

Small boost proposed for NIH budget

The US Senate appropriations committee in July approved a \$1.05 billion increase to the 2006 budget of the National Institutes of Health (NIH). The raise, which is \$905 million more than the amount proposed by President Bush, would bring the total NIH budget to \$29.4 billion, 3.7% more than the 2005 budget.

Research advocacy groups applauded the increase but are concerned the bill won't pass. The US House of Representatives in June approved a budget increase of 0.5%, similar to the President's request. Congress will need to reconcile the two bills later this year.

The House health subcommittee also proposed a bill that would strengthen the NIH director's ability to move money among the various research institutes. The bill aims to address concerns that the NIH's diffuse structure leads to redundant research at different institutes. The bill also includes a possible 5% cap on NIH's annual budget between 2007 and 2009, which has drawn concern from research lobbyists.

Meanwhile, the NIH's National Institute of Allergy and Infectious Diseases in July announced that its new Center for HIV/AIDS Vaccine Immunology, a consortium to develop and test AIDS vaccines (*Nat. Med.* 11, 587–588; 2005), would be led by Barton Haynes of Duke University. The virtual center is slated to receive \$15 million in its first year, and up to \$300 million over the following six years.

Over objections, journal publishes bioterror paper

Overruling objections from government health officials, the *Proceedings of the National Academy of Sciences* published a paper in its 12 July issue detailing how terrorists could poison the US milk supply.

In an accompanying editorial, Bruce Alberts, president of the US National Academy of Sciences, advocated publishing analysis of potential terror threats—provided the analysis uses information that is already in the public domain—because such reports drive prevention efforts.

The US Department of Health and Human Services had requested that the research, originally scheduled for publication in May, not be released, saying the paper could act as a roadmap for terrorists. After extensive review and discussions with government representatives, the academy decided that the information in the paper was already available online and published it without major changes. The research highlighted vulnerabilities in the US dairy system and estimated that more than 500,000 people could be poisoned, half of those lethally, if a milk truck were to be laced with 10 grams of botulinum toxin.

Alberts suggested the paper be used as a case study for the newly formed National Science Advisory Board for Biosecurity (*Nat. Med.* 10, 319; 2004), which was created to set guidelines for research that has potential negative uses.

WHO's AIDS drug goal unlikely to be met

Access to AIDS drugs in the world's poorest countries is far short of the World Health Organization (WHO)'s goal to treat 3 million people by 2005, according to a report released in June.

Since June 2004, the number of people on antiretroviral therapy has doubled to 1 million worldwide and tripled in sub-Saharan Africa and Asia, the two regions hit hardest by HIV/AIDS. Despite this progress, the report estimates that only 11% of those in sub-Saharan Africa and 14% of those in Asia have access to AIDS drugs. In India, which has more than 5 million cases of HIV/AIDS, the drugs are available to fewer than 10% of those who need them.

The WHO says a shortage of trained health workers, insufficient technical support and lack of reliable funds from donor countries are making it difficult to meet the '3 by 5' goal set in 2003. Donors have so far delivered only \$9 billion of the \$27 billion they committed to HIV/AIDS treatment and prevention efforts over the next three years.

Follow-up studies debunk early medical research

Nearly one-third of prominent medical studies fail to hold up to further research, according to a report released in July.

The study analyzed 45 of the most commonly cited research articles published in 20 journals between 1990 and 2003, including all clinical research in the *Journal of the American Medical Association*, *The New England Journal of Medicine* and *Lancet*. Researchers found that subsequent research contradicted seven of the studies and tempered the conclusions of seven others. The follow-up studies were usually larger or better designed, the authors note.

For example, studies refuted earlier claims that vitamin E prevents heart attacks, that vitamin A cuts breast cancer risk or that nitric oxide improves survival in people with respiratory failure. The researchers reported that nonrandomized trials were most likely to be altered by further research. In their analysis, the researchers found that 5 of 6 nonrandomized trials, compared with 9 of 39 randomized trials, fell into this category.

News briefs written by Emily Singer

Deadly parasites share genetic core

Scientists have unlocked the genetic secrets of three parasites that kill millions in the world's poorest countries. Researchers say the newly sequenced genomes will be crucial in developing vaccines for the deadly infections.

The parasite *Trypanosoma brucei* causes African sleeping sickness and infects 300,000–500,000 people a year in Africa. Chagas disease, spread through the infected feces of an insect—sometimes called the 'kissing bug' (pictured right) for its habit of biting near a person's mouth—is caused by *T. cruzi*. The disease, which kills 50,000 people per year and infects an estimated 18 million in Latin America, can lead to heart failure. *Leishmania major* is the culprit behind leishmaniasis, characterized by disfiguring skin lesions, and affects as many as 300 million people in 88 countries. A large portion of the genome sequencing was conducted in Africa and South America, regions hit hardest by these diseases.

Although the three parasites cause different diseases, they share surprisingly similar genes. Scientists say this common genetic core could provide targets for new drugs to fight all three infections (*Science* 309, 404–442; 2005). A comparative analysis of the genomes sheds light on how they infect people and trigger disease, and why they are carried by different insects. For example, *T. cruzi* has a novel set of 1,300 genes that may allow the parasite to evade the human immune system.



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