# Science in an Age of Scrutiny

How Scientists Can Respond to Criticism and Personal Attacks

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# It is crucial for scientists to differentiate between good-faith inquiries about their research and unfounded criticisms designed to undermine public confidence in either themselves or their field of research.

Have you received hateful email from strangers? Are public officials using their office to cast doubt on your research? Has your institution been served with an open-records request for your email? Has a blogger publicly misrepresented your findings or questioned your integrity?

As odd as it may seem, you deserve congratulations. The attention you are receiving shows that your research is now at the center of public policy debate. Nevertheless, scientists often find such experiences intimidating. This guide suggests some steps you can take to deal with harassment and other attacks on the integrity of your work. Based on the experiences of other scientists, we know that the first 24 hours after such attacks occur are critical, as this is often when scientists make mistakes in attempting—or not attempting—to engage.

It is vitally important that scientists respond to valid critiques and questions about their work, from both colleagues and the public. However, it is equally important for scientists to differentiate between good-faith inquiries about their research and unfounded criticisms designed to undermine public confidence in either themselves or their field of research. And in both cases, it is important for scientists to be honest, communicate clearly, and demonstrate their trustworthiness to the public.

Scientists who face harassment need to know they are not alone. It is not uncommon for scientists to face public criticism and attacks when their findings threaten vested ideological and financial interests.

This has happened for decades. In the 1960s, asbestos manufacturers hired public relations firms to question

research linking asbestos exposure to cancer, specifically attacking the work of Dr. Irving Selikoff, a pioneering asbestos researcher. In the 1970s, the lead industry relentlessly targeted Dr. Herbert Needleman, a physician whose research revealed the harmful effects of lead exposure on children's development.

Climate scientists have become the most recent highprofile public targets, as industry-funded groups have attempted to discredit the research and reputation of notable investigators. These include Dr. Benjamin Santer, who drafted part of a report from the Intergovernmental Panel on Climate Change,<sup>3</sup> and Dr. Michael Mann, whose research on modern versus past climate<sup>4</sup> has been attacked by members of Congress and a state attorney general, as well as industry-funded groups.

Some organizations and elected officials have also used subpoenas and taken advantage of open-records laws to demand data and private correspondence from scientists at public universities and in government agencies.<sup>5</sup> Given ideological divides on many science-based policy challenges, as well as the integral role of science in the policy-making process, we can expect such attacks to continue.

The Union of Concerned Scientists (UCS) has created this booklet to provide some basic guidance on dealing with harassment as well as legitimate requests for information. Nothing in this guide constitutes or should replace legal advice. We advise you to consult with your own counsel, or to contact organizations that could provide you with legal assistance and advice specific to your circumstances, such as Public Employees for Environmental Responsibility or the American Civil Liberties Union (see p. 7).

<sup>1</sup> Egilman, D. 2004. P.W.J. Bartrip's attack on Irving J. Selikoff. American Journal of Industrial Medicine 46(2):151–155.

<sup>2</sup> Denworth, L. 2008. Toxic truth: A scientist, a doctor, and the battle over lead. Boston, MA: Beacon Press.

<sup>3</sup> Union of Concerned Scientists. 2010. Climate fingerprinter. Cambridge, MA. Online at http://www.ucsusa.org/global\_warming/science\_and\_impacts/science/climate-scientist-benjamin-santer.html, accessed October 6, 2014.

<sup>4</sup> Mann, M. 2012. The hockey stick and the climate wars: Dispatches from the front lines. New York, NY: Columbia University Press.

<sup>5</sup> Clynes, T. 2012. The battle over climate science. Popular Science, June 21.

# How to Respond to Harassing Correspondence

You receive an email from an unknown individual alleging that your research or field of research is fraudulent. You answer questions from someone via email and receive a seemingly endless string of follow-up questions.

You receive a letter that threatens physical harm to you or your family.

#### You should:

- Respond to valid inquiries.
- Assume that any response you write can be forwarded or published online.
- ✓ Look for signs that an emailer is wasting your time with endless questions, or attempting to play "gotcha" by asking badly framed questions.
- ✓ Refrain from responding to harassing correspondence.
- Compile all threatening email or paper mail into archives (such as into one folder that is safe and protected on your computer, on external hard drives, or in your office).
- Report the threats to your work supervisor so he or she is aware of the situation.
- ✓ In the case of a clear and explicit threat to someone's life, health, or safety, notify law enforcement.

#### Outcome:

- ✓ You have saved your valuable time.
- You have a record of all abuse that can be used as evidence in any investigation.
- You have not given the attacker any satisfaction or motivation to attack you publicly.
- The proper authorities and your institution can protect you and your colleagues should the situation escalate.

#### Try to avoid:

- Wasting your time engaging in a back-and-forth argument over email.
- Responding directly to harassing or threatening email. The attacker may use your response to attack you publicly, or see it as a reason to harass you further.
- X Examining the correspondence in excessive detail. It is not worth your time or frustration to interact with people who do not wish to be constructive.
- Assuming that the source is legitimate. Consult resources listed in this guide to help evaluate the source and its history.
- Deleting email. You will have no readily available evidence that a threat was made.

