

Coalition For Animals & Animal Research

CFAAR Arizona Newsletter

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To join the Arizona CFAAR, please fill out the membership form on the back page. Donations publish our newsletter and educational materials. A years subscription is included with your contribution.

CFAAR: Who We Are

CFAAR is a nonprofit educational organization which formed in response to activists who were attempting to discredit animal research and animal researchers in 1988. Several local CFAAR chapters have since sprung up across the country. These groups share the following objectives:

- 1) To **organize** students, faculty, and staff at institutions where animal research is performed so effective letter writing campaigns can be initiated quickly.
- 2) To **educate** the public, in general, and the campus, in particular, about the true nature of animal research and animal researchers.
- 3) To **support** responsible and humane use of animals in biomedical research.

The first of these objectives will be the primary function of the group. As legislation is introduced that affects animal research, we need to respond so our representatives know exactly how we, the people, want them to vote. Accordingly, through our newsletter, we will help inform you about legislation and other "happenings" concerning attacks on animal research. Our goal is to make it as easy as possible to contact your Washington, D.C. representatives.

The key to the effectiveness of this organization is you! We need your willingness to write an occasional letter, perhaps talk with a school group and, of course, give a few dollars to cover the cost of printing the newsletter and educational materials.

**HELP SUPPORT CFAAR
SO WE CAN SUPPORT YOU**

Domestic Terrorists Must be Stopped

Catherine Ives was a researcher at Michigan State University in 1999, working on developing disease-resistant crops that could help alleviate starvation in Third World countries. Then, the facility in which she worked was torched, destroying Ives' work.

A group called the Earth Liberation Front claimed responsibility for the fire. Upset with the research because of its association with genetically engineered crops, ELF members shut down Ives' operation through an act of terrorism.

While the resolve of Americans to combat terrorism is currently at a peak, the focus remains on Islamic extremists. Domestic terrorists such as the ELF and the Animal Liberation Front (ALF) continue to operate with little public notice of their acts of terror.

Richard Berman, executive director of an organization representing restaurant and tavern owners, wrote last week in a USA Today opinion piece that homegrown terrorism has not let up since the awful events of Sept. 11. Rather than admit that their form of terrorism is every bit as odious as that of the Mideast radicals, the environmental and animal rights groups self-righteously cling to the "correctness" of their cause.

"In this age of insanity, you may be branded a terrorist," says an Animal Liberation Front Web page, "but you will one day be remembered as a selfless warrior who dared to fight for what is right." The words are directed at ALF associates who bomb or burn down research labs, sometimes killing animals in order to "save" them.

If those same words were distributed by Osama bin Laden, righteous indignation would be the reaction. Yet these domestic terrorists carry on with little scrutiny.

"The growing wave of domestic terrorism by animal-rights, anti-corporate and anti-biotech

extremists has gone beyond vandalism," Berman wrote. "Property has been destroyed and lives have been put at risk. And Americans are the perpetrators."

The FBI and other federal law enforcement agencies have their hands full now, giving the domestic terrorists a virtual field day for their lunatic fringe activities. ALF claims to have set fire to a primate research facility just nine days after planes hit the World Trade Center and the Pentagon.

Periodic torchings or bombings of research facilities have been commonplace. The ALF or ELF has claimed responsibility for firebombings at meat companies and a feed mill. The fire at Michigan State University caused about \$1 million in damages, Berman wrote.

Because these domestic terrorists have so far managed to avoid killing people, their activities have been largely ignored by the general public. But terrorism is terrorism, and any war on terrorism must include these twisted and unjustifiable attacks.

While not directly engaged in terrorism, groups such as People for the Ethical Treatment of Animals are nevertheless linked to terrorist attacks. For example, in 1992 ALF member Rodney Coronado firebombed a Michigan research facility, a crime he later admitted committing. PETA contributed \$42,500 to Coronado's legal defense in 1995 while spending less than \$5,000 for animal shelters that year.

Former FBI Director Louis Freeh was outspoken in his contempt for domestic terrorism, but most Americans remain unaware that animal-rights and environmentalist radicals are loose in this society. Similarities between the homegrown terrorists and the men who hijacked four planes on Sept. 11 can be found in their rhetoric and their unflinching belief that no act is too extreme if the cause is "right."

Arson, property destruction, burglary and theft are "acceptable crimes" in the pursuit of a cause, PETA co-founder Alex Pacheco once said. With such an endorsement of terrorism, it's not out of line to suggest that PETA itself encourages acts of violence.

In an opinion piece that appeared in The Oklahoman on Oct. 24, Nick Nichols, chairman of a crisis management firm in Washington, D.C., said Americans too often tolerate violence

committed by environmental and animal rights terrorists as "stunts" or "pranks."

