Cleveland. His research team collected pieces of saphenous vein—a leg vein—that were being used for coronary bypass operations in 60 whites and 22 African-Americans and examined the tissues' ability to contract and dilate in response to various drugs. Although there were no differences in the blood vessels' ability to constrict, the saphenous veins of African-Americans "demonstrated significant impairment in their ability to relax" when compared to the veins from whites, according to the researchers.

The new findings have important implications for treatment, says Tackett, and suggest "we need to target therapy to correcting [the] deficit" in the ability of blood vessels to relax. The findings may also explain why drugs like beta blockers, which regularize heart rate but do not relax blood vessels, are not very effective anti-hypertension drugs for African-Americans.

AP/WIDE WORLD PHOTO

Toast of the town. Enrico Fermi may be a better beer salesman than Al Capone. Discriminating Chicagoans favored the physicist over the gangster.

Commercializing Science

He may be the last person you'd expect to see hawking ale, but that truly is renowned physicist Enrico Fermi up on a beer billboard in Chicago. Since June, the makers of Chicago's Old Style beer have run advertisements featuring the deceased Nobel Prize winner at the controls of the world's first nuclear reactor, which was built under the west stands of the University of Chicago's football stadium. Fermi's high profile in Chicago—and elsewhere—dates back to 1942, when he used the reactor to ignite the first self-sustaining nuclear reaction, ushering in the modern era of nuclear power and nuclear bombs.

Even that auspicious achievement, however, didn't make Fermi the top choice to sell the century-old brew. That honor went to gangster Al Capone. But when the Capone billboards hit Chicago in early June they raised an outcry from the local Italian-American community, the mayor's office, and the *Chicago Sun-Times*. As *Sun-Times* columnist Raymond R. Coffey pointed out, Chicago, a sensitive town, would prefer that Capone's face not be the one representing it to the world. The day after Coffey's *Sun-Times* broadside, Capone was pulled down, soon to be replaced by Fermi.

Chicago might be happy with the about-face, but local physicists at the Fermi National Accelerator Laboratory have mixed reactions to the sight of their eponym boosting brews. Some were delighted that a physicist—dead or alive—could compete with athletes (and mobsters) in the commercial endorsement market. On the other hand, said one Fermilab physicist, "you would think if they were going to do a Fermi advertisement, they would at least do a good chianti."

High-Energy Physics vs. Classical Mechanics

These days, nothing seems to go quite as planned when it comes to the United States and high-energy physics—including visits by the emperor and empress of Japan to the Stanford Linear Accelerator Center (SLAC).

On 22 June, SLAC director Burton Richter planned to treat Emperor Akihito and Empress Michiko to a tour of the collider hall, where the royal couple could feast their eyes on the 4000-ton, 5-story-high particle detector. "We were going to let [them] gaze up at this massive detector in its awe and grandeur," says Stanford physicist Michael Riordan. [The awe-inspiring 14-mile tunnel dug in Waxahachie, Texas, for the now-defunct Superconducting Super Collider (SSC) was not on the royal itinerary.] This time, however, it was low technology, not Congress, that upset the physicists' plans. "The elevator got stuck, and we couldn't take [them] down," says Riordan.

But the physicists did have success on one related front. Richter and Hirotaka Sugawara, the director of the KEK high-energy physics lab in Tsukuba, Japan, made full use of the press attending the royal visit to talk up a project that both see as the future of their labs. On the afternoon before the royal tour, the physicists gave joint interviews stressing their eagerness to collaborate on a large linear electron-positron collider that could be six times longer than the 2-mile-long SLAC collider. Sugawara explained that the Japanese had been planning to do the project themselves since 1986—at which time, the SSC was being planned as an all-American enterprise. But with the demise of the SSC, said Sugawara and Richter, they both believe the next linear collider will have to be an international project—ideally, a "Pacific rim collaboration."

Changing of The Astro-Guard

One of the world's oldest scientific positions will change hands at the end of this year when Arnold Wolfendale, 67, of Durham University, retires as Britain's Astronomer Royal. Sir Martin Rees, 52, former director of Cambridge University's Institute of Astronomy, will take over on 2 January.

"It's a quaint title that they are trying to keep alive," says the newly-appointed Rees. Such nonchalance is understandable. The post, created in 1675, for 297 years carried with it the directorship of the Royal Greenwich Observatory. But in 1972 the two positions were separated, and Astronomer Royal is now a purely ceremonial post.