Suggestions for Enhancing EPA's Culture of Scientific Integrity Questions (56-59)

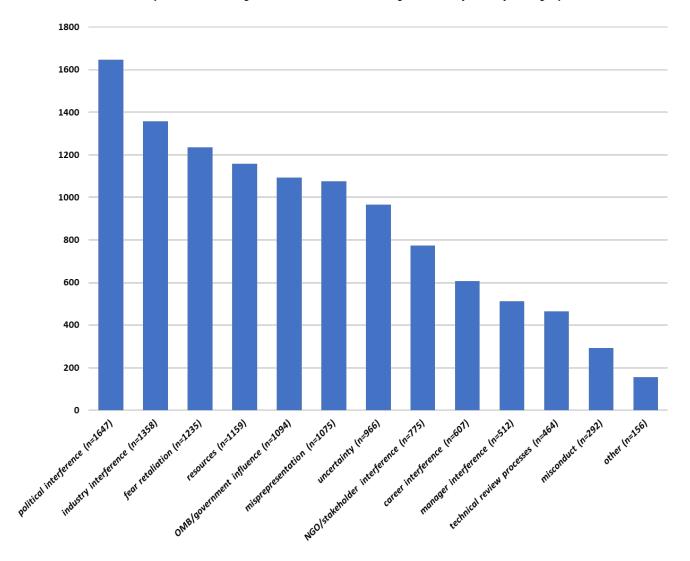
The Obstacles to Scientific Integrity and Suggestions for Improvement section was informed by both the 2016 Scientific Integrity survey and 2018 OIG survey, and new items were also developed. This section identifies the highest scientific integrity issues, useful suggestions for enhancing the culture of scientific integrity, and allows for open comment suggestions as well as sharing of any additional information not previously covered in the survey

Questions required of all participants are marked with an "R" after the question number.

| 56.(R) Currently, what do you think are the greatest obstacles to achieving a Culture of Scientific Integrity at EPA? (Select your top 5 choices and rank them from 1 to 5, with 1 being the greatest obstacle) | n | % |
|---|------|------|
| Fear of retaliation | 266 | 58 |
| Greatest obstacle | 372 | 13.9 |
| 2 nd greatest obstacle | 197 | 7.4 |
| 3 rd greatest obstacle | 195 | 7.3 |
| 4 th greatest obstacle | 185 | 6.9 |
| 5 th greatest obstacle | 286 | 10.7 |
| Not selected | 1433 | 53.7 |
| Misrepresentation of science as policy | 266 | |
| Greatest obstacle | 175 | 6.6 |
| 2 nd greatest obstacle | 263 | 9.9 |
| 3 rd greatest obstacle | 229 | 8.6 |
| 4 th greatest obstacle | 218 | 8.2 |
| 5 th greatest obstacle | 190 | 7.1 |
| Not selected | 1593 | 59.7 |
| Interference in science by political appointees across EPA | 266 | |
| Greatest obstacle | 669 | 25.1 |
| 2 nd greatest obstacle | 368 | 13.8 |
| 3 rd greatest obstacle | 248 | 9.3 |
| 4 th greatest obstacle | 205 | 7.7 |
| 5 th greatest obstacle | 157 | 5.9 |
| Not selected | 1021 | 38.3 |
| Interference in science by career leaders across EPA | 266 | |
| Greatest obstacle | 60 | 2.2 |
| 2 nd greatest obstacle | 135 | 5.1 |
| 3 rd greatest obstacle | 137 | 5.1 |
| 4 th greatest obstacle | 164 | 6.1 |
| 5 th greatest obstacle | 111 | 4.2 |
| Not selected | 2061 | 77.2 |
| Lack of appropriate resources (staff and/or funding) | 266 | |
| Greatest obstacle | 302 | 11.3 |
| 2 nd greatest obstacle | 205 | 7.7 |
| 3 rd greatest obstacle | 231 | 8.7 |
| 4 th greatest obstacle | 197 | 7.4 |
| 5 th greatest obstacle | 224 | 8.4 |
| Not selected | 1509 | 56.6 |
| Mischaracterization of scientific uncertainty | 266 | |
| Greatest obstacle | 119 | 4.5 |
| 2 nd greatest obstacle | 186 | 7.0 |
| 3 rd greatest obstacle | 213 | 8.0 |
| 4 th greatest obstacle | 225 | 8.4 |
| 5 th greatest obstacle | 223 | 8.4 |
| Not selected | 1702 | 63.8 |
| Interference in science by managers/supervisors within EPA | 266 | |
| Greatest obstacle | 58 | 2.2 |
| 2 nd greatest obstacle | 84 | 3.1 |
| 2 B. Catest obstacle | 5. | 9.1 |