"This invites acts of greater violence," Nichols wrote. "Instead, we need to crack down with aggressive prosecution of domestic terrorism against property to protect us from more serious domestic terrorism against our people."

To paraphrase President Bush after the Sept. 11 attacks, you are either in the battle against terrorism or you are abetting it. Extremist animal and environmental activists have made it clear which side they're on.

(The Oklahoman, 11/5/01)

Gene Therapy Studied for Muscular Dystrophy By Amy Norton

Scientists have had their first success in combining stem-cell and gene therapy to partially restore lost muscle in mice with a muscular dystrophy-like disease.

Researchers used stem cells from the animals' own muscle tissue to deliver a normal gene meant to correct the defect underlying Duchenne muscular dystrophy. The tactic produced some normal muscle fibers in the mice--although it was not enough to reverse the animals' condition.

Still, the team from the University of Pittsburgh in Pennsylvania says that improving upon this technique could lead to a way to fight muscular dystrophy.

Much work remains, though--including finding out whether such a stem cell population exists in the muscle of people with Duchenne muscular dystrophy, the team's lead investigator told Reuters Health.

Muscular dystrophy refers to a group of genetic disorders marked by muscle weakness and degeneration. Duchenne muscular dystrophy, the most common form in children, arises from a defect in the gene that makes the muscle protein dystrophin. The dysfunctional gene lies on the X chromosome, and since males have only one X chromosome, Duchenne affects boys almost exclusively. Most die by the time they reach their 20's.

In several experiments, Dr. Johnny Huard and his colleagues looked at the feasibility of extracting muscle stem cells from diseased mice, introducing a "corrective" version of the dystrophin gene into the cells, then placing them back into the animals.

In one study, the researchers reintroduced the stem cells into the bloodstream after destroying the animals' existing bone marrow. In a separate experiment, they tried injecting the corrected stem cells directly into the animals' muscle.

Both methods garnered some success in generating normal muscle fiber. Huard presented the findings this week in Washington, DC, at the annual meeting of the American Society for Cell Biology. The research is currently under consideration for publication in the Journal of Cell Biology.

Stem cells are primitive master cells that are able to differentiate into a range of body tissues. Because of this capacity, Huard's team reasoned that equipping some of the animals' stem cells with a normal dystrophin gene would allow their bodies to create healthy muscle fibers.

And theoretically, using a patient's own stem cells to deliver a corrective gene would be preferable to other delivery methods--such as a modified virus--because the method should avoid an immune system attack.

In the experiments in which mice had stem cells reintroduced directly into muscle, Huard's team found that the treatment produced not only some new muscle fibers, but also blood vessels and nerves.

However, a systemic approach would be needed for patients since, Huard pointed out, people do not die from wasting in skeletal muscle, but from the eventual failure of heart and respiratory muscle.

In their experiments with giving mice corrected stem cells through the blood, the investigators found that the stem cells replaced the animals' destroyed bone marrow and migrated to various organs. They also observed a small number of normal muscle fibers in the animals' hind limbs.

Huard said that part of the challenge now is to try to improve the systemic delivery of the combined stem-cell and gene therapy.

(NY Times, 12/12/01)

UA Treatment of Animals Humane, Responsible By Susan Wilson-Sanders

As attending veterinarian in charge of University of Arizona animals, I'm responding to Dr. Patricia Haight's Nov. 8 article "UA's responses in dog controversy puzzling." The facts are simple: The University of Arizona uses animals in its teaching and research programs in order to educate students and to improve the health and well-being of both man and animals.

The Institutional Animal Care and Use Committee - with veterinary, scientific and community members - reviews all proposed studies, and use of dogs is limited to those where dogs are the most appropriate species for a particular project.

During 2001, the university used 39 dogs. In comparison, more than 100,000 dogs and cats were destroyed this year in Arizona pounds and shelters. University dogs gave their lives for the improvement of human and animal life; animals killed in shelters and pounds lost their lives because they were not wanted.

The recent article expressed misunderstandings based on misinterpretation of information obtained by Dr. Haight and others who requested university documents under the Arizona Public Records Law. Thousands of pages regarding protocols, animal purchase, surgical, clinical and the other records were provided to these individuals.

