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TO: Dionne Toombs  
Director  
Office of the Chief Scientist

FROM: Virginia E. B. Rone  
Assistant Inspector General for Data Sciences

SUBJECT: Survey of USDA Scientists Regarding Scientific Integrity

In April 2017, the Office of Inspector General's (OIG) Office of Data Sciences (ODS) released a report that presented the results of the survey we conducted in 2016. The survey was developed to support OIG with Audit Report 50601-0006-31, *Reviewing the Integrity of USDA's Scientific Research Program*. The purpose of the survey was to assess whether U.S. Department of Agriculture (USDA) scientists perceive they can perform and communicate all aspects of their research assignments or projects without inappropriate influence or political interference. The survey was sent to 2,212 USDA research-grade scientists in 4 USDA agencies: the Agricultural Research Service, the Economic Research Service, the Forest Service, and the Natural Resources Conservation Service.

In May, OIG began a further review of that report, and determined that not all aspects of the Quality Control Process, which follows the OIG and USDA Information Quality Guidelines, were adequately completed and documented. We removed the report from our website to complete the review. While we found the report to be substantially correct, we found that there were percentages and tables that needed additional explanation due to the skip logic used in the survey, and we took steps to ensure that the report clearly protected the confidentiality of the respondents. As stated at the December 12, 2017 Audit Exit Conference, the completion of the related audit was delayed pending completion of the Quality Control Process. Attached is the updated final report for your use. This report contains publicly available information and will be posted in its entirety to our website.

Attachment

cc: (with attachments)

Chavonda Jacobs-Young, Acting Under Secretary for Research, Education, and Economics, and Administrator, Agricultural Research Service;

Dan Jiron, Acting Deputy Under Secretary for Natural Resources and Environment;

Robert Johansson, Acting Under Secretary for Farm Production and Conservation;

Mary Bohman, Administrator, Economic Research Service;

Tony Tooke, Chief, Forest Service;

Leonard Jordan, Acting Chief, Natural Resources Conservation Service



# **Survey of USDA Scientists Regarding Scientific Integrity**

**Methodology, Analysis, and Results**

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## Executive Summary

The Office of Inspector General (OIG) conducted a survey of scientists employed by the Department of Agriculture (USDA) in the summer of 2016 as a part of an audit that assessed whether USDA scientists perceive they have, within reason, an unhindered ability to perform and communicate all aspects of their research assignments or projects. The audit also assessed whether the USDA Scientific Integrity Policy (SIP) (Departmental Regulation (DR) 1074-001), issued in 2013,<sup>1</sup> provides sufficient controls to ensure that the scientific research results are published and communicated based on actual research performed and supported conclusions without undue interference. OIG sent the survey to 2,212 USDA research-grade scientists in 4 USDA agencies: the Agricultural Research Service (ARS), the Economic Research Service (ERS), the Forest Service (FS), and the Natural Resources Conservation Service (NRCS). Below, we highlight several observations concerning their responses, which we describe in greater detail in the pages that follow.

### Results highlights

- ◆ 1,349 scientists started the survey and 1,312 finished it (61 and 59 percent of the population, respectively).
- ◆ 1,102 out of 1,337 scientists (82 percent) were aware of USDA's 2013 SIP, while 18 percent of scientists were not aware of the policy.
- ◆ 453 out of 1,104 scientists (41 percent) indicated they (a) did not have training for the 2013 SIP or (b) were not sure / did not remember having had training, or both.
- ◆ The majority of scientists who recalled receiving training on the 2013 SIP believed that the training was adequate and sufficient to familiarize them with the policy; some scientists believed that short and simple SIP training and reminder trainings could be beneficial.
- ◆ The majority of the scientists with USDA experience prior to the May 2013 SIP—949 out of 1,113<sup>2</sup> (85 percent)—offered no opinion as to whether the 2013 SIP has benefitted them, or stated that the SIP was not beneficial.
- ◆ Most scientists—1,099 out of 1,332 (83 percent)—believed their agencies promoted a culture of scientific integrity; when compared with scientists who did not agree, those who thought integrity was promoted were generally more likely to see benefits from the SIP.
- ◆ Most scientists have not had problems with scientific integrity in their research in recent years; since implementation of the 2013 SIP, 29 scientists (2 percent) indicated that entities external to USDA had pressured them to alter their work and 42 scientists (3 percent) indicated a Department official had pressured them to omit or significantly alter their research findings for reasons other than technical merit.

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<sup>1</sup> On November 18, 2016, USDA issued a revised version of the Department's SIP (DR 1074-001). The survey, which was sent out on July 12, 2016, and closed on August 12, 2016, captured scientists' perceptions regarding the previous version of the policy issued in 2013.

<sup>2</sup> Of the 1,113 respondents who provided their opinion to Question 29, 167 indicated that they were not aware of the 2013 SIP in Question 11. Of the participants who were aware of the policy, 83 percent believed that either the 2013 SIP did not benefit them or had no opinion.

- ◆ Of those scientists who felt pressure to alter their research (referenced in the previous bullet), most did not report the incident because of fear of retaliation, reprimand, or reprisal.
- ◆ 1,067 out of 1,318 scientists (81 percent) agreed or strongly agreed that their research findings had not been altered or suppressed for reasons other than technical merit, while 9 percent disagreed or strongly disagreed.
- ◆ 792 out of 1,312 scientists (60 percent) were unaware of how to file a complaint under the SIP's provisions; 765 out of 1,312 scientists (58 percent) did not know who to contact with scientific integrity concerns.

## I. Introduction

In March of 2016, the Department of Agriculture's (USDA) Office of Inspector General (OIG) initiated a review of the integrity of USDA's scientific research program as a result of a whistleblower complaint filed in 2014 in which a researcher alleged managerial violations of the Department's Scientific Integrity Policy (SIP).<sup>3</sup> The whistleblower was public with the allegations through the Public Employees for Environmental Responsibility (PEER) website, PEER litigation against USDA, and related media coverage." Additionally, between May 2015 and April 2016, OIG received a total of eight complaints regarding scientific integrity violations. OIG did not perform follow-up work on any of these complaints because of their similarities and the ongoing litigation. OIG engaged in an audit - *Reviewing the Integrity of USDA's Scientific Research Program* - to determine whether those individuals conducting scientific research in USDA perceive they have, within reason, an unhindered ability to perform and communicate all aspects of their research assignments or projects.<sup>4</sup>

The survey presented in this paper was developed to support OIG with the *Reviewing the Integrity of USDA's Scientific Research Program* audit, which will be reported separately. The survey's questions were designed to gather data to assess the first audit objective: whether "scientists conducting scientific research in USDA perceive they have, within reason, an unhindered ability to perform and communicate all aspects of their research assignments or projects." An additional audit objective (secondary to the focus of the survey) was to assess whether USDA's SIP has sufficient controls to ensure that scientific research results are published and communicated without undue interference and are based on actual research performed and the supported conclusions.

In 2009, Federal departments and agencies began developing SIPs as a result of a March 9, 2009, presidential memorandum, disseminated to instill and ensure scientific integrity across all Federal agencies.<sup>5</sup> The Secretary of Agriculture established USDA's SIP on August 5, 2011; it was updated on May 10, 2013.<sup>6</sup>

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<sup>3</sup> "USDA Departmental Regulation DR 1074-001 establishes the USDA Scientific Integrity Policy and provides instruction and guidance to Departmental leadership, employees and contractors to ensure the highest level of integrity in all aspects of the Department's involvement in scientific and technical processes and analysis. It includes guidance to decision makers as they develop public policies based on sound science relevant to food, agriculture, natural resources, rural development, and related issues. This information will ensure public confidence by articulating the principles of scientific integrity and roles and responsibilities of all USDA employees, including career staff and political appointees, in maintaining these principles within the Department of Agriculture." *USDA Scientific Integrity Policy Handbook*, July 10, 2013. For additional information regarding USDA's SIP, please visit: USDA-OCS, *Scientific Integrity and Research Misconduct* (Sept. 20, 2017), <https://www.usda.gov/our-agency/staff-offices/office-chief-scientist-ocs/scientific-integrity-and-research-misconduct>.

<sup>4</sup> Audit Report 50601-0006-31, *Reviewing the Integrity of USDA's Scientific Research Program*.

<sup>5</sup> Memorandum for the Heads of Executive Departments and Agencies Regarding Scientific Integrity (Mar. 9, 2009), 74 Fed. Reg. 10671 (Mar. 11, 2009).

<sup>6</sup> On November 18, 2016, USDA issued a revised version of the Department's SIP (DR 1074-001). The survey, which was sent out on July 12, 2016, and closed on August 12, 2016, captured scientists' perceptions regarding the previous version of the policy issued in 2013.

## II. Survey Methodology

The director of the Office of the Chief Scientist informed us that *research-grade scientists* were scientists most affected by the SIP. Therefore, we chose those scientists because they fell under the *Research Grade Evaluation Guide* (RGEG), which requires them to publish and communicate their research work. Through discussion with managers in OIG Audit, we chose to survey USDA research-grade scientists within a range of responsibility levels along the General Schedule (GS) for pay (GS 11, GS 12, GS 13, GS 14, GS 15), Senior Level Scientific or Professional (SL/ST), and Senior Science and Technology Service (SSTS), as these levels reflect the population who may share similar experiences as the one(s) making the allegations mentioned above. These scientists came from the following four agencies: the Agricultural Research Service (ARS), with 1,583 researchers; the Economic Research Service (ERS), with 127 researchers; the Forest Service (FS), with 498 researchers; and the Natural Resources Conservation Service (NRCS), with 4 researchers.<sup>7</sup> The survey population totaled 2,212 research-grade scientists.

The audit team obtained the universe of research-grade scientists from human resource officials in the respective agencies. OIG's Office of Data Sciences (ODS), in conjunction with OIG's Office of Audit, drafted a survey questionnaire to address the first audit objective.<sup>8</sup> Our survey included a total of 57 questions—multiple choice and open-ended—where scientists could write in free form and share what they chose. Not all scientists had to answer all 57 questions. The survey included survey skip-logic to allow questions to be skipped based on previous answers.<sup>9</sup> We used SurveyMonkey to develop, design, and administer the survey.<sup>10</sup> We shared the questions with officials at each of our four subject agencies and asked for feedback. We then administered the survey to a pilot test group of 16 scientists from the selected agencies to check for content, interpretation and terminology, flow, logical structure, and time to complete. We met with the pilot group to get their feedback, and we incorporated their suggestions into the survey design.

