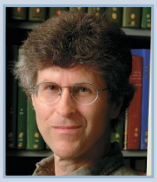
p1336 Blood simple: Dwindling reserves appear set to create a hemo-global crisis.



p1339 Blue-chip biochemist: Patrick Brown sees the world through rose-colored glasses.

p1340 Conflict-of-interest conundrum: How much money does it take to skew a researcher's bias?

New NIH project could be road to ruin for basic research

The ambitious US National Institutes of Health (NIH) *Roadmap for Medical Research* arrived in October to glowing press reports and enthusiastic endorsements from top scientists. But some researchers are worried that the plan will give the NIH director authority to set a top-down agenda at the expense of bench scientists.

The plan is designed to transform NIH research, says director Elias Zerhouni. Developed during Zerhouni's 17-month tenure, the program will create a $2.1 billion fund to pay for a long list of interdisciplinary projects focusing on clinical research, structural biology and informatics (*Nature* **425**, 438; 2003).

"The historic frustration that people have had is that the NIH is not responding fast enough to emerging areas or new trends in science," Zerhouni said. "This is designed to do that."

The plan drew praise from groups such as the American Association of Medical Colleges, and from noted scientists such as Harold Varmus, Zerhouni's predecessor at the NIH.

The road map is long overdue, says Edison Liu, a researcher who led the US National Cancer Institute's Division of Clinical Sciences from 1996 to 2001.

"It breaks from the disease- or systems-oriented approach...and concentrates on the entire research machinery," says Liu, who now heads the Genome Institute of Singapore, that country's flagship program in genetic research. "I think [the road map] is visionary."

Disease-oriented research is one of the NIH's strengths, says Murray Goldstein, who served as director of the National Institute of Neurological Disorders and Stroke from 1982 to 1993. But Goldstein, now director of the United Cerebral Palsy Research and Educational Foundation in Washington, D.C., says he is worried about who will lose out at the NIH with a shift in funds and authority. Each institute is expected to contribute a percentage of its budget to fund the plan.

"The investigator-initiated research project has been and continues to be the strength of American biomedical science," says Goldstein. "Will this be cut back to provide the resources needed to accomplish these broader cross-cutting objectives?"

The plan comes at a time of transition for the NIH. After five years of funding increases—doubling the agency's budget to $27 billion—scientists are bracing for a return to the lean years. An Institute of Medicine report on the future of the NIH, released this summer, called for many of the initiatives in Zerhouni's plan, including more authority for the director (*Nat. Med.* **9**, 1098; 2003). But it also warned that major organizational changes—such as combining institutes—might promote efficiency over good science.

Some of the push for combining institutes comes from Congress, which has its own agenda for the NIH. Zerhouni put his road map on the table when he appeared before a joint Senate/House committee two days after announcing the program. Rather than focus on the initiative, the lawmakers questioned Zerhouni about budget accountability, the ethics of research into human sexuality and stem cells, and NIH personnel issues.

If the roadmap is to succeed, it will have to survive the politics of the NIH, an organization seen by many as "a collection of fiefdoms" pandering to special interests, and controlled by an academic elite, says Liu in Singapore. "My concern is whether the special interests will derail this unique effort."

Tinker Ready, Boston

Taiwanese scientists find genetic link to SARS

A genetic variant in the immune system might render some groups of people more susceptible to severe acute respiratory syndrome (SARS) infection, Taiwanese researchers report.

Marie Lin, a hematologist at the Mackay Memorial Hospital in Taipei, says subtypes of human leukocyte antigen (HLA) class I are associated with severe SARS infection

Lin and her team compared blood samples from 65 suspected SARS patients (including 37 probable cases) with samples from 101 high-risk, uninfected health-care workers. The researchers used 190 healthy, unrelated Taiwanese individuals as controls.

People with the *HLA-B*4601* allele are most likely to fall victim to SARS, the researchers reported (*BMC Med. Genet.* **4**; 2003). Of the 37 probable cases, 15 had *HLA-B*4601*, and 5 severe cases had a significantly higher frequency of the allele when compared with controls. The HLA system is often used to search for the origins of infectious diseases and autoimmune disorders.

The *HLA-B*4601* allele is found in about 10% of the Taiwanese population and among other southern Asians, including people from China's southern coast, Hong Kong, Singapore and part of Vietnam—areas hit hard by SARS. But it is seldom seen in the indigenous people of Taiwan—about 1.5% of the total Taiwanese population—in Caucasians or in people of African origin.

Richard Chung/Reuters

Waiting to exhale: People in South China and Taiwan may be genetically susceptible to SARS.

The results explain why south China was the epicenter of the SARS epidemic, the researchers suggest. The finding tallies with the scenario in Taiwan: no probable SARS cases were reported among indigenous people. It might also explain why the disease left Caucasian people largely unaffected—except in Toronto, which has a high Asian population.

Lin suggests screening health-care workers for *HLA-B*4601* to prevent the spread of SARS. But other scientists are cautious about extrapolating results from a small study.

"It's too [early] to talk about mass screening now," says Yuh-Shan Jou, a researcher in Taiwan's National Health Research Institutes. "The lack of data from other areas hit by SARS makes Lin's scientific evidence comparatively weak."

Yu-Tzu Chiu, Taipei