Without knowledge of our Animal Care Program, this information could be difficult to understand. Rather than bring these misunderstandings into a public forum, Dr. Haight could seek assistance from university personnel. I have always had an open-door policy to those who wish to reasonably discuss concerns regarding our animal-care program. To dispel specific concerns raised by Dr. Haight, I am providing the following answers to her questions:

IACUC protocols contain projected animal numbers. Not all research studies are funded and conducted, but all must have an approved protocol in place. Using numbers of animals listed in protocols will provide an inaccurate count of animals used. Animal Purchase Orders detail the actual animals purchased during the year, and these numbers are reflected in the Annual Report

to the United States Department of Agriculture, as required by federal law. In FY 2001, for dogs, this figure was 39 animals.

When Ann Denogean of the Citizen interviewed me, I told her we had no dogs at the present time but had used (39) dogs during the year. The university has had no dogs since the end of August and there are no pending orders for dogs. There are approved protocols for dogs, and we expect dogs to be used early next year.

Dr. Robert Dorr's protocol was approved for the use of eight dogs. He successfully completed his research with four dogs. The research was performed to meet requirements of the U.S. Food and Drug Administration approval process for a new, potent analgesic drug that produces long-lasting analgesia, which cannot be produced by existing pain drugs such as morphine.

Results of studies at the UA have shown that this drug has tremendous potential for assisting persons or animals with cancer pain, while requiring fewer injections and having reduced side effects. In the four dogs, the drug was delivered by an indwelling intravenous catheter, which was surgically implanted, under the skin, by a board-certified veterinary surgeon.

The same devices, called vascular access ports, are used to deliver chemotherapy to human cancer patients. Because these access ports are implanted under the skin, humans or animals can have inflammatory reactions. All of these dogs had fluid accumulation post-surgically. The dogs' scratching and high level of activity caused incision disruption. All were successfully treated by the veterinary staff of University Animal Care. At no time did any member of the research team report a concern to those who could address it.

A report was filed with the U.S. Department of Agriculture, which sent a federal veterinarian to the UA to perform an unannounced inspection of the animal facilities and records. The USDA inspector's report showed no violations of the Animal Welfare Act with regard to these dogs.

A number of dogs have been purchased from U.T. Houston during the past several years. None of these dogs has been in the animal facilities since May of 2001. None was present at the time of the interview with the Tucson Citizen.

- Dogs were last used for teaching classes in Feb-Mar 2001. The only dog used this year was a veterinarian's personal dog, which was used to demonstrate performance of a physical examination to the class of senior pre-veterinary students. This dog remains alive and well.

- Regarding recent public records requests: Dog protocols have been filed with the IACUC during 2001 and will be released to the requester. However, the university must remove all personal information prior to the documents' release to protect employees from harassment by those who oppose animal research. Confidential information regarding trade secrets must also be removed to meet federal privacy laws

- Under the Animal Welfare Act, USDA "Column E" refers to studies performed without benefit of pain relief medication.

Until January 2000, UA Category E protocols were those where major surgical procedures were performed on animals with full benefit of anesthetics and analgesics. UA Category E was equivalent to USDA Column D. Early in 2000, the IACUC changed UA pain categories to match those used by the USDA. No USDA "Column E" studies have been performed at the university during the past 20 years.

Clinical Records: Yes, one dog in the past decade did receive chemical burns following inadequate removal of a disinfectant used to clean its cage. The employee who was caring for the dog was extremely distraught over his mistake. He reported his error, was immediately retrained and procedures were adjusted to ensure prevention of such accidents. Yes, a few dogs have had cuts and sores from various causes. All were given prompt medical care and recovered.

Almost all research that involves drug and device development is privately funded. The federal government funds basic research. Private companies take that knowledge and develop applications to benefit man and animals, such as artificial hips and vessels.

Over the 28 years that I have been with the university, we have adopted many ex-research animals. We will not place for adoption an animal that has had a major surgery or medical procedure. We do not believe in giving someone an animal that may someday cause them distress and heartache. It would not be humane for the animal or the family who has come to love their pet.

(Tucson Citizen, 11/23/01)

Surviving a Media Onslaught

By Chris Woolston

For one day last April, Marc Hedrick's lab was the news-media center of Los Angeles. While TV crews from ABC, CBS, and NBC jockeyed for camera angles and collected sound bites, reporters from all over the country kept the phone constantly ringing.

For Mr. Hedrick, an associate professor of pediatrics and surgery at the University of California at Los Angeles, the road to fame started with an article he co-wrote in the April issue of *Tissue Engineering*. But his "big break" was the accompanying news release. The first sentence alone had press-stopping power: "Scientists at UCLA and the University of Pittsburgh have isolated fat as the first practical, plentiful, and economic source of stem cells."