| 3 rd greatest obstacle | 126 | 4.7 |
|--|------|------|
| 4 th greatest obstacle | 125 | 4.7 |
| 5 th greatest obstacle | 119 | 4.5 |
| Not selected | 2156 | 80.8 |
| Inappropriate influence of nongovernmental and/or external stakeholders (suc | | |
| advocacy groups) | | 68 |
| Greatest obstacle | 75 | 2.8 |
| 2 nd greatest obstacle | 147 | 5.5 |
| 3 rd greatest obstacle | 193 | 7.2 |
| 4 th greatest obstacle | 208 | 7.8 |
| 5 th greatest obstacle | 152 | 5.7 |
| Not selected | 1893 | 71.0 |
| Inappropriate influence of industry | 26 | 68 |
| Greatest obstacle | 213 | 8.0 |
| 2 nd greatest obstacle | 339 | 12.7 |
| 3 rd greatest obstacle | 327 | 12.3 |
| 4 th greatest obstacle | 286 | 10.7 |
| 5 th greatest obstacle | 193 | 7.2 |
| Not selected | 1310 | 49.1 |
| Inappropriate influence of the Office of Management and Budget or other Whi | ite | |
| House offices, or other governmental agencies | 26 | 68 |
| Greatest obstacle | 191 | 7.2 |
| 2 nd greatest obstacle | 270 | 10.1 |
| 3 rd greatest obstacle | 230 | 8.6 |
| 4 th greatest obstacle | 232 | 8.7 |
| 5 th greatest obstacle | 171 | 6.4 |
| Not selected | 1574 | 59.0 |
| Failures of internal and/or external peer or technical review practices (including | g | |
| advisory committees) | 26 | 68 |
| Greatest obstacle | 43 | 1.6 |
| 2 nd greatest obstacle | 70 | 2.6 |
| 3 rd greatest obstacle | 84 | 3.1 |
| 4 th greatest obstacle | 101 | 3.8 |
| 5 th greatest obstacle | 166 | 6.2 |
| Not selected | 2204 | 82.6 |
| Scientific misconduct | | 68 |
| Greatest obstacle | 51 | 1.9 |
| 2 nd greatest obstacle | 33 | 1.2 |
| 3 rd greatest obstacle | 51 | 1.9 |
| 4 th greatest obstacle | 61 | 2.3 |
| 5 th greatest obstacle | 96 | 3.6 |
| Not selected | 2376 | 89.1 |
| Other, please specify | | 68 |
| Greatest obstacle | 72 | 2.7 |
| 2 nd greatest obstacle | 20 | 0.7 |
| 3 rd greatest obstacle | 17 | 0.6 |
| 4 th greatest obstacle | 8 | 0.3 |
| 5 th greatest obstacle | 39 | 1.5 |

What do you think are the greatest obstacles to achieving a Culture of Scientific Integrity at EPA?



57.(R) Which of the following would be most useful for enhancing the culture of scientific integrity at EPA? (Select your top 5 choices and rank them from 1 to 5, with 1 being the most useful)

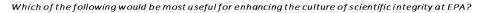
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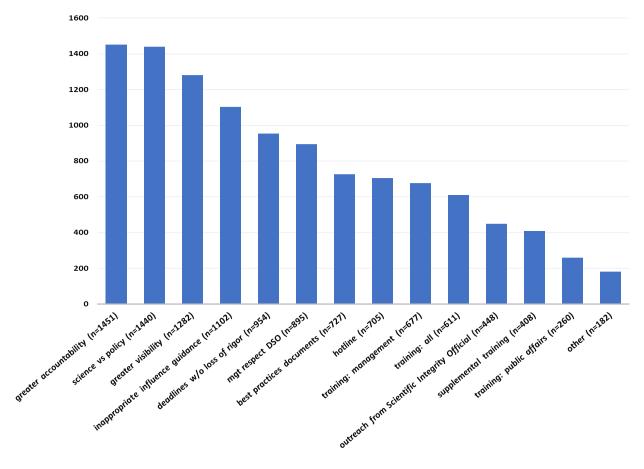
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| Greater visible commitment to scientific integrity by decision- makers across EPA | 2668 | |
|--|--------------|------|
| Most useful | 502 | 18.8 |
| 2 nd most useful | 235 | 8.8 |
| 3 rd most useful | 161 | 6.0 |
| 4 th most useful | 156 | 5.8 |
| 5 th most useful | 228 | 8.5 |
| Not selected | 1386 | 51.9 |
| Decision-makers across EPA held accountable for violations of the Scientific Integrity | | |
| Policy | 2668 | |
| Most useful | 587 | 22.0 |
| 2 nd most useful | 389 | 14.6 |
| 3 rd most useful | 144 | 5.4 |
| 4 th most useful | 164 | 6.1 |
| 5 th most useful | 167 | 6.3 |
| Not selected | 1217 | 45.6 |
| Finding ways to meet deadlines without a loss of scientific rigor | 2668 | |
| Most useful | 203 | 7.6 |
| 2 nd most useful | 208 | 7.8 |
| 3 rd most useful | 214 | 8.0 |
| 4 th most useful | 178 | 6.7 |
| 5 th most useful | 151 | 5.7 |
| Not selected | 1714 | 64.2 |
| Manager/supervisor(s) respect differing scientific opinions as a legitimate and | | |
| necessary part of the scientific process | <i>2</i> 668 | |
| Most useful | 136 | 5.1 |
| 2 nd most useful | 212 | 7.9 |
| 3 rd most useful | 228 | 8.5 |
| 4 th most useful | 187 | 7.0 |
| 5 th most useful | 132 | 4.9 |
| Not selected | 1773 | 66.5 |
| Mandatory training on scientific integrity for all staff every two years | <i>2</i> 668 | |
| Most useful | 93 | 3.5 |
| 2 nd most useful | 90 | 3.4 |
| 3 rd most useful | 140 | 5.2 |
| 4 th most useful | 142 | 5.3 |
| 5 th most useful | 146 | 5.5 |
| Not selected | 2057 | 77.1 |
| Mandatory training on scientific integrity tailored to upper management | <i>2</i> 668 | |
| Most useful | 81 | 3.0 |
| 2 nd most useful | 161 | 6.0 |
| 3 rd most useful | 184 | 6.9 |
| 4 th most useful | 141 | 5.3 |
| 5 th most useful | 110 | 4.1 |
| Not selected | 1991 | 74.6 |