In advance of the survey, USDA's Chief Scientist issued a memo on July 8, 2016, encouraging participation by Department scientists. Via an email invitation through SurveyMonkey containing a survey link, we sent the final version of the survey to the population on July 12, 2016.<sup>11</sup> Participation in the survey was completely voluntary and responses were anonymous. The survey closed on August 12, 2016. Participants who had not taken the survey were sent reminder emails periodically:

**First** reminder: sent to 1,491 contacts on July 19, 2016

**Second** reminder: sent to 1,170 contacts on July 26, 2016

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<sup>7</sup> Because of the very small population number of NRCS scientists, if NRCS employees responded to questions presented in parts 4 through 11 of section IV, their responses are not identified.

<sup>8</sup> See page 5, second paragraph, for audit objective.

<sup>9</sup> For a full version of the survey, please see Appendix C.

<sup>10</sup> SurveyMonkey is an online survey development cloud-based software.

<sup>11</sup> A copy of the invitation email is presented in Appendix B.

**Third** reminder: sent to 1,018 contacts on August 2, 2016

**Fourth** and final reminder: sent to 914 contacts on August 9, 2016

**Fifth** message: sent on August 9, 2016, to 43 contacts who had begun the survey, but had not completed it

After the survey closed, data were gathered, cleaned, and analyzed.<sup>12</sup> We conducted this analysis following ODS standards on planning, statistical analysis, and quality review of our findings. The following sections present the data analysis work and findings.

### **III. Survey Representativeness**

#### **1. Survey Population and Participation**

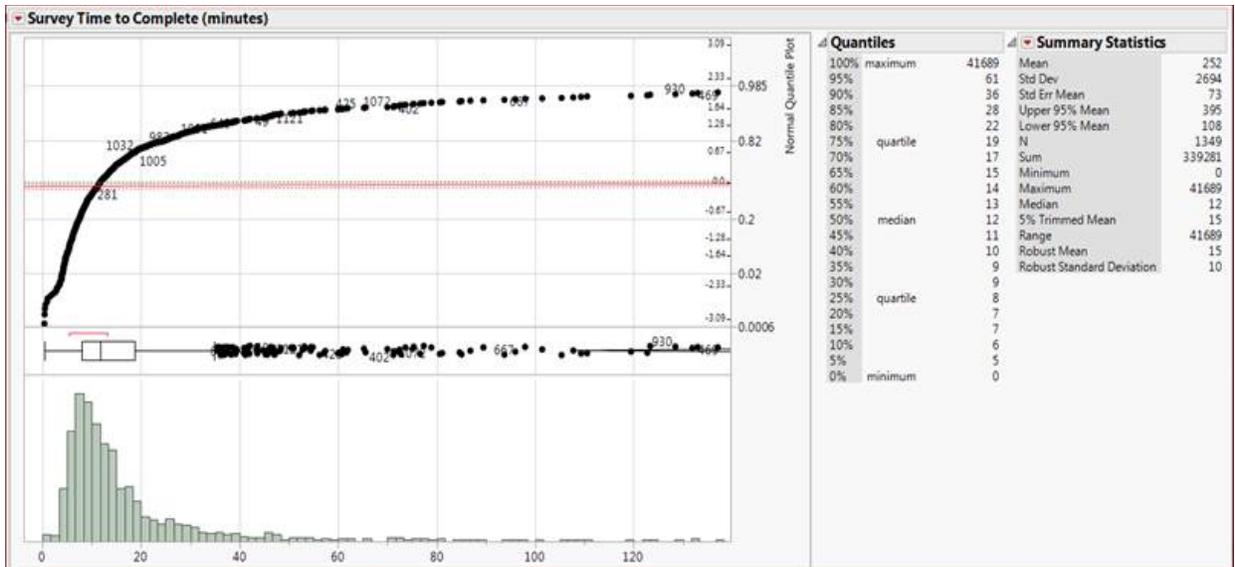
Our survey was sent to 2,212 research-grade scientists at 4 USDA agencies: ARS, FS, ERS, and NRCS. Of these, 1,349 (61 percent) responded to the survey's first question: "Do you participate in scientific research that may result in communicating the findings/outcomes/results to others outside their agency." Of these, seven answered "No" to this qualifying question and were automatically taken to the final page. Thus, these seven—and also one who answered yes to the first question—did not respond to the subsequent questions.

Ninety-eight percent of the 1,342 scientists finished the survey in its entirety. Eighty percent of the scientists took 6 to 36 minutes to complete the survey; 5 percent took more than an hour; and 5 percent took less than 5 minutes.<sup>13</sup>

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<sup>12</sup> Data cleaning is the process of checking, detecting, and correcting, if necessary, corrupt or inaccurate data.

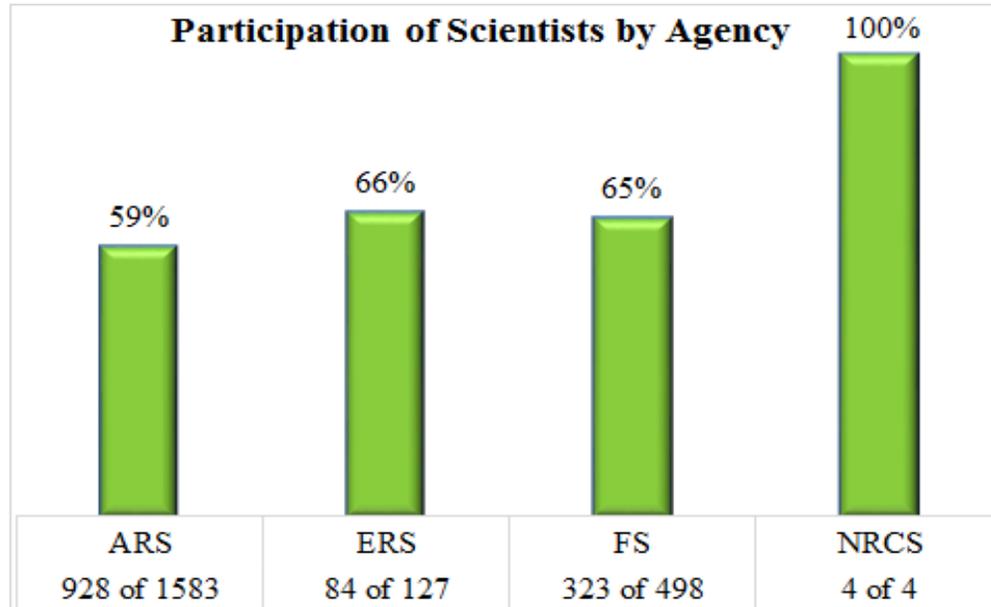
<sup>13</sup> The 5 percent of participants who took less than 5 minutes includes the seven scientists who were prompted not to complete the survey.



We sent this survey to a population of 2,212 scientists. Those who responded represent a self-selected sample of participants. This self-selected sample may not be equivalent to a representative sample, so non-response error may be introduced in our data. For this reason, we are not including a margin of error for any percentage provided in the analysis, nor are we making projections to the entire population.

## 2. Survey Responses

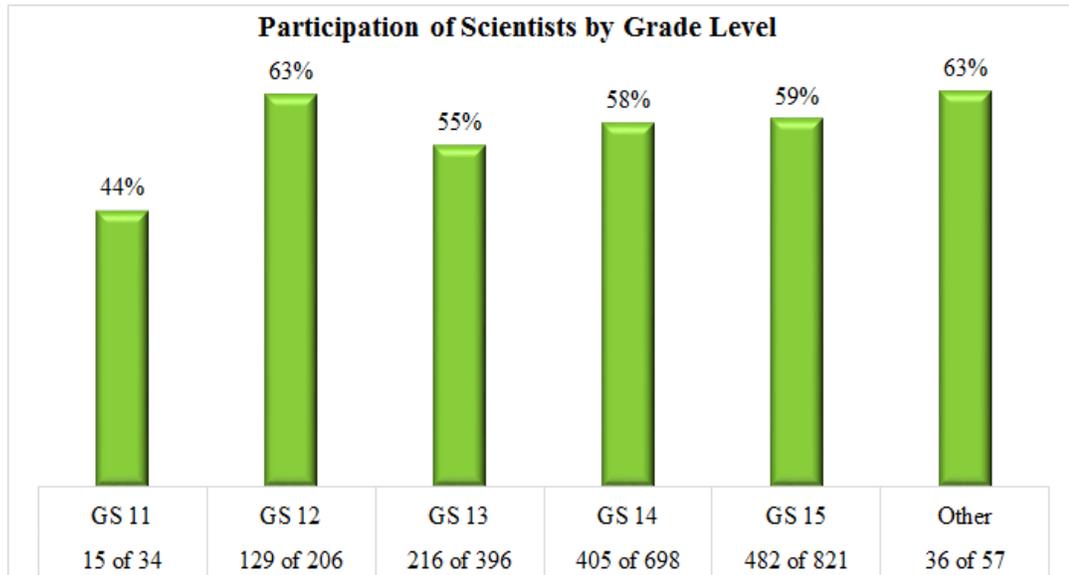
All four NRCS scientists and about 60 percent of the rest of our population responded to the survey. The chart below compares response rates across agencies.<sup>14</sup>



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<sup>14</sup> In addition to the 1,339 respondents' agencies illustrated in this chart, 2 respondents selected "Other" and specified "USDA." (See Appendix A, Question 2 table.)

The next chart compares response rates across grade levels.<sup>15</sup>



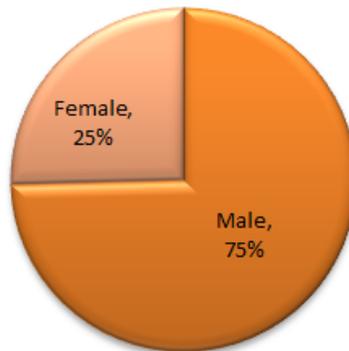
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<sup>15</sup> Of the 36 respondents labeled “Other,” 31 are ST, 1 is an SSTS, and 4 are unspecified. (See the Question 55 table in Appendix A for more on the 1,283 responses to this optional question.)