Stem cells and fat -- for journalists, it was a dream combination. The networks could explore thorny ethical issues, explain cutting-edge research, AND run their stock footage of huge bellies at the local mall. In addition to giving interviews to every major television network, Mr. Hedrick fielded calls from *The New York Times*, *The Washington Post*, *The Times* of London, the Associated Press, National Public Radio, and practically every news outlet in Los Angeles. "There was no physical way I could respond to all of the requests," he says. "I had to perform triage."

Few scientists ever find themselves in such a firestorm. But whether they study galaxies or daphnia, there's a good chance they will eventually catch the attention of at least one reporter. That's not a bad thing: Media coverage can raise the profile of scientists, boost their grant support, and even speed the pace of scientific discovery. Of course, reporters can also be obtrusive, misguided, and, worst of all, flat-out wrong.

What kind of coverage will greet your next big discovery? If you see anything remotely newsworthy in your future, you should learn how to get the most out of the media. With the right approach, your 15 minutes of fame (broken into roughly 100 nine-second sound bites) can brighten your entire career.

Some scientists would rather spend a day in a fume hood than a few moments with a reporter, but most see the value of the news media, says Dennis Meredith, a veteran public-information officer at Duke University. "Every scientist understands that funding is a political process," he says. "If you want your research funded, you have to talk about it."

And when a scientist talks about research, other scientists listen. In fact, a television spot or newspaper story can help build scientific partnerships. In recent months, Mr. Hedrick has started collaborating with several obesity and fat-cell specialists who saw articles about him in the popular news media. None of them were regular subscribers to *Tissue Engineering*.

There's another reason to get the word out: Grabbing headlines can help you rack up citations. A study published in *The New England Journal of Medicine* in 1991 showed just how valuable a little publicity can be. The study focused on articles from the journal that were featured in *The New York Times* in the summer of 1978, a period when the newspaper was on strike. (Reporters did their jobs as usual to produce a "paper of record," but the papers were never distributed.) For the sake of comparison, the researchers also looked at every article from the journal that the *Times* covered in 1979.

As it turned out, the summer of 1978 was a bad time to make a medical breakthrough. Research articles covered during the strike collected far fewer citations over the next decade than articles published in the "real" *Times*.

Even if you're eager to publicize your work, it's natural to feel uneasy in the spotlight. Scientists worry about being misquoted and misunderstood. Most of all, they don't want to seem boastful. "My biggest concern was that someone would overstate the significance of our findings," Mr. Hedrick says. "When you get under the camera and under the lights, things can come out different than you mean them to."

Researchers can protect themselves -- and their reputations -- with a little preparation, Mr. Meredith says. For one thing, it always helps to give the reporter a press release that clearly summarizes the main points of the story. Most scientists also need to spend some time polishing their presentation. "They often don't realize that the average sound bite is only nine seconds," he

says. "They have to practice saying what they are going to say in nine seconds."

When working with TV crews, scientists must remember to stay lively, Mr. Meredith says. "If they speak in a monotone voice, it won't come across well," he says. They should project their voices, gesture broadly, and most of all, stay loose in front of the camera. If they feel nervous, they should do a few local interviews before sitting on the couch at *Good Morning America*, he says.

No matter whom they talk to, scientists should learn to speak clearly, slowly, and in terms the average person can understand. "That's the biggest problem for scientists: They believe everyone knows what reverse transcriptase is," Mr. Meredith says. (Mr. Hedrick, for one, never had trouble using simple words. "I have two young kids, and I'm from Oklahoma," he says. "My problem is finding big words.")

Researchers looking for more tips should read Mr. Meredith's *Communicating Science News*, a valuable guide for anyone who needs to explain complex topics to the news media. Free online copies are available at the Web site of the National Association of Science Writers. A print version of the guide is available through the Web site for \$8.

If you're a scientist at a larger university, you may also have the chance to go through an intensive media-training program offered on the campus. Such programs, which often include mock interviews, can be especially helpful for researchers who spend a lot of time on television or who have to discuss potentially controversial subjects, Mr. Meredith says. However, there's such a thing as being TOO prepared. "Some scientists get over-trained," he says. "You see them waving their hands, and it's too artificial."

For print and radio reporters, about the least-appealing source is a scientist who "gestures broadly" and speaks in blurbs. Reporters can easily spot the scientists who have had a little too much media training, says Joe Palca, a science correspondent for National Public Radio. "They tend to speak in sound bites," he says. (While well-suited for television, sound bites fall short during lengthy, in-depth radio programs.) Mr. Palca prefers scientists who speak with passion, precision, and great detail. "They should understand that their only audience is the science writer, not the general public. The science writer is the expert at clearly expressing

complex ideas. [Scientists] can get twisted up trying to dumb down their topic."

