

Commentary

We Must Face the Threats

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En1 Scientists at the University of California using animals in research have long faced harassment and attacks from animal-rights extremists. In the latest wave, which started in 2003, we have seen our cars and homes firebombed or flooded, and we have received letters packed with poisoned razors and death threats via e-mail and voicemail (Miller, 2007; University of California, 2008, 2009; Anti-Defamation League, 2009). Our families and neighbors have been terrorized by angry mobs of masked protesters who throw rocks, break windows, and chant that “you should stop or be stopped” and that they “know where you sleep at night.” Some of the attacks have been cataloged as attempted murder. Adding insult to injury, misguided animal-rights militants openly incite others to violence on the Internet, brag about the resulting crimes, and go as far as to call plots for our assassination “morally justifiable.” Consequently, animal-rights extremism must be addressed seriously and forcefully; the passage of the Animal Enterprise Terrorism Act in 2006 was one step in this direction, but its constitutionality is now being challenged by animal-rights activists who claim that it is overly broad and inhibits constitutionally protected speech (Mintz, 2009). In addition, it is certainly only one mechanism to achieve the relief scientists need to continue their work.

Although animal-rights activists are against all forms of research involving animals, the majority of the recent attacks have concentrated on those using monkeys in their investigations. Obviously, the use of nonhuman primates in research

presents a unique set of ethical issues because of their complex cognitive and emotional abilities, and accordingly, they represent fewer than 1% of all the animals used in research. For those researchers studying complex brain functions, including vision, hearing, memory, attention, thinking, and planning, as well as how those processes fail in diseases of the CNS, rodent species simply are not adequate alternatives because of the evolutionary elaboration of these processes in nonhuman and human primates.

Although there has been a focus on primate research, “mainstream” animal-rights organizations, such as People for the Ethical Treatment of Animals (PETA) and the Humane Society of the United States, openly oppose all types of animal research, calling it flawed, unnecessary, and unethical. They call it flawed because, in their opinion, results from animal research cannot be translated into treatments for human disease. They call it unethical because, in their view, even if animal research were to be useful, it would be wrong to kill an animal to save human (and animal) lives.

These organizations also mislead the public, suggesting that alternatives to animal research exist or that they could be easily developed, such as the argument that functional magnetic resonance imaging and computer simulations have rendered invasive electrophysiological studies useless. Their message, catered to children in grades kindergarten through 12 (People for the Ethical Treatment of Animals, 2009a) and college students (People for the Ethical Treatment of Animals, 2009b), is finding increased reception as they muddle the discussion with issues regarding the environment (Department of Homeland Security, 2009) and the growing negative social perception of companies involved in pharmaceutical development. “Animal law” programs at various universities are increasingly devel-

oping theories of natural rights for nonhuman animals and arguing in favor of providing animals legal standing in our justice system (Wikipedia, 2009). Animal-rights philosophers favoring the total abolition of animal use by humans endow their movement with a perceived intellectual standing and a sense of moral superiority (Francione, 2009), one that quickly dissipates when others provide justification for, or (at the least) equivocate on the “morality” of, violent methods to achieve their desired goals (Best, 2009).

The entertainment industry has also contributed to the misperception of science, producing movies that increasingly portray humans and technology as the source of evil, in which mad scientists populate their scripts while animals are often the source of wisdom, kindness, and truth. Some Hollywood celebrities wear AIDS/cancer ribbons one day and participate in PETA fundraising and advertising on another, although research in animals is likely to hold the keys to cures for these conditions. Pseudo-science populates television talk shows, in which some celebrities now advocate for the end to childhood vaccinations.