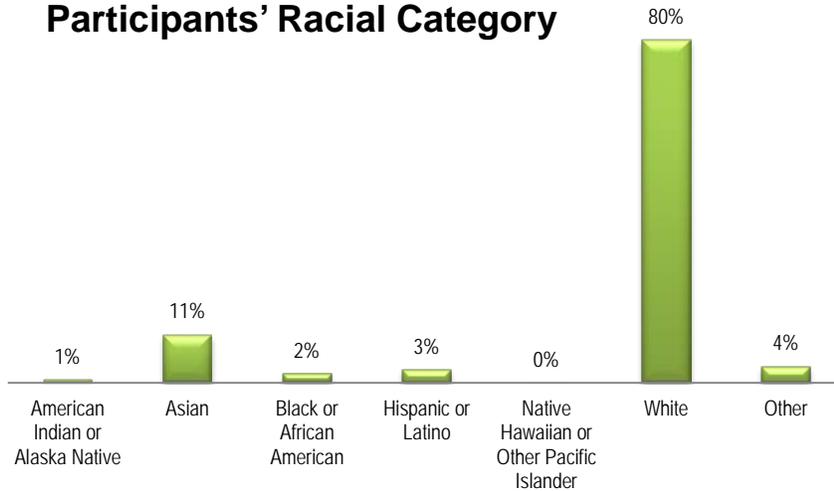
### 3. Sample Demographic and Work Information

Our sample showed three-quarters of the respondents were male and one-quarter female. Eighty percent of our participants identified as White, followed by Asian (11 percent).<sup>16</sup> Zero scientists identified as Native Hawaiian or Other Pacific Islander.<sup>17</sup>

**Gender of Participants**



**Participants' Racial Category**



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<sup>16</sup> The number of scientists who answered the gender identification question was 1,249. The number of scientists who answered the racial self-identification question was 1,225. Both of those questions were optional.

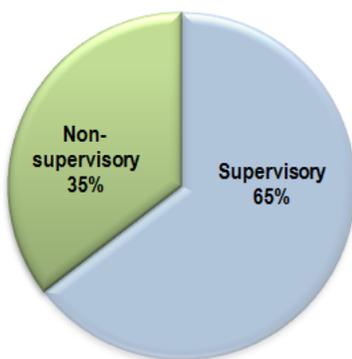
<sup>17</sup> Some totals presented in this paper may not add up to 100 percent due to rounding.

One-fifth of the participants stated that their research focused on “plant pathology/ physiology/ genetics.” Approximately 8 percent chose the “other” answer (open-ended space) to list their field of research instead of choosing one of the research fields we provided. The most commonly mentioned additional areas of research were food, microbiology, agronomy, animal health, and forest/wood products.

Which category best describes the field of research you conduct for the USDA?		
Answer Options	Response Percent	Response Count
Plant Pathology / Physiology / Genetics	20%	273
Earth / Environmental Science / Ecology	11%	154
Entomology	10%	131
Other (OR optionally, you may add your Job Series description or code here)	8%	102
Animal Science	8%	101
Economist / Mathematics	7%	94
Biology	7%	89
Soil Science	6%	86
Chemistry	6%	76
Forestry	5%	68
Engineering	5%	65
Other forms of Biology not listed above	3%	39
Social Science	2%	27
Other forms of Ecology not listed above	2%	23
Public Health	1%	13

Sixty-five percent of our participants stated that they were in a supervisory position at their agency, and 97 percent had at least a Ph.D.<sup>18</sup>

**My current position is**



What is the highest level of education you have completed?		
Answer Options	Response Percent	Response Count
Bachelors	0%	0
Masters	3%	33
PhD	97%	1299
Other (please specify)	1%	9

<sup>18</sup> The 97 percent includes respondents who selected “Other (please specify)” and indicated that they had a Ph.D. or education beyond a Ph.D. (e.g, Ph.D. and Doctor of Veterinary Medicine (DVM)) or Ph.D. and post-doctoral experience.

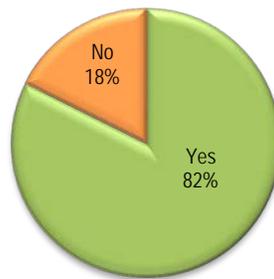
## IV. Data Findings, Two-Way Tables, and Charts

Two-way tables display two variables simultaneously. In so doing, the tables and charts examine the relationships between the two variables. The sections that follow examine the trends and relationships in our survey response data, although not necessarily cause and effect.

### 1. Scientific Integrity Policy Training

Our data showed that 18 percent of the scientists who took our survey were not aware of the SIP (Question 11).

Are you aware of the USDA's Scientific Integrity Policy (SIP) (DR 1074-001)?

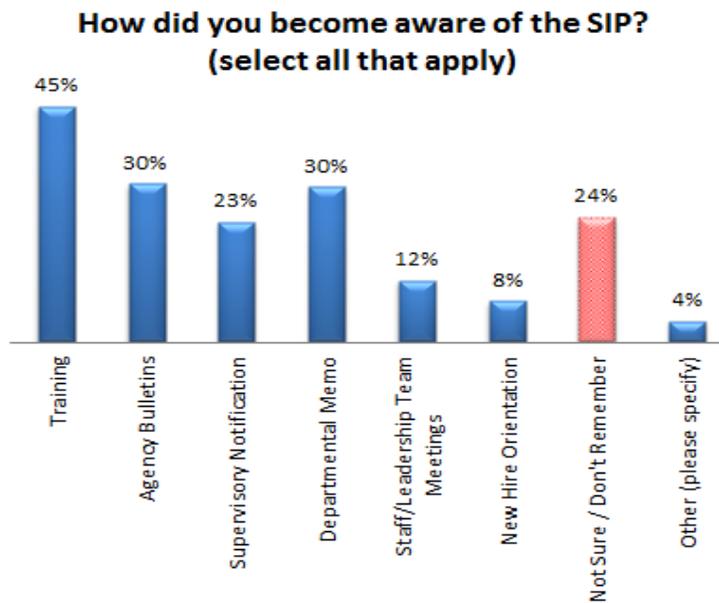


ARS had the largest percentage of people who stated they knew of the policy, compared to the other agencies as indicated in the next chart that shows a cross-tabulation of Questions 2 and 11.

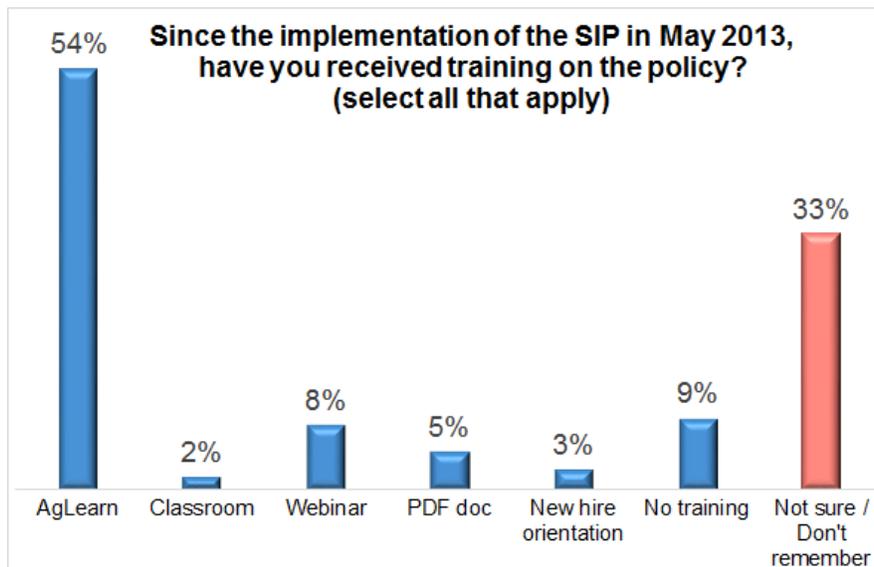
What agency do you work for?



When asked about how they became aware of the SIP (Question 12), 24 percent of the respondents answered they did not know, or they did not remember.



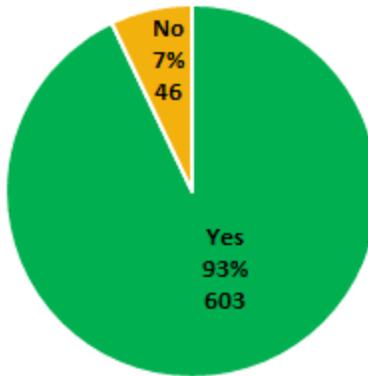
Moreover, when asked if they received training on the SIP (Question 13), 41 percent of the scientists in our sample answered that either they had not had training, or did not remember it, and seven of these chose both.<sup>19</sup>



<sup>19</sup> Forty-one percent (453 of 1,104) selected the following responses: 94 chose “I have not received any training,” 352 chose “Not Sure / Don't Remember,” and 7 chose both.

Asked if the training they received on the SIP (Question 14) was adequate and sufficient, 82 percent of respondents stated “yes” and 18 percent stated “no.” Included in that response were 349 respondents who selected “Not Sure / Don’t Remember” if they had received training, and three that selected “I have not received any training” in a prior question.<sup>20</sup> Of the 649 respondents who explicitly remembered that they had training on the SIP, 93 percent (603) answered “yes” to the training having been adequate and sufficient, and 7 percent (46) answered “no.”

**Did you consider the training to have been adequate and sufficient to make you familiar with the USDA's SIP?**



In Question 15, we asked the scientists how the SIP training could be improved; 109 respondents provided comments, with 25 of them writing “N/A” or “None.” Many mentioned that trainings are long and take time away from their daily work responsibilities. Respondents suggested short, simple refresher and reminder trainings as the best option (see the following quotes and word frequency analysis chart<sup>21</sup>):

*“I recommend simplifying this training down the core...”*

*“Make it brief and to the point. Aglearn would be fine for a vehicle but some Aglearn courses are unnecessarily long and focus on minor details.”*

*“Refresher training might be useful to some. My last training was in 2013.”*

*“A refresher course every year or every other year would be helpful.”*

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<sup>20</sup> The survey was designed to initially skip over Question 14 if “I have not received any training” was selected for Question 13, and did this in nearly all cases. Apparently three who did not initially select this for Question 13, answered Question 14, but subsequently went back to Question 13 and selected it.

