

Scientists' attitudes to animal research

Nature online poll

Nature contacted registered readers in the biomedical sciences, inviting them to anonymously take part in this survey. The email gave a link to a website where respondents could answer questions. The survey was left open for four days, and a total of 1682 people responded. This is not intended to be a rigorous scientific study, but rather snapshot of views on animal research. For an analysis of this survey and related material, see www.nature.com/news/specials/animalresearch.

1. Please state the region in which you currently work.

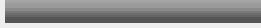
		Response Percent	Response Total
UK/Europe		45.9%	765
North America/Canada		37.5%	625
Central/South America		3.7%	62
Japan		0.2%	4
ROW/Asia		12.6%	210
Total Respondents			1666
(skipped this question)			16

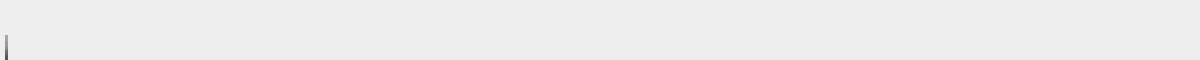
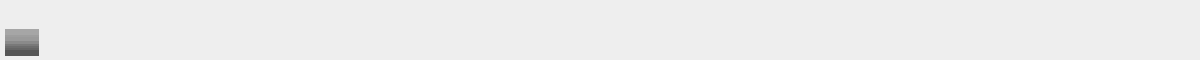
2. Please tell us which of the following is closest to your area of research:

		Response Percent	Response Total
Anatomy		0.2%	4
Biochemistry	■	7.5%	123
Bioinformatics		0.7%	11
Biotechnology	■	8.8%	144
Biophysics		0.4%	6
Cancer research	■	11.4%	188
Clinical research	■	1.4%	23
Developmental biology	■	2.6%	42
Drug discovery	■	2.6%	43
Endocrinology		0.7%	11
Genetics	■	4.4%	72
Genomics	■	1.2%	20
Immunology	■	8%	132
Microbiology	■	11.1%	183
Molecular cell biology	■	12.9%	212
Neuroscience	■	14.4%	237

Pharmacology		2.7%	45
Physiology		2.9%	48
Reproductive biology		0.9%	15
Structural biology		0.5%	9
Other (not listed)		4.5%	74
Total Respondents			1642
(skipped this question)			40

3. In which kind of institution do you work?

		Response Percent	Response Total
College/University		63.1%	1054
Industry/Corporation		11.1%	185
Privately Funded Research Institute		2.6%	43
Publicly Funded Research Institute		16.6%	278
Non-profit organization		2.9%	49

Work from home (consultant)		0.6%	10
Unemployed/Retired		1%	16
Other (not listed)		2.1%	35
Total Respondents			1670
(skipped this question)			12

4. What is your current position?

		Response Percent	Response Total
Business Consultant		0.7%	12
Graduate Student		13.3%	223
Laboratory Head		8.6%	143
Laboratory Technician		1.7%	28
Librarian/Information Scientist		0.6%	10
Marketing Manager/Director		0.2%	4

Medical Professional/Doctor		1.9%	31
Other Student		2.1%	35
Post Doctoral Fellow		13.9%	233
President/Director/CEO		1.3%	21
Professor/Lecturer		22.9%	383
Research Assistant		3.5%	59
Research Scientist		21.9%	367
Sales Manager/Director		0.2%	3
Teacher		0.8%	14
Product/Other Manager		1.6%	26
Retired/Emeritus		1.5%	25
Secondary School Teacher		0.1%	1
Unemployed		0.3%	5
Other (not listed)		2.9%	49
Total Respondents			1672
skipped this question)			10

5. Do you conduct experiments on animals?

		Response Percent	Response Total
yes		52.4%	881
no		47.6%	799
Total Respondents			1680
(skipped this question)			2

If respondent answered 'no' to question 5, they skipped straight to question 12:

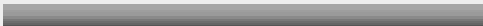
6. With what kind of animal do you do most of your work? (Please tick all that apply.)