Regrettably, the attacks and messages from the anti-research lobby have been presented to the public with little opposing force from the scientific community. Traditionally, academic institutions and individual researchers have opted to remain silent about the activities of animal-rights extremists and organizations. Such reasoning was based on the fact that, unless the attacks were directed at you or your institution, it would be unwise to draw attention by offering a response. This attitude is no longer tenable. To underscore this point, a recent survey by the Pew Research Center (2009) demonstrated that only 52% of the public views animal research favorably in the United States. For these reasons, neuroscience re-

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search stands to suffer tremendously if our community does not act in concert immediately.

Time has come for the scientific community to make a concerted effort in condemning animal-rights extremism and in reaching out to the public to explain our work, its importance, and our commitment to the strictest ethical guidelines of animal research. A special effort should be made to emphasize the irreplaceable role for nonhuman primates in neuroscience research to the public. Although scientific societies can play an important role in this respect, such as the many outreach efforts by the Society for Neuroscience, individual investigators cannot delegate their responsibility any longer. We must acknowledge an increasing divide on how animal experimentation is perceived by the broad public. We should open a discourse on the topic, explaining the key role animal research plays in our work and what our society stands to lose if we were to stop it.

Everyone agrees that the welfare of animals and the ethical issues raised by their use in research cannot be taken lightly, but the general public seems to be under the impression that investigators are free to experiment on animals in any way they please. Much needs to be done to explain what exactly goes into conducting animal research: the various settings in which students and trainees are exposed to complex

issues of ethics in research, the multiple levels of scrutiny, including review of our grants by the National Institutes of Health, the approval of the research by a university committee (composed of veterinarians and community members), the inspections from federal and state regulators, and accreditation from independent organizations that evaluate the compliance of animal programs. Above all, we should convey to the public our commitment (from students, staff, and faculty) to animal welfare, to refining our procedures, and to reducing the number of animals used in our studies. We should also consider allowing members of the public access to research facilities so that they can observe, firsthand, the measures taken to ensure the well-being of the subjects involved in our scientific enterprise.

We must now face the many threats to animal research in general and to neuroscience in particular. We must prove that “scientific community” means something more than the mere fact that we publish in the same journals and attend the same conferences. We must stand together to defend those colleagues under attack and defend the research we believe to be ethical and critical for our understanding of the brain in health and disease. The public is ready to listen.

References

Anti-Defamation League (2009) Animal rights extremists target the University of California. http://www.adl.org/main_Extremism/university_of_california_animal_rights_extremism.htm.

- Best S (2009) <http://www.drstevebest.org/>.
Department of Homeland Security (2009) Ecoterrorism: environmental and animal-rights militants in the United States. <http://www.scribd.com/doc/12251436/DHS-Eco-Terrorism-in-US-2008>.
- Francione GL (2009) Animal rights: the abolitionist approach. <http://www.abolitionistapproach.com/>.
- Martosko D (2009) Dr. Jerry Vlasak quotes. http://www.activistcash.com/biography_quotes.cfm/bid/3437.
- Miller G (2007) Science and the public: animal extremists get personal. *Science* 318:1856–1858.
- Mintz H (2009) Federal judge to weigh constitutionality of animal rights anti-terrorism law. http://www.mercurynews.com/crime/ci_12825570.
- People for the Ethical Treatment of Animals (2009a) PETA kids on animal testing. <http://www.petakids.com/testing.html>.
- People for the Ethical Treatment of Animals (2009b) Peta2 site. <http://www.peta2.com/>.
- Pew Research Center (2009) Public praises science; scientists fault public, media. <http://pewresearch.org/pubs/1276/science-survey>.
- University of California (2008) The Regents of the University of California vs. UCLA Primate Freedom; Animal Liberation Brigade; Animal Liberation Front; Linda Faith Greene (AKA Lindy Greene); Hillary Roney; Kevin Olliff; Ramin Saber; Tim Rusmisl and DOES 1–100, inclusive. http://www.newsroom.ucla.edu/portal/ucla/document/Regents_Complaint.PDF.
- University of California (2009) <http://www.universityofcalifornia.edu/news/animalresearch/UC%20animal%20research%20incidents%202005-08%20-%20August%202008.pdf>.
- Wikipedia (2009) The Great Ape Project. http://en.wikipedia.org/wiki/Great_Ape_Project.

