recover from the setback. If OHRP-ordered clinical reviews at other sites are any guide, it will cost Hopkins well over $1 million and months of labor to get its clinical studies fully on track. –ELIOT MARSHALL

HOUSTON FLOOD

Research Toll Is Heavy In Time and Money

HOUSTON—The final group of researchers returned last week to labs at the Texas Medical Center, nearly 6 weeks after Tropical Storm Allison temporarily turned the campus into a lake (*Science*, 22 June, p. 2226). But no one was celebrating. Widespread power outages had destroyed years of work, and the basement laboratories of the University of Texas Health Science Center (UT-HSC) and the Baylor College of Medicine (BCM)—once home to over 35,000 animals that drowned—were declared a total loss.

"This is a real, honest-to-God disaster," says Jim Patrick, BCM's vice president of research. Several large pieces of equipment, including two multimillion-dollar electron microscopes, were completely destroyed by water and floating debris, and Baylor officials are still tallying the damage. The total cost to UT-HSC is expected to be about $205 million, including a ruined $50 million cyclotron used for positron emission tomography, says George Stancel, the dean of the graduate school of biomedical science at UT Houston. With insurance expected to pay for only a fraction of the replacement value, both schools are seeking state and federal funds for the restoration work.

Researchers are more concerned about the lost time. Morteza Naghavi saw almost 4 years of work float away when the flood drowned all his research animals. "I lost everything: 800 mice and 35 rabbits," says Naghavi, a cardiology researcher at UT-HSC, about animals bred to be apoE deficient, which predisposes them to heart attacks. It was even worse for Lance Gould, leader of the team that built the ruined cyclotron. "It took 20 years to build that machine," he says.

Allison's destructive clouds have a faint silver lining, however. Gould's team hopes to build a better cyclotron than the one they had, for less money because of improvements in technology, with support from private donors. "The storm was an unmitigated disaster," says Gould. "But we are turning it creatively into an advantage."

The researchers back on the job have shifted to higher terrain, either elsewhere in the hospital or in nearby temporary facilities. And neither institution plans to move them back underground. "That is history," says Patrick. But their upward mobility has created a space crunch. The two hospitals must each relocate employees in nonessential services, now occupying thousands of square meters, before they can resettle the labs in permanent homes. –MARK SINCELL

Mark Sincell writes from Houston.

Damaged goods. Floodwaters destroyed equipment in the basement of the Texas Medical Center.

ANIMAL BEHAVIOR

New Data Reveal the Sisterhood of Lions

In any pride of lions, a "lion king" typically sires most of the cubs. But whereas male pridemates have a strict pecking order, a new study reveals that there's really no such thing as a "lion queen." On page 690, behavioral ecologist Craig Packer and colleagues Anne Pusey and Lynn Eberly of the University of Minnesota, Twin Cities, report that female lions all bear young with about equal success—an unusual behavior for social mammals.

Packer and his colleagues have been observing lions in Tanzania since the 1960s. A decade ago, their DNA analysis showed a big "reproductive skew" among males, with most of the offspring belonging to one of two dominant males. In this study, they analyzed 36 years' worth of birth records in which they kept track of every cub reaching its first birthday in some 31 prides and identified its mother. "That they looked across a large number of groups over a long time makes this a powerful [study]," notes Jeffrey French, an animal behaviorist at the University of Nebraska, Omaha.

The number of young varied from pride to pride: In some, the females had just one or two cubs a year, whereas in others, they tended to have three or four and occasionally more. But within a pride, Packer says, "there was no hint [that] any females were systematically getting more reproduction than others." Indeed, the more mothers in a pride, the likelier the cubs were to survive.

Such behavior is atypical for social mammals, in which it is common for one female to hold the reproductive reins and actively sabotage the reproductive efforts of others. As a result, subordinate females stop breeding and instead help a more dominant sister or mother with her young. But Packer and his colleagues offer several reasons why this behavior does not occur in lionesses.

For one, the fighting required to set up a pecking order that would prevent low-caste females from breeding would lead, Packer says, to "mutually assured destruction" from the animals' massive claws and teeth. "It's too risky to try to control other females directly," agrees Tim Clutton-Brock, an evolutionary biologist at the University of Cambridge, United Kingdom.

Lionesses also avoid another strategy sometimes employed by alpha females seeking to thwart breeding by potential rivals: killing the rivals' newborn young. This likely stems from breeding in communal locations. But in behavior typical of felines, lionesses go into hiding to give birth and don't rejoin the pride until the cubs are 6 weeks old and much less vulnerable.

Returning mothers then raise the cubs communally and together fend off raids from lions in other prides. "Females benefit from each other's presence," notes Clutton-Brock. In short, Packer adds, "the queen of beasts is a democrat." –ELIZABETH PENNISI

Togetherness. In contrast to males, female lions in a pride have about equal reproductive success and even cooperate in raising their young.

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