

The UCS Scientific Integrity Curriculum Guide: Lecture Slide Sources

Note: Most of the webpages cited are on the Union of Concerned Scientists (UCS) website. Those pages contain thorough references to the primary sources, so the links listed below can lead you to a wealth of related information.

I. Two Day Lecture Presentation

Federal Science – Compromised by Politics

- Examples of this collection of instances can be found on the UCS A to Z Guide to Political Interference in Science, online at www.ucsusa.org/atoz.
- UCS. Scientific Freedom and the Public Good. Online at http://www.ucsusa.org/scientific_integrity/restoring/scientificfreedom.html.

Example: Lead in Children’s Lunchboxes

- UCS. “Lb: Federal agency fails to protect children from lead lunches.” Online at http://www.ucsusa.org/scientific_integrity/interference/children-not-protected-from-lead-lunches.html.
- Center for Environmental Health. Online at <http://www.cehca.org/about.htm>
- The Environmental Protection Agency. Lead in paint, dust, and soil. Online at <http://www.epa.gov/lead/index.html>.

Interference Example: Climate Change

- Intergovernmental Panel on Climate Change. Online at <http://www.ipcc.ch>.
- UCS. “Climate change research distorted and suppressed.” Online at http://www.ucsusa.org/scientific_integrity/interference/climate-change.html.
- UCS. 2007. *Atmosphere of pressure: Political interference in federal climate science*. Online at http://www.ucsusa.org/scientific_integrity/interference/atmosphere-of-pressure.html.
- UCS. “Ch: Hushing up the health hazards of climate change.” Online at http://www.ucsusa.org/scientific_integrity/interference/censoring-health-hazards.html.
- ABC News. 2006. “Poll: Americans see a climate problem.” March 26. Online at <http://www.time.com/time/nation/article/0,8599,1176967,00.html>.
- The Pew Research Center for the People and the Press. 2006. “Little consensus on global warming—partisanship drives opinion.” July 12. Online at <http://people-press.org/reports/display.php3?ReportID=280>.

Censorship and Suppression

- *Clear Skies Initiative:*
UCS. “Q: Multiple air pollutants information censored.” Online at http://www.ucsusa.org/scientific_integrity/interference/multiple-air-pollutants.html.
- *Antidepressants and Children:*

- G. Harris. 2004. "Expert kept from speaking at antidepressant hearing." *New York Times*, April 16.
- S. Vedantam. 2004. "FDA told its analyst to censor data on antidepressants." *Washington Post*, September 24.
- *Vioxx*:
UCS. "X: FDA's drug safety system fails to protect public." Online at http://www.ucsusa.org/scientific_integrity/interference/vioxx.html.
 - *Bull Trout*:
UCS. "B: Suppressing analyses on bull trout habitat." Online at http://www.ucsusa.org/scientific_integrity/interference/endangered-species-florida-panther-bull-trout-trumpeter-swans.html#Trout.
 - *Endangered Salmon*:
UCS. "Sa: Deleting scientific advice on endangered salmon." Online at http://www.ucsusa.org/scientific_integrity/interference/deleting-scientific-advice-on-endangered-salmon.html.

False or Inaccurate Science

- *Breast Cancer and Abortion*:
UCS. "Bc: Scientific knowledge on breast cancer distorted." Online at http://www.ucsusa.org/scientific_integrity/interference/breast-cancer.html.
- *Lead Content in Vinyl Lunchboxes*:
Center for Environmental Health. "Lead in children's lunchboxes." Online at <http://www.cehca.org/lunchboxes.htm>.

Distortion of Scientific Advice

- *Scientific Advisory Panels Compromised and Marginalized*:
UCS. "Re: Underqualified nominee for FDA Reproductive Health Advisory Committee." Online at http://www.ucsusa.org/scientific_integrity/interference/breast-cancer.html.
UCS. "Lp: Lead poisoning prevention panel influenced by industry." Online at http://www.ucsusa.org/scientific_integrity/interference/lead-poisoning-prevention-panel.html.
UCS. "St: HHS censors STD panel at CDC conference." Online at http://www.ucsusa.org/scientific_integrity/interference/sexually-transmitted-disease.html.
UCS. "Nn: National Nuclear Security Administration panel dismissed." Online at http://www.ucsusa.org/scientific_integrity/interference/national-nuclear-security-administration-panel.html.
- *Particulate Matter*:
UCS. "Pm: EPA air pollution decision threatens public health." Online at http://www.ucsusa.org/scientific_integrity/interference/epa-particulate-matter.html.
- *Ketek*:
UCS. "K: FDA allows pediatric trials for drug with risk of liver failure." Online at http://www.ucsusa.org/scientific_integrity/interference/ketek.html.