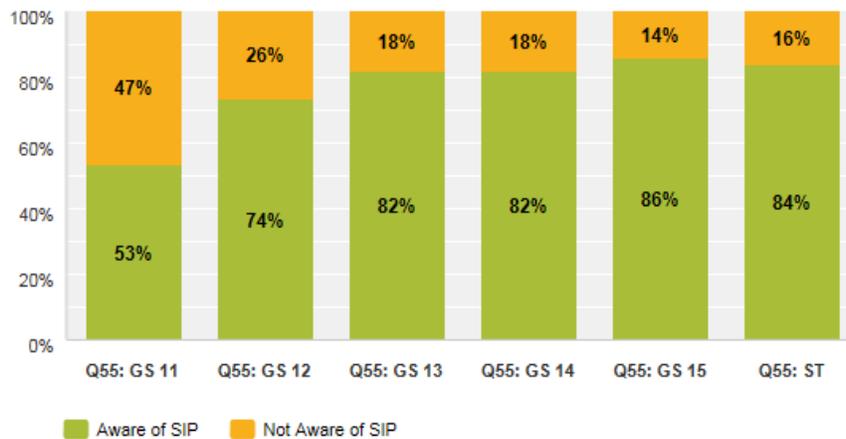
<sup>21</sup> A word frequency analysis chart, or “word cloud,” is a graphical representation of word frequency. The larger the word displayed, the more frequently mentioned that word was in our responses.

**If you have any recommendations about how to improve the training on the SIP, please list them below. (Optional)**

SYs Mandatory Discussion Focus Important Clear  
 Scientists Prior SIP PDF Refresher  
 Annual Training USDA AgLearn Webinar  
 Policy Outside Scientific Integrity Relevant  
 Reminder Learn

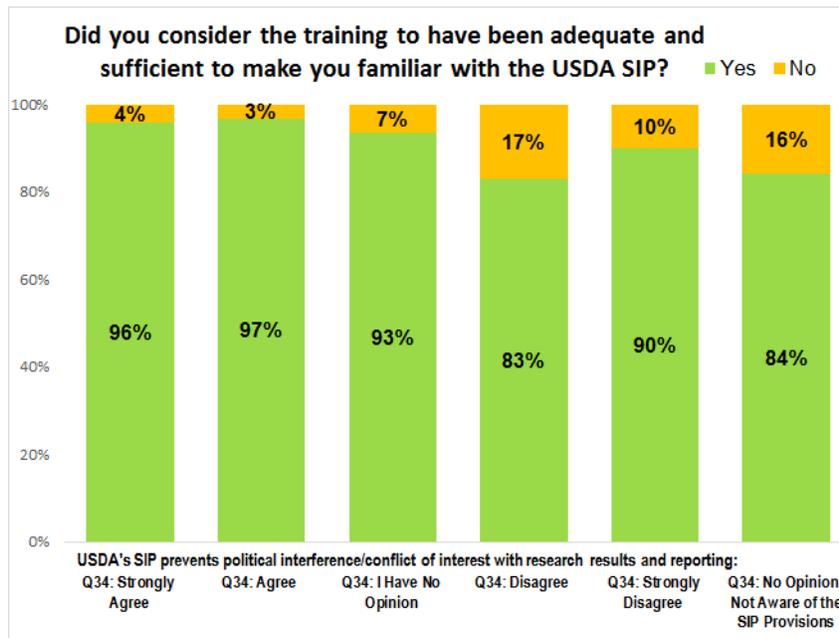
The data indicate that generally scientists at higher grade levels are more aware of the SIP than those at lower grade levels. There are two exceptions - participants at the GS 13 and GS 14 levels, where the proportions are equal, and the ST level, which is higher than a GS 15 but shows a smaller percentage than the GS 15. (Note: Question 55 identifying one’s grade level was optional. 1,283 scientists answered the question with 6 listing “Other.”<sup>22</sup>)

**Are you aware of the USDA’s Scientific Integrity Policy (SIP) (DR 1074-001)?**



<sup>22</sup> Of the six respondents who listed “Other,” one indicated “GS 13,” one indicated “SSTS,” and four did not specify. This chart reflects the addition of the GS 13 respondent to the GS 13 category for a total of 216 GS 13 respondents and a resulting total of 5 who make up the “Other” category.

Compared to those who did not believe SIP training was adequate and sufficient (Question 14), those who did were more likely to think the SIP prevents political interference or conflict of interest with research results and reporting. The next chart shows a cross-tabulation of Questions 14 and 34 based on the 645 responses of those who explicitly remembered having training on the SIP.<sup>23</sup>



We found no difference in the respondents’ sex and racial identification in terms of their awareness of the SIP.

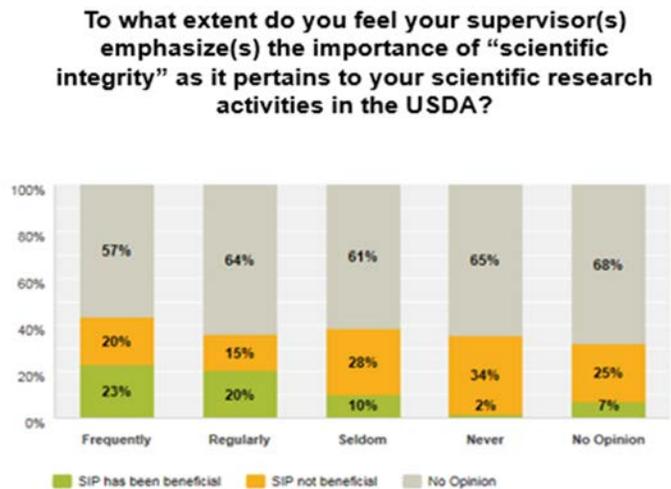
## 2. Supervisors, Agencies, and the Emphasis on Integrity

Scientists who believe their supervisors emphasize the importance of scientific integrity, or believe that their agencies promote a culture of scientific integrity, are more likely to be aware of the policy than those who think their agencies and supervisors do not promote scientific integrity.

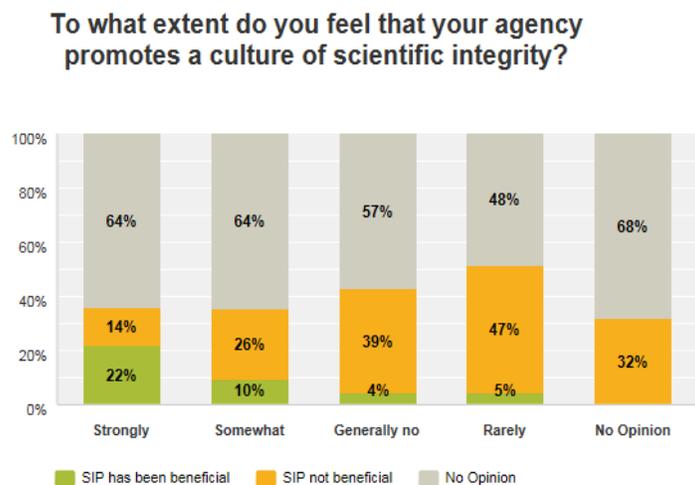
<sup>23</sup> This was also true for all 993 who responded to both questions, although the proportions who thought the training was adequate and sufficient were lower (i.e., for those whose Question 34 responses were Strongly Agree, Agree, Disagree, and Strongly Disagree, the proportions of those who thought the training was adequate and sufficient were 88, 89, 79, and 58 percent, respectively.)

Further, those who believed their supervisors emphasized the importance of scientific integrity frequently or regularly were more likely to find the SIP beneficial than those who thought their supervisors seldom or never emphasized the policy.

The chart below shows a cross-tabulation of Questions 16 and 29.<sup>24</sup>

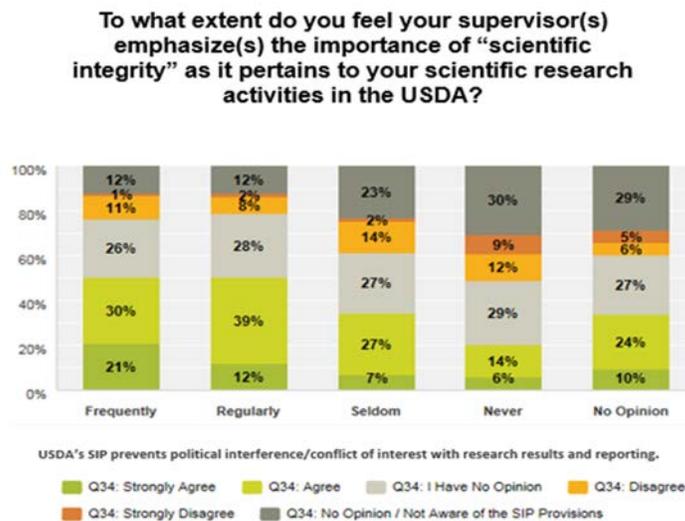


Likewise, the more the respondents believed their agency promoted a culture of scientific integrity, the more likely they were to state the policy was beneficial to them. The chart below shows a cross-tabulation of Questions 17 and 29.

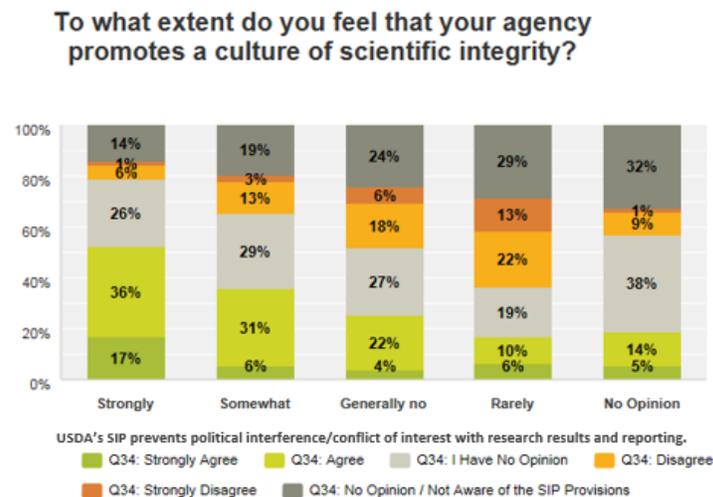


<sup>24</sup> Question 29 percentages in this paper contain 167 respondents who were unaware of the 2013 SIP (answered “no” for Question 11); however, all 167 respondents reported to have worked at USDA as a research-grade scientist since prior to May 2013 (Question 22). Because of this, unless otherwise stated, those responses were included in any calculation of percentages and/or cross-tabulations pertaining to Question 29 in the report.

