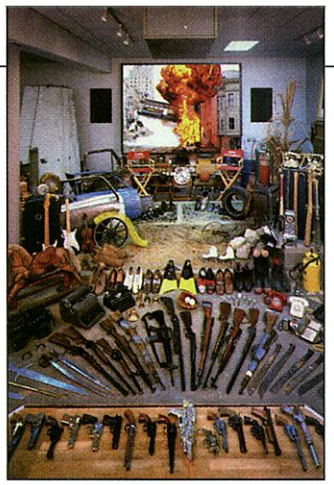

Stage with Foley props.

Realer Than Real

Hollywood may soon be able to craft acoustic illusions that sound better than the real thing, say researchers at Brown University.

Technicians, known as Foley artists after Hollywood pioneer Jack Foley, create the noises that populate the soundscapes of radio, film, and television. A crackling fire, for instance, can be evoked by twisting cellophane, and squeezing a box of cornstarch can mimic footsteps in snow.

Because Foley effects often possess very different acoustic properties than their real-life counterparts, psychologists Laurie Heller and Lauren Wolf wanted to find out which components are key in recognizing a sound. First, they had 17 volunteers listen over headphones to familiar sounds, such as breaking glass, paired with Foley imitations. This confirmed that Foley sounds are still not as believable as the real thing.

The researchers then attempted to create sounds that were better than the real ones by digitally manipulating the three most successful Foley effects: "walking in mud" (squishing wet crumpled newspaper), "walking in leaves" (running fingers through cornflakes), and "crushing eggshells" (squeezing folded sandpaper).

More than 70% of the time, listeners rated these new sounds as more convincing than the real ones, the researchers reported last week at the annual Acoustical Society of America meeting in Pittsburgh. They say enhancing the slow-moving wave components of a sound—what is known as its "envelope"—results in a better perception of actions such as walking. But augmenting the fast-traveling sound waves apparently helps people identify materials involved in an event, such as mud.

Honoring Kirschstein

Members of Congress have found a lasting way to express their thanks to Ruth L. Kirschstein, a 46-year veteran of the NIH and still going strong as its deputy director. On 22 May, Senator Tom Harkin (D–IA) announced that Kirschstein's name will be added to NIH's main training grants program, the National Research Service Awards.

Kirschstein

Kirschstein's career at NIH has included serving as an institute director and as acting NIH director from January 2000 until Elias Zerhouni took over the post last month. Richard Knapp of the Ad Hoc Group for Medical Research Funding says he and others were looking for a way to honor the 75-year-old Kirschstein and her "very strong commitment to training" scientists. He says they hope the "Kirschstein awards," which go to more than 16,700 pre- and postdoctoral students a year, will become as familiar as the federal Pell grants for undergraduate education.

Happiness Hits the Big Time

The emerging field of "positive psychology"—which holds that the study of sweetness and light is just as important as understanding the dark side of human nature—is the focus of a new interdisciplinary Center for the Development of Peace and Wellbeing, which opened last month at the University of California, Berkeley. It will bring together anthropologists, public policy analysts, education researchers, and psychologists to figure out how people become, and stay, happy.

Established with $1 million from two members of the '60s generation, Berkeley alums Thomas and Ruth Ann Hornaday, the center is headed by psychologist Dacher Keltner. Psychologist Frank Fujita of Indiana University, South Bend, says it's a sign that the field of positive psychology is becoming institutionalized. "All the tools are already available," he notes, honed on war and hatred, and now bent to explore their opposites.

The center's first symposium focused on resilience in abused children. The 15 graduate and undergrad research projects cover such topics as "love in Latino couples," breast cancer support groups, peace, and "well-being and overscheduling of children."

Reviving the Tasmanian Tiger

The last Tasmanian tiger died in a Hobart zoo in 1936. But its days on the extinction list might be numbered, claim Australian scientists who are making a bold attempt to resurrect the striped meat-eating marsupial.

"To actually reverse extinction would be the biological equivalent of the first walk on the moon," says Michael Archer, head of the Australian Museum in Sydney. Don Colgan and Karen Firestone of the museum's Evolutionary Biology Unit have taken the first step: They've successfully amplified some DNA extracted from three Tasmanian tigers (*Thylacinus cynocephalus*) that were preserved in alcohol more than a century ago.

By comparing the DNA to other animal DNA data, they have confirmed that it really is tiger DNA—and "definitely not from some wizened old curator," says Archer. That puts it ahead of earlier attempts to resurrect extinct animals such as the woolly mammoth, where no usable DNA has been obtained.

Baby tiger pickled in 1866.

The next step is to make a DNA library, storing the material inside frozen bacteria. The team could then begin amplifying and reassembling some 3.5 billion bases of thylacine DNA. That done, they could—at least theoretically—build synthetic chromosomes and cell nuclei in which to fit the genes. Finally, they would clone a thylacine—inserting genetic material into the egg cell of a close relative such as the Tasmanian devil—and then put a fertilized egg in a surrogate mother. The ultimate step: introducing the reconstituted species into the wild.

Opinion varies on the potential success of the venture, with most bets hovering around zero. Colgan pegs his chances at about 5%. Slim as those are, says cryobiologist John Critser, head of the Comparative Medicine Center at the University of Missouri, Columbia, "in terms of the production of new and important scientific knowledge, I think it is very likely this project will succeed." But reproductive physiologist Naida Loskutoff of Omaha's Henry Doorly Zoo and 16 colleagues wrote in an e-mail to *Science* that the thylacine project is a waste of money that would be better put toward conservation efforts.

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