

Effective Communication with the General Public about Science that Requires the Care and Use of Animals -- Workshop Resources (recommended by individual presenters and members of the planning committee)

Survey Findings

Australian and New Zealand Council for the Care of Animals in Research and Teaching (2022). Survey into animal research shows mixed feelings and greater transparency needed. Media release.

<https://www.scimex.org/newsfeed/survey-into-animal-research-shows-mixed-feelings-and-greater-transparency-needed>

Brunt, M.W., Kreiberg, H. & von Keyserlingk, M.A.G. Invertebrate research without ethical or regulatory oversight reduces public confidence and trust. (2022). *Humanit Soc Sci Commun* 9, 250. <https://doi.org/10.1057/s41599-022-01272-8>.

Brunt MW, Weary DM (2021) Perceptions of laboratory animal facility managers regarding institutional transparency. *PLoS ONE* 16(7): e0254279.

<https://doi.org/10.1371/journal.pone.0254279>

Brunt MW, Weary DM (2021) Public consultation in the evaluation of animal research protocols. *PLoS ONE* 16(12): e0260114. <https://doi.org/10.1371/journal.pone.0260114>

Sandgren EP, Streiffer R, Dykema J, Assad N, Moberg J (2019) Assessing undergraduate student and faculty views on animal research: What do they know, whom do they trust, and how much do they care? *PLoS ONE* 14(10): e0223375. <https://doi.org/10.1371/journal.pone.0223375>

Concerns of the Media

Strauss, M. (2018). Americans are divided over the use of animals in scientific research.

<https://policycommons.net/artifacts/617208/americans-are-divided-over-the-use-of-animals-in-scientific-research/1597981/>

Concerns of Non-Scientists

FASEB (July 2023). Research with Invertebrates and Cephalopod Research. Factsheet.

<https://www.faseb.org/getmedia/bfe84c18-a703-43ca-80f1-5c7cddd34f72/FASEB-Invertebrates-Research-fact-sheet-7-23.pdf>

FASEB (October 2020). Animal Research Saves Lives and Cures Diseases. Factsheet. https://www.faseb.org/getmedia/ad58e921-9d1c-46aa-8e37-93539aaadb58/FASEB-animal-models-fact-sheet-3_10_20.pdf

FASEB (July 2020). Biomedical Research Breakthroughs: 2010-2019. Factsheet. https://www.faseb.org/getmedia/b6b76478-3368-49e8-bcdb-b7b7739e8f59/img_OPA_FASEB-Biomed-Breakthru-fact-sheet-7-30.pdf

FASEB (March 2020). Animal Research: Addressing misconceptions and other frequently asked questions. Factsheet. <https://www.faseb.org/getmedia/07f54fd8-2801-4bed-9830-7e2e24489ceb/FASEB-Animal-FAQ-Fact-Sheet.pdf>

Morton B, Maciejewski E, Newman J, Charalambakis N (2023). Animal Research Activism Update and Recommendations to Promote Communication, Transparency, and Public Outreach About Animal Research. <https://www.faseb.org/getmedia/d6fdf327-982f-435e-8ac3-a48552ea57b0/Animal-Research-Activism-Report-2023-1-23-v2.pdf> [includes an extensive list of additional resources related to effective communication]

Inadequately Communicated Topics

Collis M, Lewis D, Nandi M, Zecharia A. (2018). Using animals in biomedical research: why education holds the key. Blogpost. <https://www.timeshighereducation.com/cn/blog/using-animals-biomedical-research-why-education-holds-key#survey-answer>

Making Communication Effective

Ford C. (October 18, 2022). How to Report on Animal Research Fairly and Transparently. Blog post. <https://www.theopennotebook.com/2022/10/18/how-to-report-on-animal-research-fairly-and-transparently/>

Communicating about NAMs

FASEB. Animal Research: Necessary for Scientific Progress. Factsheet. <https://www.faseb.org/getmedia/6d1eb49d-f819-4376-8074-4f4e859e29df/FASEB-22-Fact-Sheet-03.pdf>

Levin, L. H., and L. J. Muglia. (2022). Alternative Thinking about Animals in Research. NAM Perspectives. Commentary, National Academy of Medicine, Washington, DC.
<https://doi.org/10.31478/202211a>.

USARO

Concordat on Openness on Anima. Research in the UK <https://concordatopenness.org.uk/>

US Animal Research Openness initiative <https://www.usaro.org/>

Considerations Along the Spectrum of Openness

Brunt MW, Chatigny F. (2022) Talking things out: How institutional transparency could improve animal research. Blog post. <https://theconversation.com/talking-things-out-how-institutional-transparency-could-improve-animal-research-188683>

Carbone, Larry (2021). Open Transparent Communication about Animals in Laboratories: Dialog for Multiple Voices and Multiple Audiences. *Animals* 11(2): 368.
<https://doi.org/10.3390/ani11020368>

Clark JM, Clifford P, Jarrett W, Pekow C (2019). Communicating About Animal Research with the Public. *ILAR J* 60(1): 34-42. <https://pubmed.ncbi.nlm.nih.gov/31095690/>