The more the respondents agreed the SIP prevented political interference or conflict of interest with research results, the more they also believed their agencies promoted a culture of scientific integrity, and that their supervisors emphasized the importance of scientific integrity frequently or regularly instead of seldom or never. The chart below shows a cross-tabulation of Questions 16 and 34.<sup>25</sup>



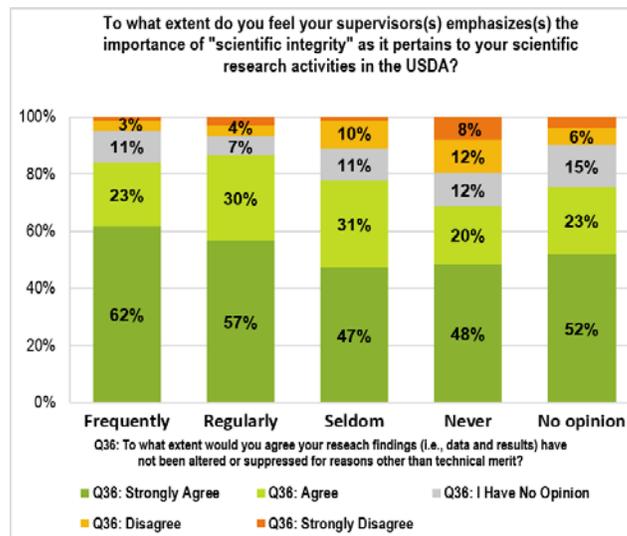
The chart below shows a cross-tabulation of Questions 17 and 34.



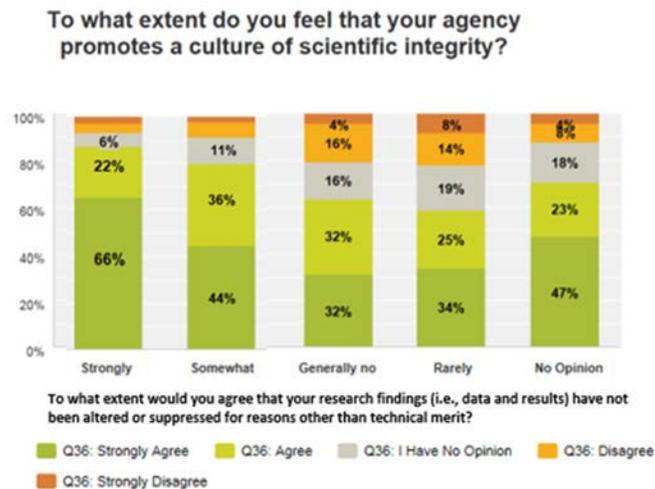
Moreover, compared to those who did not, those who believed their supervisor emphasized scientific integrity and thought that their agency promoted a culture of integrity were less likely

<sup>25</sup> Question 34 percentages presented in this paper contain 231 respondents who reported to be unaware of the 2013 SIP (answered “no” for Question 11).

to state that their research findings were altered or suppressed for reasons other than their technical merit. The chart below shows a cross-tabulation of Questions 16 and 36.



The chart below shows a cross-tabulation of Questions 17 and 36.

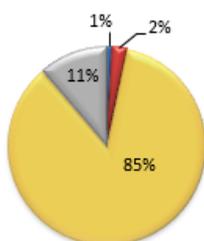


Our text analysis of the open-ended responses shows that scientists were concerned about broad censorship, poor efficiency of the publication process, and improperly applied authorship (credit being given when not earned, or removal of authorship for inappropriate reasons). They were also concerned about emphasis on the quantity of published reports instead of the quality of reports. A few respondents mentioned they had observed or experienced inequitable management or unfair treatment.

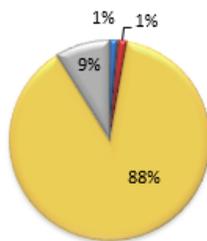
### 3. Perceptions of Benefits of the SIP to USDA Scientists

Many of the comments from the scientists in our survey suggested that they valued scientific integrity and believed it is a vital part of successful, unbiased research. However, an overwhelming majority of the respondents who were scientists at USDA prior to the May 2013 SIP stated its implementation had not made any difference to their work. Of those who stated that the SIP made a difference, more found that it decreased rather than increased their ability to publish, participate in peer reviews, present research findings at professional meetings or conferences, participate in professional societies, and communicate scientific findings with the media (Questions 24 to 28).<sup>26</sup>

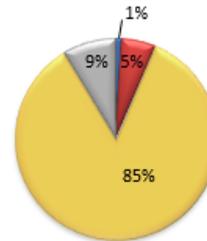
As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to publish in professional or scholarly journals has



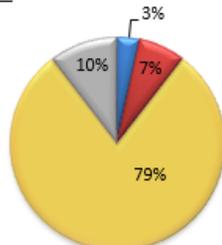
As a result of the implementation of the USDA SIP in 2013, do you believe your ability to participate in peer reviews as a reviewer of scientific manuscripts has



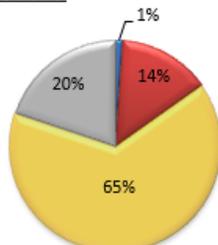
As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to present research findings at professional meetings or conferences has



As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to participate in professional societies has



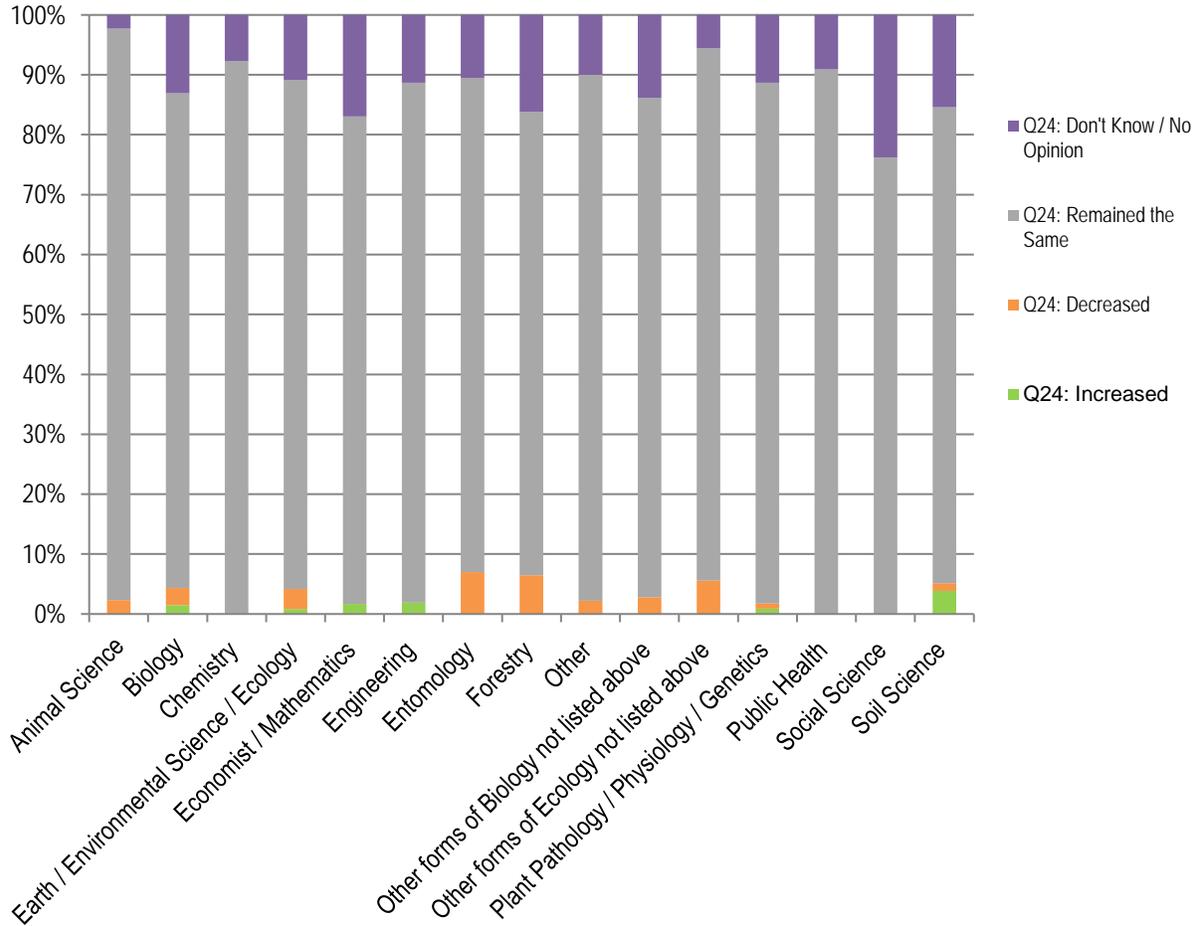
As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to communicate scientific findings with the media has