Now that the dust from the media stampede has mostly settled, Mr. Hedrick has enjoyed a chance to reflect. For the most part, the coverage his story received was fair and accurate, he says. It was also just a little over the top: "The story probably got more press than it deserved. Other people are doing better research but don't get half the publicity." Still, if NBC, CBS, or ABC ever calls again, he'll happily welcome them into his lab. He just hopes that next time they don't all arrive on the same day.

(The Chronicle, 11/19/01)

Anti-Cancer Vaccine Packs One-Two Punch

An experimental DNA vaccine against cancer that withers tumors and augments the immune system with a two-pronged approach has apparently granted lab mice complete resistance to the tumors that plagued them. Scientists suggest the vaccine may one day help fight a wide range of cancers in humans as well.

"Using these two techniques in one vaccine, not only did we protect the mice from growing more tumors, but we also observed a dramatic reduction in the visible tumors as well," said researcher T.C. Wu, a molecular chemo immunologist at Johns Hopkins University in Baltimore.

Vaccines stimulate immunity against a specific invader. The problem the immune system has with tumors is that it does not see cancer cells as foreigners. Cancer-fighting DNA vaccines contain genes that cells absorb to make them capable of recognizing tumors for what they are -- dangerously malfunctioning tissues that should be destroyed.

The key to the new vaccine's one-two punch is a protein called calreticulin. Cells can snip calreticulin apart to form a potent tumor-fighting factor called vasostatin, which prevents tumors from growing by cutting off their blood supply.

In addition, calreticulin helps enhance specialized immune cells known as antigen presenting cells. These cells display antigens, or

fragments of invaders, on their surfaces like red flags so hunter-killer immune cells can identify the body's enemies and neutralize them. Recent evidence also suggested that linking calreticulin with tumor-linked antigens could promote a tumor-killing response.

The researchers engineered a fusion gene that encoded for calreticulin and an antigen linked to tumors infected with human papillomavirus, a germ found in all cervical cancer and roughly a quarter of all head and neck tumors. Gold particles covered in the DNA vaccine were then introduced into cancer-ridden mice using a high-pressure helium-driven injection.

"We witnessed a potent decrease in the size of visible tumor modules in the mice that received the vaccine," Wu said in an interview with United Press International. "The vaccine also generated a significant anti-angiogenesis effect -- it stopped tumors from new blood vessel growth, therefore protecting mice from growing more tumors. The results were really impressive and exciting."

Immunologist Lewis Lanier, a DNA vaccine expert at the University of California at San Francisco, cautioned that though he found the double-duty approach interesting, he had some reservations as well.

"The only skepticism I have concerns the fact that they chose to work with tumors that were transduced with a foreign viral gene," Lanier told UPI. "The immune system is naturally set up to get rid of viruses and bacteria, so tumors marked with viral genes may prove a lot easier to get rid of than other tumors."

Lanier did think that the vaccine's two-birds-with-one-stone approach "was a clever twist. So I really hope to see soon that the researchers try this novel technique on a more challenging model and see if it still holds up."

Wu said that once his team made more progress with their vaccine, the idea of applying it towards well-known antigens on cancers such as melanoma or lung cancer was an exciting one. "Can you imagine it?" Wu exclaimed. "Just plug in an antigen."

The researchers are applying to the National Institutes of Health for a grant to use their vaccine in a clinical trial on volunteers with advanced cancer. They reported their findings in the *Journal of Clinical Investigation*.

(Baltimore Sun, 8/29/01)

Animal Activist Dies on Hunger Strike

Animal rights activist Barry Horne has died in hospital in Worcester after being on hunger strike, the Prison Service said. Horne, who was serving an 18-year sentence after being convicted of a nationwide fire-bombing campaign, died on Monday morning.

The 49-year-old had been refusing food since 21 October, a Prison Service spokeswoman told BBC News Online. Horne had been at Long Lartin high security prison in Worcestershire until last Thursday, when he was admitted to Ronkswood Hospital with liver problems. Horne had been at Long Lartin high security prison in Worcestershire when he was admitted to Ronkswood Hospital with liver problems.

The cause of death was liver failure, a Prison Service spokeswoman said. "Mr Horne had signed an advance directive refusing medical intervention for his food refusal. "As Mr Horne was declared to be of sound mind, there was no option but to abide by the instruction of the directive," she said in a statement.

Horne, from Northampton, lost an appeal against his conviction two years ago. Horne had been sentenced in December 1997 to what was believed to be the longest prison term for an animal rights activist after being convicted at Bristol Crown Court of causing damage costing millions of pounds to shops in arson and attempted arson attacks.

(BBC News, 11/5/01)

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