Commitment to Open Science (2021)
<https://plos.org/commit-to-openness/>

Jarrett W (2017). Openness and transparency in animal research (2017). *Lab Anim* (NY) Mar 22;46(4):92-93. <https://pubmed.ncbi.nlm.nih.gov/28328899/>

Mendez, J.C., Perry, B.A.L., Heppenstall, R.J. *et al.* (2022). Openness about animal research increases public support. *Nat Neurosci* **25**, 401–403. <https://www.nature.com/articles/s41593-022-01039-z>

Mills KE, Han Z, Robbins J, Weary DM (2018) Institutional transparency improves public perception of lab animal technicians and support for animal research. *PLoS ONE* 13(2): e0193262. <https://doi.org/10.1371/journal.pone.0193262>

Morton B, Maciejewski E, Newman J, Charalambakis N (2023). Animal Research Activism Update and Recommendations to Promote Communication, Transparency, and Public Outreach About Animal Research. <https://www.faseb.org/getmedia/d6fdf327-982f-435e-8ac3-a48552ea57b0/Animal-Research-Activism-Report-2023-1-23-v2.pdf>

Ormandy EH, Weary DM, Cvek K, Fisher M, Herrmann K, Hobson-West P, McDonald M, Milsom W, Rose M, Rowan A, et al. (2019). Animal Research, Accountability, Openness and Public Engagement: Report from an International Expert Forum. *Animals*; 9(9):622.
<https://www.mdpi.com/2076-2615/9/9/622/htm> [Note: Some of the authors of this article are affiliated with animal rights groups]

Concerns of Institutional Leadership

Davis AM (2022) Universities Can Combat Misinformation By Sharing Research With the Public. Blog post. <https://www.edsurge.com/news/2022-01-31-universities-can-combat-misinformation-by-sharing-research-with-the-public>

Communicating about Ethics

Festing, S., and Wilkinson, R. (2007). The ethics of animal research: talking point on the use of animals in scientific research. *EMBO reports*, 8(6), 526-530.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2002542/>

Rollin, B. E. (2016). A Moral Science: Talking Point on the Use of Animals in Scientific Research. *The Animal Ethics Reader*, 347.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2002540/>

Consideration of Ethics

Landi, M., Everitt, J., & Berridge, B. (2021). Bioethical, reproducibility, and translational challenges of animal models. *ILAR journal*, 62(1-2), 60-65. <https://doi.org/10.1093/ilar/ilaa027>

Landi, M. S., Shriver, A. J., & Mueller, A. (2015). Consideration and checkboxes: incorporating ethics and science into the 3Rs. *Journal of the American Association for Laboratory Animal Science*, 54(2), 224-230.
<https://www.ingentaconnect.com/content/aalas/jaalas/2015/00000054/00000002/art00015>

Christopher I. Petkov, C.I., Flecknell, P., Murphy, K., Basso, M.A., Mitchell, A. S., Hartig, R., and Thompson-Iritani, S. (2022). Unified ethical principles and an animal research ‘Helsinki’ declaration as foundations for international collaboration. *Current Research in Neurobiology*, 3.
<https://www.sciencedirect.com/science/article/pii/S2665945X2200033X>

Communicating on Social Media

Bik H.M., Goldstein M.C. (2013) An Introduction to Social Media for Scientists. PLoS Biol 11(4): e1001535. <https://doi.org/10.1371/journal.pbio.1001535>

Bird, C. Talking about Science on Social Media: Facts can be distorted online, but we can work to prevent this. <https://www.bu.edu/articles/2016/communicating-science-on-social-media/>

Addressing More Generally Controversial Aspects of Research with Animals

Best Practices for Protecting Researchers and Research: Recommendations for Universities and Institutions <https://www.sfn.org/-/media/SfN/Documents/NEW-SfN/Initiatives/Animals-in-Research/Best-Practices-for-Protecting-Researchers-and-Research.pdf>

Levin, L. H., and L. J. Muglia. (2022). Alternative Thinking about Animals in Research. NAM Perspectives. Commentary, National Academy of Medicine, Washington, DC. <https://doi.org/10.31478/202211a>.

Levin LH, Reppy WA. (2015) Reforming the politics of animal research. J Med Ethics 41:563–566. <https://doi.org/10.1136/medethics-2012-101043>

Morton B, Maciejewski E, Newman J, Charalambakis N (2023). Animal Research Activism Update and Recommendations to Promote Communication, Transparency, and Public Outreach About Animal Research. <https://www.faseb.org/getmedia/d6fdf327-982f-435e-8ac3-a48552ea57b0/Animal-Research-Activism-Report-2023-1-23-v2.pdf>

Society for Neuroscience webpage on Best Practices for Protecting Researchers and Research (copyright 2023) <https://www.sfn.org/Initiatives/Animals-in-Research/Support-for-Members-and-Institutions/Best-Practices-for-Protecting-Researchers-and-Research>