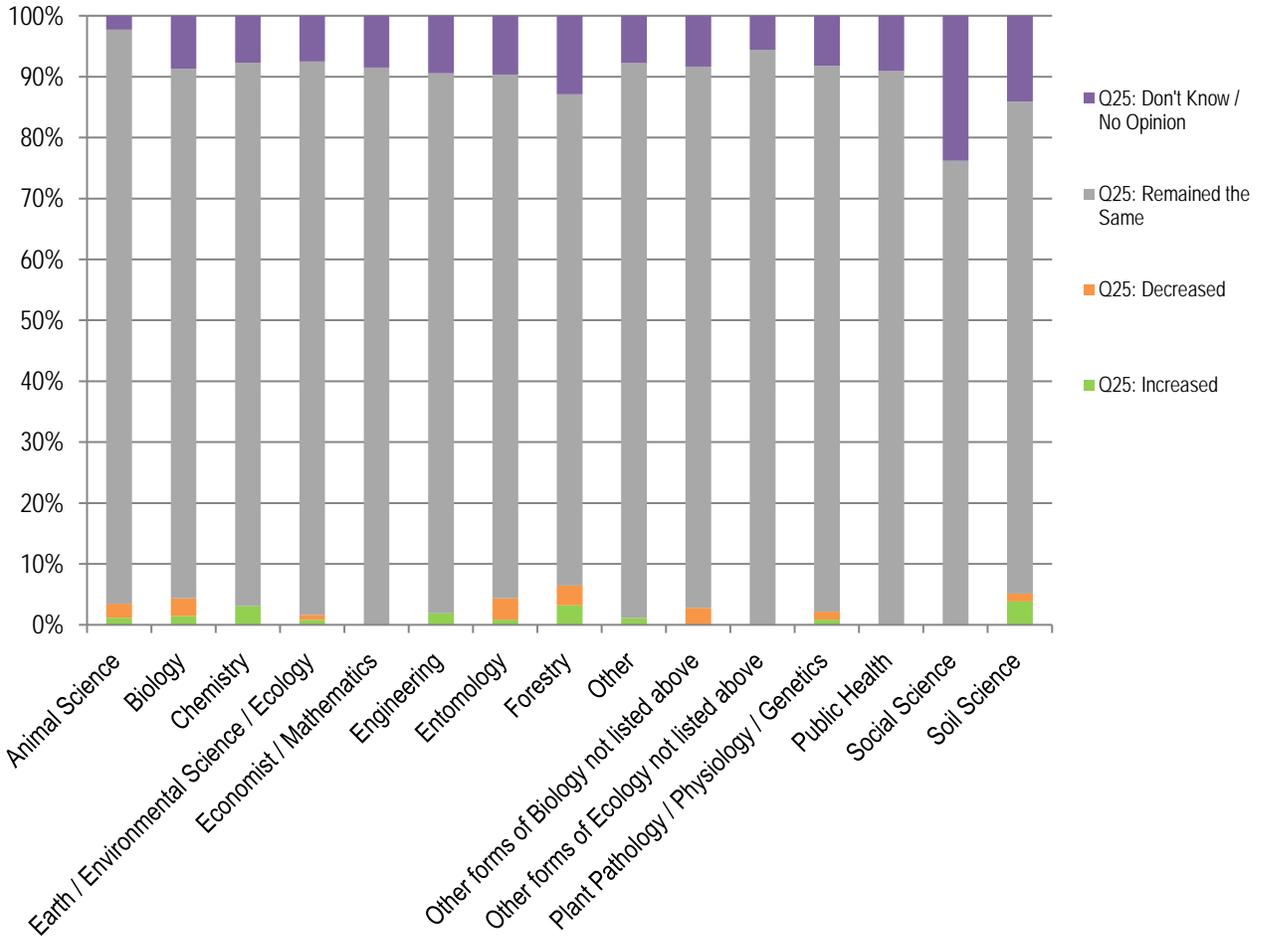
<sup>26</sup> The survey allowed participants to respond to Questions 24 to 29 only if they answered “Yes” to Question 22 (indicating experience as a research-grade scientist at USDA prior to the May 2013 SIP). However, 167 of the 1,113 who responded to Questions 24 to 29 answered “No” for Question 11 (indicating they were not aware of the 2013 SIP).

The following charts show how these same questions were answered by scientists working in the various research areas.

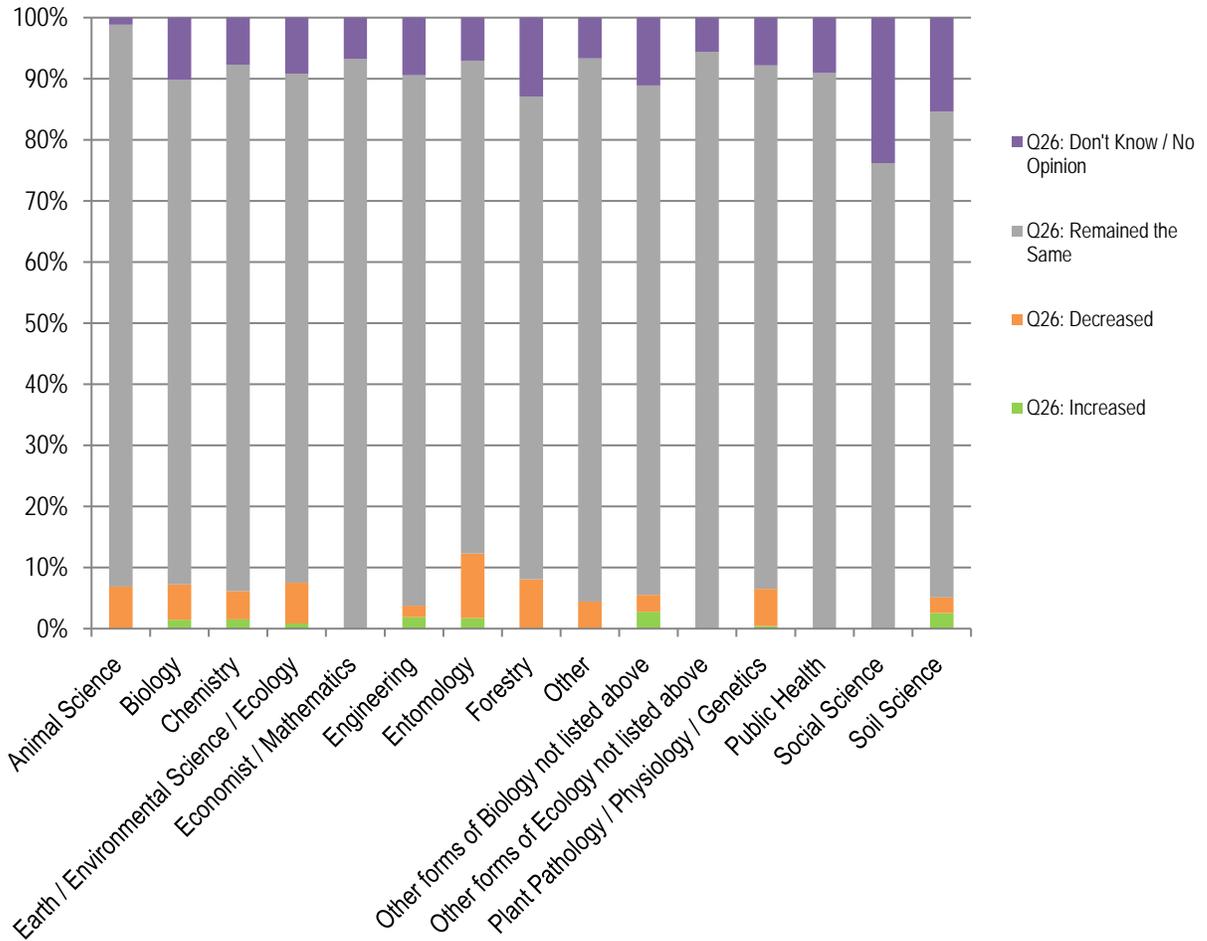
*Q24. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to publish in professional or scholarly journals has: increased, decreased, remained the same, don't know/no opinion?*



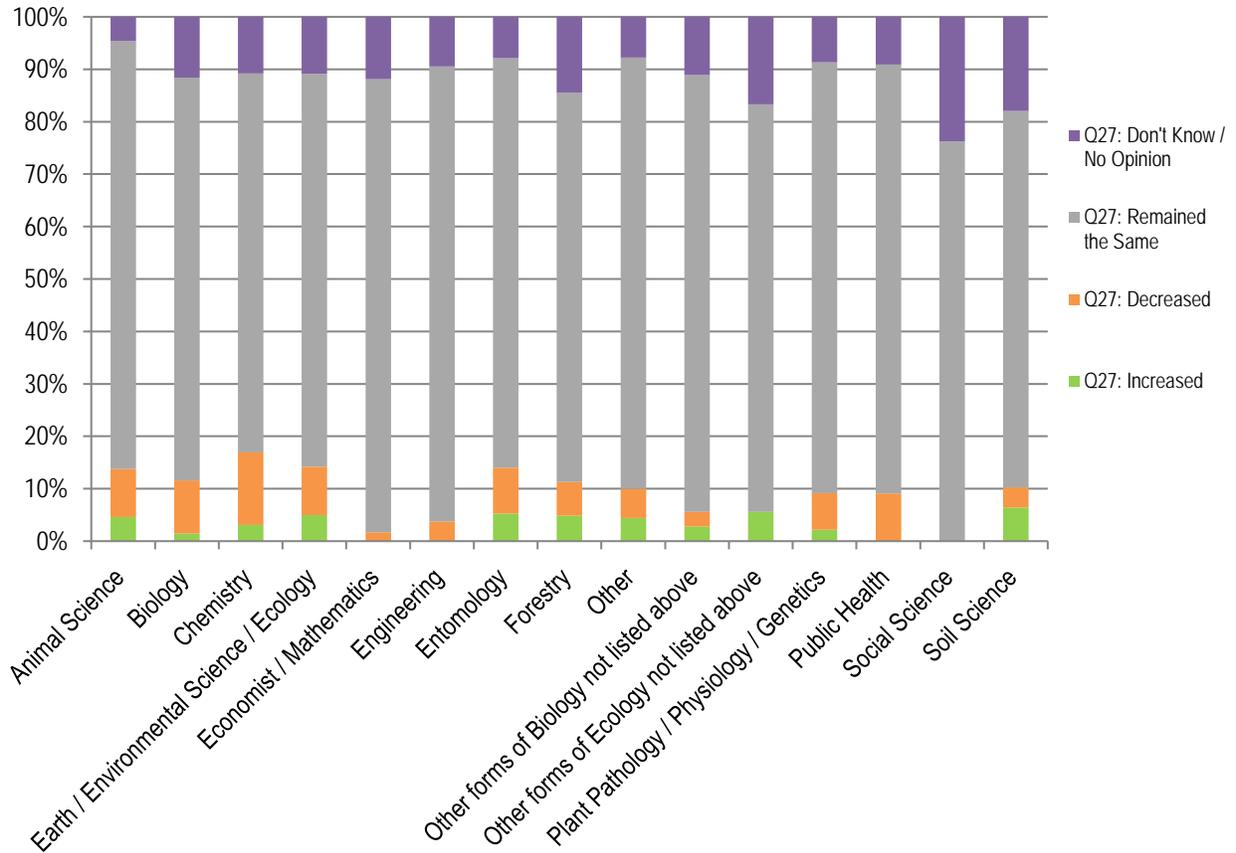
Q25. As a result of the implementation of the USDA SIP in 2013, do you believe your ability to participate in peer reviews as a reviewer of scientific manuscripts has: increased, decreased, remained the same, don't know/no opinion?