- *Gunnison's Prairie Dog, White-Tailed Prairie Dog, Roundtail Chub, Gunnison's Sage Grouse:*
UCS. "Systematic interference with science at Interior Department exposed." Online at http://www.ucsusa.org/scientific_integrity/interference/endangered-species-act-interference.html.
- *Florida Panther:*
UCS. "Fp: Distorting scientific knowledge on Florida panthers." Online at http://www.ucsusa.org/scientific_integrity/interference/endangered-species-florida-panther-bull-trout-trumpter-swans.html#panthers.

Indirect Politicization of Science

- UCS. "L: EPA library closings limit researchers' access to information." Online at http://www.ucsusa.org/scientific_integrity/interference/epa-library-closings.html.
- UCS. "T: What toxic chemicals are released in your neighborhood?" Online at http://www.ucsusa.org/scientific_integrity/interference/toxic-chemicals-release.html.
- UCS. "Ea: FWS Decrees the Southwestern Bald Eagle is Safe, in Spite of Science." Online at http://www.ucsusa.org/scientific_integrity/interference/fws-decrees-southwestern-bald-eagle-safe.html.
- OMB Watch. 2007. *A failure to govern: Bush's attack on the regulatory process.* Online at <http://www.ombwatch.org/article/articleview/3774>.

Broad Scope

- UCS. Scientist surveys. Online at http://www.ucsusa.org/scientific_integrity/interference/survey-summaries.html.

Specific Consequences

- *Climate Change:*
 - Intergovernmental Panel on Climate Change. Online at <http://www.ipcc.ch>.
 - UCS. "Climate change research distorted and suppressed." Online at http://www.ucsusa.org/scientific_integrity/interference/climate-change.html.
 - UCS. 2007. *Atmosphere of pressure: Political interference in federal climate science.* Online at http://www.ucsusa.org/scientific_integrity/interference/atmosphere-of-pressure.html.
 - UCS. "Ch: Hushing up the health hazards of climate change." Online at http://www.ucsusa.org/scientific_integrity/interference/censoring-health-hazards.html.
 - ABC News. 2006. "Poll: Americans see a climate problem." March 26. Online at <http://www.time.com/time/nation/article/0,8599,1176967,00.html>.

- *The Pew Research Center for the People and the Press*. 2006. “Little consensus on global warming—partisanship drives opinion.” July 12. Online at <http://people-press.org/reports/display.php3?ReportID=280>.
- *Endangered Species:*
UCS. “Systematic interference with science at Interior Department exposed.” Online at http://www.ucsusa.org/scientific_integrity/interference/endangered-species-act-interference.html.
- *Drug Safety:*
UCS. “St: HHS censors STD panel at CDC conference.” Online at http://www.ucsusa.org/scientific_integrity/interference/sexually-transmitted-disease.html.
- *FEMA Emergency Housing:*
UCS. “Ft: FEMA exposes Gulf Coast residents to formaldehyde.” Online at http://www.ucsusa.org/scientific_integrity/interference/fema-trailers.html.

Solutions and Reforms

- UCS. Scientific integrity legislative actions. Online at http://www.ucsusa.org/scientific_integrity/restoring/scientific-integrity-legislative-information-page.html.
- UCS. Solutions to restore scientific integrity in policy making. Online at http://www.ucsusa.org/scientific_integrity/restoring/protecting-scientific-integrity.html.
- UCS. Additional media policy information contained in the report *Atmosphere of Pressure*. Online at http://www.ucsusa.org/scientific_integrity/interference/atmosphere-of-pressure.html.

Example: FEMA Trailers

- UCS. “Ft: FEMA exposes Gulf Coast residents to formaldehyde.” Online at http://www.ucsusa.org/scientific_integrity/interference/fema-trailers.html.

Example: Southwestern Bald Eagle

- UCS. “Ea: FWS decrees bald eagle is safe, in spite of science.” Online at http://www.ucsusa.org/scientific_integrity/interference/fws-decrees-southwestern-bald-eagle-safe.html

Example: Particulate Matter

- UCS. “Pm: EPA air pollution decision threatens public health.” Online at http://www.ucsusa.org/scientific_integrity/interference/epa-particulate-matter.html.