		Response Percent	Response Total
invertebrates		9.1%	77
non-mammalian vertebrates		10.4%	88
mammals: mice / rats		82.4%	699
mammals: rabbits		10.7%	91
mammals: dogs		2%	17
mammals: pigs		3.7%	31
mammals: non-human primates		6%	51
mammals: other (not listed)		5.5%	47
Total Respondents			848

(skipped this question)

834

7. What does your work involve? (Please tick all that apply.)

		Response Percent	Response Total
observation only		15.1%	128
genetic modification		30.9%	262
surgery		43.6%	370
administering drugs		54.8%	465
administering anaesthetics		44.9%	381
taking blood/ tissue samples		77%	653
other (not listed)		26.1%	221
Total Respondents			848
(skipped this question)			834

8. Do you have any ethical misgivings about the role of animals in your research?

		Response Percent	Response Total
yes		17.9%	149
no		81.3%	677
Additional comments:		8.2%	68
Total Respondents			833
(skipped this question)			849

9. Do you feel able to freely discuss any concerns about the ethics of animal research with your peers or superiors?

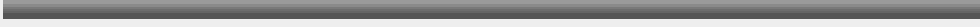
		Response Percent	Response Total
yes		93.8%	791
no		6.2%	52
Total Respondents			843
(skipped this question)			839

10. How does your institution encourage you to communicate with the general public about your work on animals?

		Response Percent	Response Total
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It encourages communication with the general public, but offers no training/assistance.		12.3%	103
It encourages communication and offers training/assistance.		16.6%	139
It encourages me not to communicate with the general public.		10.9%	91
It has not showed a preference for communication either way.		60.2%	504
Total Respondents			837
(skipped this question)			845

11. How do you discuss the research you do on animals with the general public?

		Response Percent	Response Total
Only discuss research with the general public directly (such as giving public lectures, etc.).		18.2%	152
Only discuss research with the general public via media (such as giving interviews to journalists, etc.).		4.1%	34
Discuss research with the general public both directly and via media outlets.		11.4%	95
Have not had the opportunity to discuss research with the general public.		61.6%	516
Have had the opportunity to discuss research, but have chosen not to.		4.8%	40
Total Respondents			837

(skipped this question)	845
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Everyone could answer the following questions:

12. Do you think that more discussion within the biomedical community about the use of animals in research is needed?

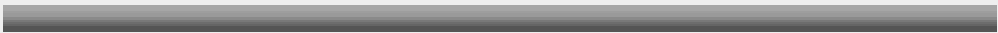
		Response Percent	Response Total
yes		71.3%	1141
no		28.7%	459
Total Respondents			1600
(skipped this question)			82

13. On a scale of 1-4 (with 1 being not at all necessary and 4 being essential), please rate how necessary you think animal research is for progressing biomedical science.

		Response Percent	Response Total
1 - not at all necessary		1.3%	21
2		5.2%	83
3		18.7%	300
4 - essential		74.8%	1201
Total Respondents			1605

(skipped this question)	77
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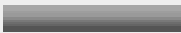
14. In the long term, would you see the elimination of animal experiments as:

		Response Percent	Response Total
a desirable and achievable goal		14.7%	235
a desirable, but unachievable goal		62.8%	1008
an undesirable goal		22.5%	361
Total Respondents			1604
(skipped this question)			78

15. Do you consider the legislation governing the use of animals in research in your country to be:

		Response Percent	Response Total
too strict		13.8%	220
not strict enough		16.3%	259
about right		69.9%	1113
Total Respondents			1592
(skipped this question)			90

16. Do you believe the animal rights movement makes it difficult for a researcher to voice a nuanced opinion on animal research (for example, one that supports most research, but has reservations about some of it)?

		Response Percent	Response Total
Yes		70.7%	1130
No		11.3%	181
Don't know		18%	287
Total Respondents			1598
(skipped this question)			84

Company: SurveyMonkey.com
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