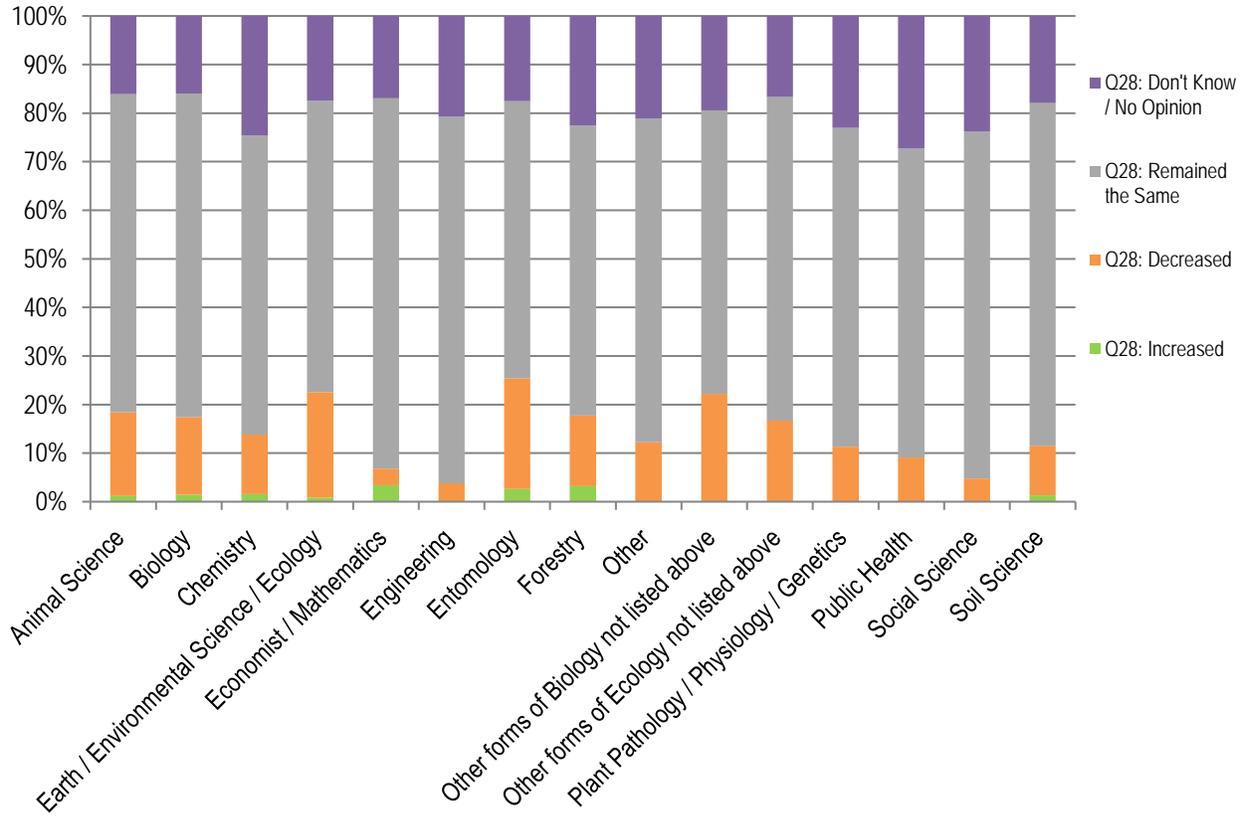
Q26. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to present research findings at professional meetings or conferences has: increased, decreased, remained the same, don't know/no opinion?



Q27. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to participate in professional societies has: increased, decreased, remained the same, don't know/no opinion?

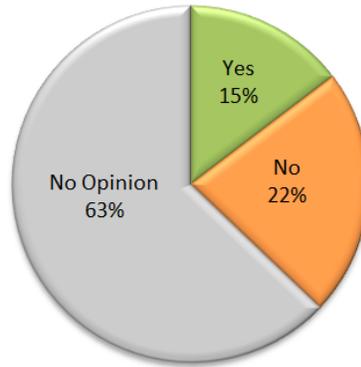


Q28. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to communicate scientific findings with the media has: increased, decreased, remained the same, don't know/no opinion?

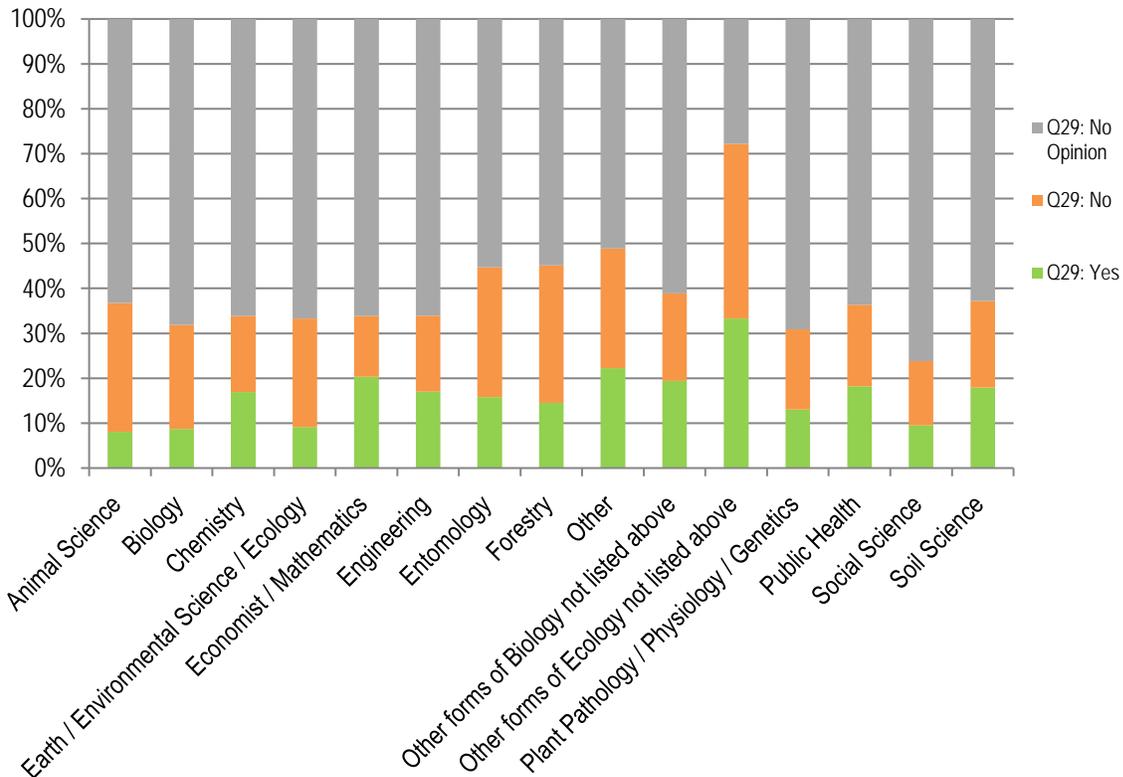


Only 15 percent of our participants stated that the SIP was beneficial to them (Question 29). Of the respondents who reported to be aware of the SIP, 17 percent stated that the SIP was beneficial to them.

**In your opinion, has the implementation of the 2013 SIP been beneficial to you?**



This cross-tabulation of Questions 3 and 29 shows the breakdown of responses across areas of research.



We received 126 open-ended comments for Question 29. The comments provided by respondents suggest that some scientists believed that the SIP did not provide any real protection for their research. Participants identified a fear of politically driven budget restrictions that could affect conducting research and traveling. Scientists mentioned that the SIP complicated the publishing and communication process. Below are direct quotes from some respondents.

*“...a SIP is kind of nicety with no real meaning.”*

*“It has done nothing about the lack of scientific integrity exhibited by my station director.”*

*“...seems like it is designed to protect the agency only not a code for individual scientist interacting with other scientists.”*

*“Yes and no. Some topics that are interpreted as highly controversial are closely monitored and any interaction with media for instance is either discouraged or highly scrutinized before being allowed to speak.”*

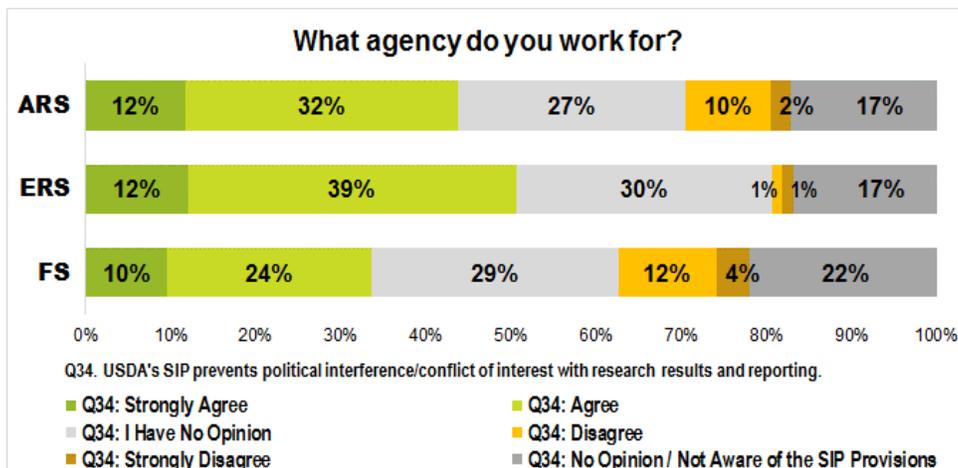
*“Nothing has really changed, because the SIP still provides managers with the ability to stop communication of anything they want. The wording has changed and sounds better, but reality has not changed.”*

*“My agency was doing a fairly good job already. My work was not directly changed by SIP. However, SIP is indirectly beneficial in supporting a climate of scientific integrity.”*

*“The policy makes it clear that as a senior scientist, I am speaking from the facts of science and not opinion.”*

#### 4. USDA’s SIP and Political Interference or Conflict of Interest

In Question 34, we asked our survey participants if they believed that the SIP prevents political interference or conflict of interest with research results and reporting. Forty-two percent of the respondents strongly agreed or agreed, 46 percent listed that they had no opinion or were unaware of the SIP’s provisions, and 13 percent disagreed or strongly disagreed with the statement. ARS, ERS, and FS scientists were more likely to agree than to disagree that the SIP prevents such interference. The chart below shows a cross-tabulation of Questions 2 and 34.<sup>27</sup>



In all areas of research, including “Other,” the scientists were more likely to *Strongly Agree* or *Agree* that the SIP prevents political interference/conflict of interest with research, compared to those in the same research categories who stated *Disagree* or *Strongly Disagree*.