| Mandatory training on scientific integrity tailored to public affairs staff | 2668 | |
|---|------|------|
| Most useful | 21 | 0.8 |
| 2 nd most useful | 50 | 1.9 |
| 3 rd most useful | 65 | 2.4 |
| 4 th most useful | 68 | 2.5 |
| 5 th most useful | 56 | 2.1 |
| Not selected | 2408 | 90.3 |
| Creation of clear guidance about science versus policy | 2668 | |
| Most useful | 276 | 10.3 |
| 2 nd most useful | 337 | 12.6 |
| 3 rd most useful | 358 | 13.4 |
| 4 th most useful | 285 | 10.7 |
| 5 th most useful | 184 | 6.9 |
| Not selected | 1228 | 46.0 |
| Creation of clear guidance about inappropriate influence on science | 2668 | |
| Most useful | 121 | 4.5 |
| 2 nd most useful | 244 | 9.1 |
| 3 rd most useful | 292 | 10.9 |
| 4 th most useful | 271 | 10.2 |
| 5 th most useful | 174 | 6.5 |
| Not selected | 1566 | 58.7 |
| Best practices documents on topics related to scientific integrity | 2668 | |
| Most useful | 95 | 3.6 |
| 2 nd most useful | 112 | 4.2 |
| 3 rd most useful | 161 | 6.0 |
| 4 th most useful | 168 | 6.3 |
| 5 th most useful | 191 | 7.2 |
| Not selected | 1941 | 72.8 |
| More outreach from the Scientific Integrity Official | 2668 | |
| Most useful | 53 | 2.0 |
| 2 nd most useful | 56 | 2.1 |
| 3 rd most useful | 86 | 3.2 |
| 4 th most useful | 104 | 3.9 |
| 5 th most useful | 149 | 5.6 |
| Not selected | 2220 | 83.2 |
| Supplemental training on topics related to scientific integrity | 2668 | |
| Most useful | 43 | 1.6 |
| 2 nd most useful | 58 | 2.2 |
| 3 rd most useful | 59 | 2.2 |
| 4 th most useful | 111 | 4.2 |
| 5 th most useful | 137 | 5.1 |
| Not selected | 2260 | 84.7 |
| A hotline maintained by the Scientific Integrity Program to report allegations of | | |
| lapses in scientific integrity | 2668 | |
| Most useful | 89 | 3.3 |
| 2 nd most useful | 107 | 4.0 |
| 3 rd most useful | 120 | 4.5 |
| 4 th most useful | 161 | 6.0 |

| 5 th most useful | 228 | 8.5 |
|-----------------------------|------|------|
| Not selected | 1963 | 73.6 |
| Other | 2668 | |
| Most useful | 85 | 3.2 |
| 2 nd most useful | 25 | 0.9 |
| 3 rd most useful | 17 | 0.6 |
| 4 th most useful | 18 | 0.7 |
| 5 th most useful | 37 | 1.4 |
| Not selected | 2486 | 93.2 |





58. Based on your understanding and experiences, please share any suggestions that you have for improving scientific integrity at EPA.

Answers to open-ended questions are being separately analyzed and these results will be made available when this analysis is complete.

59. If there are other scientific integrity concerns that have not been covered in the survey, please feel free to discuss them here:

Answers to open-ended questions are being separately analyzed and these results will be made available when this analysis is complete.