#### Yes, but...

"The person who sent me the email is wrong.
I could convince him or her of the truth if I just provided the right data!"

#### Think again.

Your explanations are unlikely to persuade people who send harassing messages. Instead, spend your time communicating in other venues about your scientific expertise.

# How to Respond to a Hostile Blogger

A relatively popular blogger misrepresents your research.

A blogger releases your personal contact information.

A hostile posting on an obscure blog accuses you of scientific misconduct.

#### You should:

- Determine whether the blog is highly trafficked or obscure. Highly trafficked blogs have lots of comments and tens of thousands of readers.
- Evaluate the blog's tone and track record. Knowledgeable colleagues can help you determine if a particular blog is often the source of such attacks.
- Ignore spurious claims from obscure blogs with small audiences. Treat them like harassing emails (see p. 3).
- Consider responding calmly and with the facts to attacks from more prominent blogs, but do so on your own blog, Facebook page, institutional blog, or other outlet.
- Acknowledge valid criticisms and strongly rebut invalid ones.
- If attacks gain traction with other bloggers, prepare a response in case mainstream media outlets take interest.
- Copy and paste the blog and related material into a Word document, and take screen shots of any offensive material.
- If you see any content or receive any correspondence that you perceive as threatening, notify your employer and contact law enforcement.

#### **Outcome:**

- ✓ You defended your reputation in legitimate venues.
- You have a record of the attacks.
- ✓ You likely have not given harassing bloggers any more ammunition to attack you and your research.

#### Try to avoid:

- X Posting a response in the comment section of the blog. You will provoke the blog author and readers, and the former can edit or manipulate your comment.
- ✗ Getting drawn into an endless exchange with a blogger. A single response on your own blog or other online arena you control is often adequate.
- ✗ Ignoring valid criticism. It is possible to mollify reasonable bloggers who have taken issue with an aspect of your research. Refusing to answer valid criticism can engender attacks.
- X Mistaking an obscure blog for a legitimate media source.

#### Yes, but ...

"The blogger misrepresented my data. Shouldn't I fight back and expose him or her?"

#### Think again.

Engaging with a harassing blogger can create unnecessary controversy and draw the attention of larger blogs and mainstream media outlets.

## How to Respond to Demands for Private Information

A group issues an openrecords request for your data, research materials, or email correspondence. A blogger claims you are hiding information because you refuse to release private communication.

Your university receives a subpoena for all your email from the last five years.

#### You should:

- Keep work email messages professional, and assume that all messages are discoverable. Understand that your institution owns your email and often has the right to review it, as well as a legal responsibility to share it in certain situations.
- Differentiate between your research and data and your personal correspondence. Open-records requests often inaccurately conflate the two.
- Consider using one email address for your professional duties and another for your personal correspondence. This can make it easier to differentiate between discoverable and non-discoverable emails if you are ever targeted.
- Research the person or entity making the request to determine why they may be interested in your work.
- Understand that laws regarding disclosure vary by location and venue (such as whether your employer is public or private), and that many exempt personal correspondence.
- Reach out to an organization that may be able to provide you with legal assistance, such as Public Employees for Environmental Responsibility or the American Civil Liberties Union (see p. 7).
- Publicly speak out when you believe the request is designed to undermine your research and the public's understanding of science.

#### **Outcome:**

- You have not fueled your attacker with content that can be used to skew and distort the public conversation.
- You are prepared to defend yourself, and have enlisted others who are willing to help.
- Although courts rarely consider motivation, you can alert others as to why the request was not made in good faith.
- You have served as an example to other researchers who want to protect their privacy.

#### Try to avoid:

- X Handing over content immediately.
- X Assuming that your institution has your best interests in mind. Its primary responsibility is to protect itself, not you, though it may have obligations to you as an employee.
- Attempting to resolve the situation alone, without contacting your institution and, if needed, your own counsel.
- X Assuming that a requester's motivations have legal bearing. Courts and administrative officers rarely consider motivation when ruling on subpoenas and open-records requests.

#### Yes, but ...

"I have nothing to hide. Shouldn't I just hand over everything and get this over with?"

#### Think again.

While transparency is important, all scientists need and deserve safe space to develop and test new ideas. Institutions should balance transparency and free-speech rights. Automatically complying with requests can set a bad precedent for when your colleagues face similar attacks.

# How to Respond to Attacks through a Mainstream Source

A newspaper editorial or op-ed claims that your research is flawed.

A reporter calls you for comment on a blog post that accuses you of abusing the peer-review process.

A public official or politician publicly attacks you or your research.