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1. Science fiction cartoon: G. Blumenkrantz for the 2006 UCS Science Idol cartoon contest.

2. Contaminated culture cartoon: C. Ellies for the 2006 UCS Science Idol cartoon contest.
3. Political Science cartoon: Jesse Springer for the 2007 UCS Science Idol cartoon contest.
4. Puppeteer cartoon: A.A. Churchwell for the 2006 UCS Science Idol cartoon contest.
5. Metal jewelry photo: Center for Environmental Health. Online at <http://www.cehca.org/leadpics/lead20.html>.
6. Baby bib photo: Center for Environmental Health. <http://www.cehca.org/babybibs.htm>.
7. Tweety Bird lunchbox photo: Center for Environmental Health. Online at <http://www.cehca.org/lunchboxes.htm>.
8. Spiderman lunchbox photo: Center for Environmental Health. Online at <http://www.cehca.org/lunchboxes.htm>.
9. Lunchbox photo: A. Thompson. Online at <http://www.sxc.hu/photo/412013>.
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12. DNA scientists photo: USDA. Online at <http://www.ars.usda.gov/is/graphics/photos/k4134-6.htm>.
13. Pink flowers photo: USDA. Online at <http://www.ars.usda.gov/is/graphics/photos/k5545-17.htm>.
14. Galaxy lensing photo: National Aeronautics and Space Administration (NASA). Online at <http://grin.hq.nasa.gov/IMAGES/SMALL/GPN-2000-000886.jpg>.
15. Polar bears photo: National Oceanic and Atmospheric Administration (NOAA). Online at <http://www.photolib.noaa.gov/htmls/anim0032.htm>.
16. Grand Canyon photo: National Park Service (NPS). Online at <http://www.nps.gov/archive/grca/photos/images/T501.jpg>.
17. Geocentric model: Public domain. Online at http://en.wikipedia.org/wiki/Ptolemaic_system.
18. Inverted microscope photo: National Institutes of Health (NIH). Online at <http://media.nih.gov/imagebank/display.aspx?ID=97>.
19. Earth's interrelated systems: NASA. Online at <http://grin.hq.nasa.gov/IMAGES/SMALL/GPN-2002-000121.jpg>.
20. Blocking the Light Cartoon: Matthew Shultz for the 2007 UCS Science Idol cartoon contest.
21. Clouds of smoke photo: C. Meyer. Online at <http://www.sxc.hu/photo/688347>.
22. Iceberg photo: NOAA. Online at <http://www.photolib.noaa.gov/htmls/corp1417.htm>.
23. Glaciers cartoon: J. Smith for the 2006 UCS Science Idol cartoon contest.
24. Can you feel it now? cartoon: S. Moskowitz for the 2006 UCS Science Idol cartoon contest.
25. NIH research cartoon: J. MacLeod for the 2006 UCS Science Idol cartoon contest.
26. Censor-matic cartoon: R. Sharp for the 2006 UCS Science Idol cartoon contest.
27. Los Angeles smog photo: T. Clough. Online at <http://www.sxc.hu/photo/709616>.
28. Traffic photo: Y. Mission. Online at <http://www.sxc.hu/photo/577084>.
29. Sick photo: J. Meyer. Online at <http://www.sxc.hu/photo/386306>.
30. Red pills photo: J. Gaujardo. Online at <http://www.sxc.hu/photo/671700>.
31. Bull trout photo: NPS. Online at http://en.wikipedia.org/wiki/Image:Bull_trout.jpg.