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Commentary

Animal Rights Terrorists: What Every Neuroscientist Should Know

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AQ: B **Introduction**

Fn1 The disgraceful, illegal, and immoral tactics used by animal rights activists to forward their agenda have led to the federal government labeling them as domestic terrorists, a very well deserved categorical name. The types of terrorism engendered by these groups are varied, but most recently their most violent and troublesome acts have occurred at the homes of neuroscientists. Drs. Ringach and Jentsch have detailed many of these terrorist attacks in their accompanying commentary, and I will not review them here. However, do not let the preponderance of violent animal rights activity occurring in California mislead you into thinking that Society for Neuroscience (SfN) members in other states are immune to the situation. These violent acts occur across the country, with researchers in Utah, Connecticut, Oregon, as well as numerous other locales having reported violent attacks at their homes, often in the presence of children. Let us also be clear about the individuals whom they are attacking. These scientists have not just been performing research on animals: all have been performing responsible research on animals, using procedures that have been approved by the National Institutes of Health (NIH) and the Institutional Animal Care and Use Committees (IACUC) of their universities.

While these activists' strategy of terrorizing investigators and their families at their homes may be relatively new, these actions and their intent to terrorize are not. The origin of animal rights activism can be traced to the publication of *Animal*

Liberation in 1975 by Philosophy Professor Peter Singer. Singer is now viewed as the father of the modern animal rights movement. In 1981, Alex Pacheco and Ingrid Newkirk formed People for the Ethical Treatment of Animals (PeTA) in Washington, DC. These two events catapulted animal rights activism into the popular public mindset. While their misguided message about the responsible use of animals in research was heard, their methods of operation received less attention. They fully support the burning down of laboratories. Indeed, Newkirk has been quoted as saying so on numerous occasions (see http://www.activistcash.com/biography_quotes.cfm/bid/456). The Animal Liberation Front (ALF) sets fire to mink farms at Oregon State and Michigan State Universities. Other groups, such as Stop Huntingdon Animal Cruelty (SHAC) attacked the Huntingdon Life Sciences and its shareholders. The company and its shareholders were completely unaware of the reason they were attacked (they provided loans for companies performing animal research), and the company nearly collapsed financially. In 2000, ALF stole dozens of research animals from laboratories at the University of Minnesota, and in 2004, they broke into University of Iowa laboratories, causing hundreds of thousands of dollars in damages. These and other groups also disrupt science by using legal, but harassing, methods such as a continuous flurry of Freedom of Information Act (FOIA) requests and IACUC misconduct claims, most of which have been found to be completely baseless after costly investigation. Other efforts include legal maneuvers to grant animals "personage," or legal rights equal to humans, and combating even noninvasive research using great apes (which, incidentally, is the only genus that can be effectively used to model human hepatitis C

infection). These are just a few of the numerous activities of these groups over the past three decades.

So, with their widespread and dangerous activities, why has our membership been relatively silent on this matter? It is difficult to say, but one theory is that these activities have been predominantly directed against researchers using nonhuman primates and companion animals, the small minority of SfN members. The majority of members perform research on rodents, and they might conclude that this is "not my problem." Wrong! The violent activities of these animal rights activists are no longer exclusive to researchers that work with unusual species: a number of researchers who work with rodents have recently been targeted and attacked with the same violence and vigor as their colleagues. Now, everyone is at risk and a strong outcry by our membership is needed.