#### You should:

- Respond to reporters' questions promptly. This enables you to explain inaccuracies in the charges against you. You can also help shape a story by explaining how the peerreview process works.
- Ask newspapers if you can respond to an editorial or op-ed with your own op-ed or letter. Many newspapers will grant this request, especially if you are named in the original piece.
- Ask colleagues who understand your work to help you set the record straight by validating your response.
- Seek assistance from your public relations office, your scientific society, or other resources in responding publicly to attacks from politicians or public officials. These sources can help you understand how to communicate your research most effectively.
- Consult A Scientist's Guide to Talking with the Media, available at www.ucsusa.org/deskreference.

#### **Outcome:**

- ✓ You have shared your side of the story and helped shape the final media product.
- Readers or listeners hear your point of view and become better informed.
- You are well prepared to respond to additional questions from reporters or legislators.

#### Try to avoid:

- X Saying "no comment" in response to a reporter's questions. The reporter may assume you have something to hide. Also, a news story is much more likely to be inaccurate if you refuse to engage.
- ✗ Getting defensive. Calmly and clearly explain the facts. Acting defensively makes it look as though you did something wrong.
- X Answering illegitimate criticisms. Instead, put them in an appropriate context.
- X Assuming that you can speak "off the record." Anything you say to a reporter can be quoted or used in a story.
- Overemphasizing the debunking of misinformation (often related to details) at the expense of sharing toplevel information that scientists in your field know to be accurate.
- ✗ Responding to attacks from public officials or politicians without seeking assistance. The legislative and public policy environments are much different from the scientific environment.

#### Yes, but...

"Why do I engage in these situations but not in the case of an attack by a blogger?"

#### Think again.

Mainstream news sources, public officials, and politicians reach the people who will benefit most from understanding your research and its implications.

### Other Resources and Tools

Remember that you are not alone. UCS has worked with many of the following groups in defending scientists who have been harassed. These organizations can help you defend yourself against attacks.

#### Where to Look for Help

- The Center for Science and Democracy at the Union of Concerned Scientists works to restore the essential role of science, evidence-based knowledge, and constructive debate in the U.S. policy-making process. To be successful, we must build the capacity of scientists to respond to harassment. Learn more at www.ucsusa.org/ scienceanddemocracy.
- The American Association of University Professors, with 47,000-plus members, works to advance academic freedom and shared university governance, to define fundamental values and standards for higher education, and to ensure higher education's contribution to the common good. The AAUP has worked with UCS to defend researchers from political attacks. See <a href="https://www.aaup.org">www.aaup.org</a>.
- The American Civil Liberties Union defends individual rights and liberties guaranteed by the U.S. Constitution.
   The ACLU has worked with UCS to defend climate scientists from subpoenas in Virginia. See www.aclu.org.
- The Climate Science Legal Defense Fund believes
  that legal claims against one scientist or institution can
  threaten science as a whole. The fund has defended
  climate scientists who have been dragged into litigation,
  and has acted aggressively to protect the interests of
  science. See www.climatesciencedefensefund.org.
- The Climate Science Rapid Response Team is a matchmaking service that connects climate scientists with lawmakers and the media. The group is committed to providing high-quality information quickly to media and government officials. See www.climaterapidresponse.org.
- Public Employees for Environmental Responsibility is
  a national alliance of local, state, and federal professionals
  who work on natural resources. Among other objectives,
  PEER defends and strengthens the legal rights of public
  employees who speak out about resource management and
  environmental protection. The organization provides free
  legal assistance if needed. In addition, PEER operates the
  Climate Science Legal Defense Fund. See www.peer.org.

- **Your scientific society** or university associations such as the American Council on Education can speak out in your defense in the media or the courts.
- Your department head, organizational leadership, faculty senate, public relations office, or Freedom of Information Act representative may be able to offer you additional support.

#### **Tools**

- The UCS Science Network. This community of more than 17,000 scientists, engineers, economists, public health specialists, and other experts across the country is working to educate the public and inform decisions critical to our health, safety, and environment. In addition to public engagement activities, you'll receive invitations to online and in-person events designed to help you become a more effective science advocate. Learn more and sign up at <a href="https://www.ucsusa.org/sciencenetwork">www.ucsusa.org/sciencenetwork</a>, and connect with us on Twitter at <a href="https://www.twitter.com/SciNetUCS">www.twitter.com/SciNetUCS</a>.
- A Scientist's Guide to Talking with the Media. This easy-to-use book from UCS draws on the authors' expertise in public relations and journalism to help researchers talk about their work and its importance in their own terms. The book provides tips on how to translate abstract concepts into concrete metaphors, craft sound bites, and prepare for interviews. The authors explain how to become a reporter's trusted source on controversial issues. See <a href="https://www.ucsusa.org/scientistsmediaguide">www.ucsusa.org/scientistsmediaguide</a> for the book and <a href="https://www.ucsusa.org/deskreference">www.ucsusa.org/deskreference</a> for a desk reference describing the book.
- **Google alerts.** To set up key-word searches for your name and related terms, go to *www.google.com/alerts*. Google will email you when the terms show up in newspaper articles, major blogs, or other locations on the Internet.