32. Coho salmon photo: NPS. Online at http://en.wikipedia.org/wiki/Image:Coho_salmon.jpg.
33. Sanitize Data cartoon: Steve Moskowitz for the 2007 UCS Science Idol cartoon contest.
34. Breast cancer ribbon photo: C. Woroniuk. Online at <http://www.sxc.hu/photo/707124>.
35. Lunchbox photo: A. Thompson. Online at <http://www.sxc.hu/photo/412013>.
36. Advisory panel cartoon: A. Yu for the 2006 UCS Science Idol cartoon contest.
37. Gunnison's prairie dog photo: U.S. Fish and Wildlife Service (FWS). Online at <http://mountain-prairie.fws.gov/species/mammals/gunnisonprairiedog>.
38. Gunnison's sage grouse photo: R. Bennetts, NPS. Online at <http://www.mbr-pwrc.usgs.gov/id/framlst/i3092id.html>.
39. Cougar photo: D. Allynn. Online at <http://www.sxc.hu/photo/431071>.
40. Energy Efficiency/EPA Libraries cartoon. Kym Teslik for the 2007 UCS Science Idol cartoon contest.
41. White House in spring photo: L. Suriano. Online at <http://www.sxc.hu/photo/696861>.
42. Truth Cartoon: Jesse Springer for the 2007 UCS Science Idol cartoon contest.
43. Misinformation Cartoon: Jesse Springer for the 2007 UCS Science Idol cartoon contest.
44. Endangered Species Cartoon: Alejandro Yergos for the 2007 UCS Science Idol cartoon contest.
45. Washington Monument photo: Diliff (under the Creative Commons Attribution ShareAlike 2.5 license). Online at http://en.wikipedia.org/wiki/Image:Washington_Monument_Dusk_Jan_2006.jpg; license at <http://creativecommons.org/licenses/by-sa/2.5>.
46. U.S. Capitol photo: Architect of the Capitol. Online at http://www.aoc.gov/cc/photo-gallery/upload/72285_hr_1997.jpg.
47. White House in winter photo: M. Ishikawa. Online at <http://www.whitehouse.gov/president/winterwonderland/02.html>.
48. FEMA trailers photo: John Fleck/Federal Emergency Management Agency
49. Bald eagle photo: Karen Laubenstein/U.S. Fish and Wildlife Service
50. Tailpipe photo: V. Petaccio. Online at <http://www.sxc.hu/photo/632990>.
51. Smokestack photo: K. Kiser. Online at <http://www.sxc.hu/photo/117451>.
52. PM levels/Chicken Little: Richard Catron for the UCS 2007 Science Idol cartoon contest.

II. One Day Lecture Presentation

I. Text Credits

Federal Science – Compromised by Politics

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- UCS. “L: EPA library closings limit researchers’ access to information.” Online at http://www.ucsusa.org/scientific_integrity/interference/epa-library-closings.html.

- UCS. “T: What toxic chemicals are released in your neighborhood?” Online at http://www.ucsusa.org/scientific_integrity/interference/toxic-chemicals-release.html.
- UCS. “Ea: FWS Decreases the Southwestern Bald Eagle is Safe, in Spite of Science.” Online at http://www.ucsusa.org/scientific_integrity/interference/fws-decrees-southwestern-bald-eagle-safe.html.
- OMB Watch. 2007. *A failure to govern: Bush’s attack on the regulatory process*. Online at <http://www.ombwatch.org/article/articleview/3774>.

Broad Scope

- UCS. Scientist surveys. Online at http://www.ucsusa.org/scientific_integrity/interference/survey-summaries.html.

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- *Endangered Species:*
UCS. “Systematic interference with science at Interior Department exposed.” Online at http://www.ucsusa.org/scientific_integrity/interference/endangered-species-act-interference.html.
- *Drug Safety:*
UCS. “St: HHS censors STD panel at CDC conference.” Online at http://www.ucsusa.org/scientific_integrity/interference/sexually-transmitted-disease.html.
- *Air Pollution:*
UCS. “Hg: EPA ignored science when regulating power plant mercury emissions.” Online at http://www.ucsusa.org/scientific_integrity/interference/mercury-emissions.html.
- *FEMA Emergency Housing:*
UCS. “Ft: FEMA exposes Gulf Coast residents to formaldehyde.” Online at http://www.ucsusa.org/scientific_integrity/interference/fema-trailers.html.

Solutions and Reforms

- UCS. Scientific integrity legislative actions. Online at http://www.ucsusa.org/scientific_integrity/restoring/scientific-integrity-legislative-information-page.html.
- UCS. Solutions to restore scientific integrity in policy making. Online at http://www.ucsusa.org/scientific_integrity/restoring/protecting-scientific-integrity.html.
- UCS. Additional media policy information contained in the report *Atmosphere of Pressure*. Online at http://www.ucsusa.org/scientific_integrity/interference/atmosphere-of-pressure.html.

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7. Lab cultures photo: USDA. Online at <http://www.ars.usda.gov/is/graphics/photos/k5948-2.htm>.
8. DNA scientists photo: USDA. Online at <http://www.ars.usda.gov/is/graphics/photos/k4134-6.htm>.
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34. U.S. Capitol photo: Architect of the Capitol. Online at http://www.aoc.gov/cc/photo-gallery/upload/72285_hr_1997.jpg.
35. White House in winter photo: M. Ishikawa. Online at <http://www.whitehouse.gov/president/winterwonderland/02.html>.