So, what should researchers and SfN members do? The first part is easy. Go to <http://www.ucla-pro-test.org/>. This is a website created by University of California, Los Angeles (UCLA) faculty in a stand against the animal rights terrorists. Sign the petition at www.raisingvoices.net, take a stand against these violent criminals, and take a stand for the responsible use of animals in research. Second, download the Best Practices document from the SfN website. This is a document that has been created and vetted by the Committee for the Use of Animals in Research (CAR) at SfN, a committee I am honored to chair. This document is based upon the UCLA Task Force document that was created following a series of violent attacks on their faculty. While the University of California system might be properly criticized for initially moving slowly on this front, they have become welcome leaders and champions for their embattled fac-

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ulty, and all SfN members should be grateful for their generosity in sharing their taskforce findings with us. The document is meant for any researcher to take to their university leadership to serve as a plan for protecting researchers under attack. It should be presented before any attack or threat of attack occurs. This document is not specific for animal rights issues and would prove valuable for researchers under attack for any reason (e.g., use of human fetal tissue or human embryonic stem cells in research). The document is divided into three parts and a summary of its concepts are detailed below:

Part 1: Leadership and administration

University leaders should provide regular, explicit public affirmation from the institutional leadership in support of academic freedom and state the institutional commitment to ensuring the protection of those individuals exercising it. In cases in which researchers are under attack, the university should pursue legal measures, public declarations, statements of support, and provisions of accurate information to the public and other forms of sustaining moral and psychological support. When illegal activities occur, university leadership should publicly support and encourage prosecution to the fullest extent of the law. Additionally, the university should request formal support from the academic senate or equivalent body.

Part 2: Security

The university should assign staff to monitor security efforts, deploy campus resources as necessary, and communicate with affected researchers. It should ensure that these personnel are on call at all times and have the ability to easily communi-

cate with top administration officials. The university should develop a plan with local law enforcement. The university should develop a formal process for responding to threats against personal and physical safety.

The university should establish an organizational structure that anticipates and forestalls threats to a researcher. The university should establish or strengthen security protocols. The university should ensure regular and effective communications between security personnel and community law enforcement to avoid gaps in protection.

Part 3: Communication and advocacy

The university should actively pursue the introduction and passage of federal, state, and local legislation and regulations that would protect research. They should urge lawmakers to ensure consistency of protective coverage across jurisdictions. They should proactively build relationships with reporters to convey accurate information about responsible research, as well as specific research being conducted at the facility, and they should regularly examine student-university organizations, in keeping with standards of protected activity.

I have taken this document to my administration, it was well received, and it has been adopted. I and my colleagues are safer because of it.

The CAR committee at SfN as well as the National Association for Biomedical Research (NABR) are also important resources for individuals who are under attack. Indeed, the CAR committee should be informed of all animal rights activist attacks, and the committee Chair and the SfN staff will provide as much assistance as possible. Additionally, it is imperative that we educate the public on the appro-

priateness of responsible research using animals, and on the health benefits they have provided both humans and nonhumans. Talking points for these concepts can be found at the SfN website.

Finally, I and many of my colleagues have been greatly disappointed by the failure of NIH to take a stronger stand against animal rights terrorists. Articles have been written by high-ranking NIH officials condemning their activities; e.g., http://www.nih.gov/about/director/02082008_statement_UCLAresearcher.htm. That is good. However, it remains hard to imagine how words alone will have any material impact on the behavior of these criminals. The leadership of SfN, including CAR members like myself, have solicited NIH to mandate that all custodians of their research funds (i.e., virtually all universities and other institutions performing research) have a protection plan in place for their researchers. Common sense would seem to dictate that if NIH can mandate the existence of IACUC, Institutional Review Board (IRB), and other oversight committees to protect animals and clinical trial patients before receiving NIH funding, a similar requirement can be instituted for the protection of the individuals performing the research. The Best Practices document described above can serve as a template for such a plan. This request has fallen on deaf ears. Hopefully, with the appointment of a new director of NIH, we will be able to readdress this issue in the near future with greater success.

In summary, as individual scientists I urge you to be proactive, be concerned, and be a loud voice for the responsible use of animals in research and be completely intolerant of criminals' intent on preventing the honest performance of our important work.

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