<sup>27</sup> The number of scientists who answered both Questions 2 and 34 was 1,318. As mentioned in our Methodology section, responses provided by the four NRCS respondents are not identified for the remainder of this document to protect anonymity. Two participants answered Question 34, yet did not provide a specific USDA agency they work for. Hence, the chart represents the answers of 1,312 scientists.

We asked our survey participants to identify which research areas had been identified to them as “sensitive/controversial/prominent/high profile” and required additional managerial approval (Question 19). They most frequently identified Climate Change and Gene Editing/Transgenics. The following table and word frequency chart shows the answers we received:

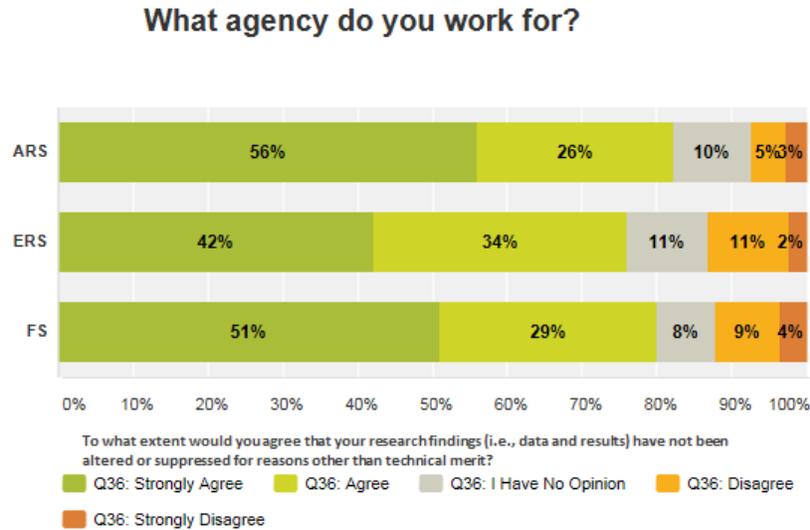
**Please identify which research areas have been identified to you as sensitive/controversial/ prominent/ high profile. (select all that apply)**

Answer Options	Response Percent	Response Count
Climate Change	43%	422
Pollinator Health	22%	220
Anti-Microbial Resistance (AMR)	23%	229
Gene Editing/Transgenics	35%	348
Wildfire Research	8%	78
Other (please specify)	42%	414
<i>answered question</i>		<b>989</b>
<i>skipped question</i>		<b>360</b>



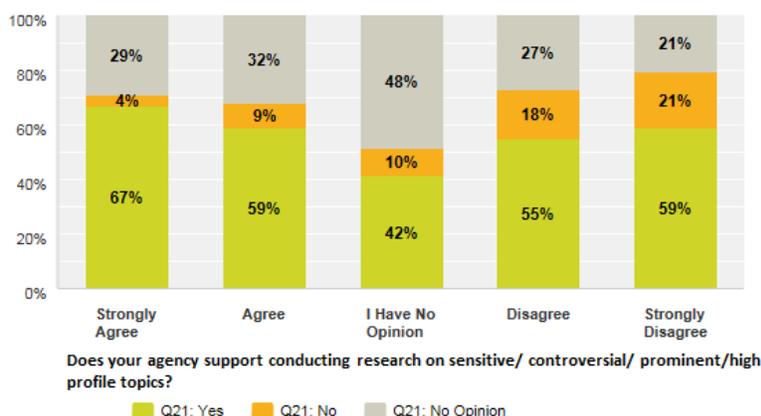
## 5. Research Findings and Technical Merit

We asked the survey participants if they agreed that their research findings (for example, data and results) had not been altered or suppressed for reasons other than technical merit (Question 36). Seven percent of ARS' respondents, 13 percent of ERS' respondents, and 13 percent FS' respondents disagreed or strongly disagreed. The chart below shows a cross-tabulation of Questions 2 and 36.



Out of 1,318 responses to the question, 121 respondents disagreed or strongly disagreed that their research findings had not been altered or suppressed for reasons other than technical merit, 90 of whom had authored or co-authored more than 26 scientific peer-reviewed journal articles. Compared to all other respondents, scientists who stated that their agency does not support conducting research on sensitive/controversial/prominent/high profile topics were more likely to also state that they disagreed or strongly disagreed that their research findings had not been altered or suppressed for reasons other than technical merit. The following chart shows a cross-tabulation of Questions 21 and 36.

**To what extent would you agree that your research findings (i.e., data and results) have not been altered or suppressed for reasons other than technical merit?**



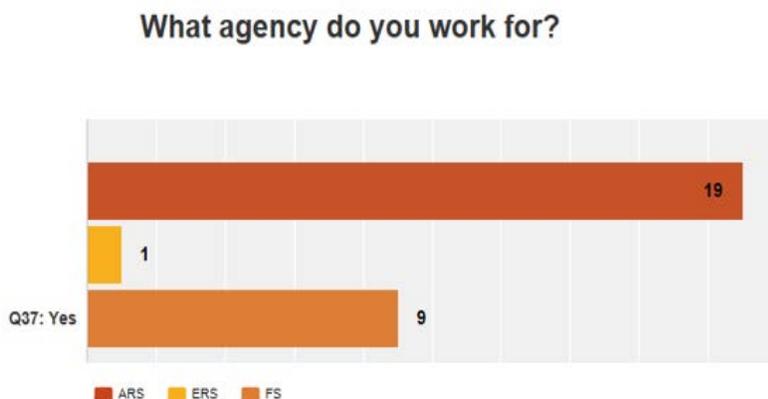
Compared to all other respondents, participants who said that as a result of the implementation of the 2013 SIP, their abilities to present research findings at professional meetings or conferences, participate in professional societies, or communicate scientific findings with the media have decreased, were more likely to also state that their research findings had been altered or suppressed for reasons other than technical merit (cross-tabulation of Questions 26-28 and Question 36).

A review of comments provided in the survey revealed that scientists have concerns about the publication process when dealing with sensitive issues—sensitive topics tended to slow down the publication process. Respondents expressed concerns about the censorship of sensitive topics, such as not being allowed to discuss the results of research on these topics. One scientist shared concerns about outside pressure on USDA to conduct research on controversial subjects, stating that researchers’ work got promoted only if there was such pressure, and if not, the research was not supported. Scientists mentioned concerns about how the change in media interest might affect how they should present results. We received a few comments related to concerns that only viewpoints that are positive towards the agency were supported, and concerns about the lack of general agency support on sensitive research topics.

## 6. Pressure by External Interest Groups

We asked our survey participants if, during the past 3 years, they had been pressured by external interest groups (i.e., non-USDA entities such as businesses, advocacy/stakeholder groups, etc.) to omit or significantly alter their research findings for reasons other than technical merit (Question 37). Twenty-nine out of 1,315 respondents (2 percent) answered “yes” to this question. The narrative in this section will only focus on those 29 respondents and their answers to the rest of the survey questions.

Nineteen of these respondents work for ARS, nine for FS, and one for ERS.



Twenty-six of the 29 (90 percent) had worked at USDA as a research-grade scientist prior to the implementation of the SIP; 22 of these worked for 11 years or more.

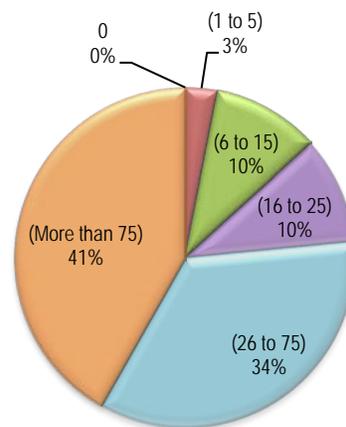
Below are the grade levels (optional question) of these respondents:

GS 11	GS 12	GS 13	GS 14	GS 15	ST	Skipped
1	1	4	9	13	0	1

All research areas were represented by those who said “yes,” with earth/environmental science/ecology and plant pathology/physiology/genetics having the higher counts of 4 and 5, respectively. Twenty-two scientists stated that they are in a supervisory position, and seven identified themselves as non-supervisory. Twenty-six of the 29 (90 percent) were in a principal investigator or researcher role. The following figures show how those 29 scientists communicate their research (more than one answer choice was permitted for this question), how many times they were the author or co-author, and their awareness of the SIP.

	Publish in Peer-Reviewed Journals	Publish in Trade Journals	News Media Releases and/or Interviews	Social Media	Professional Conferences and Workshops	Agency Website/ Newsletter/ Publications	Other (please specify)
Q37: Yes	100%	48%	55%	17%	93%	66%	10%
	29	14	16	5	27	19	3

**During your career with the USDA, how many scientific peer-reviewed journal articles have you authored or co-authored?**



**Are you aware of the USDA's Scientific Integrity Policy (SIP) (DR 1074-001)?**



Seventeen of the 29 participants answered that their supervisor “seldom” or “never” emphasizes scientific integrity.

	Frequently	Regularly	Seldom	Never	No Opinion	Total
Q37: Yes	17%	21%	34%	24%	3%	100%
	5	6	10	7	1	29

When asked to what extent they feel that their agency promotes a culture of scientific integrity, the answers were more affirmative than not.

	Strongly	Somewhat	Generally No	Rarely	No Opinion	Total
Q37: Yes	31%	38%	10%	17%	3%	100%
	9	11	3	5	1	29

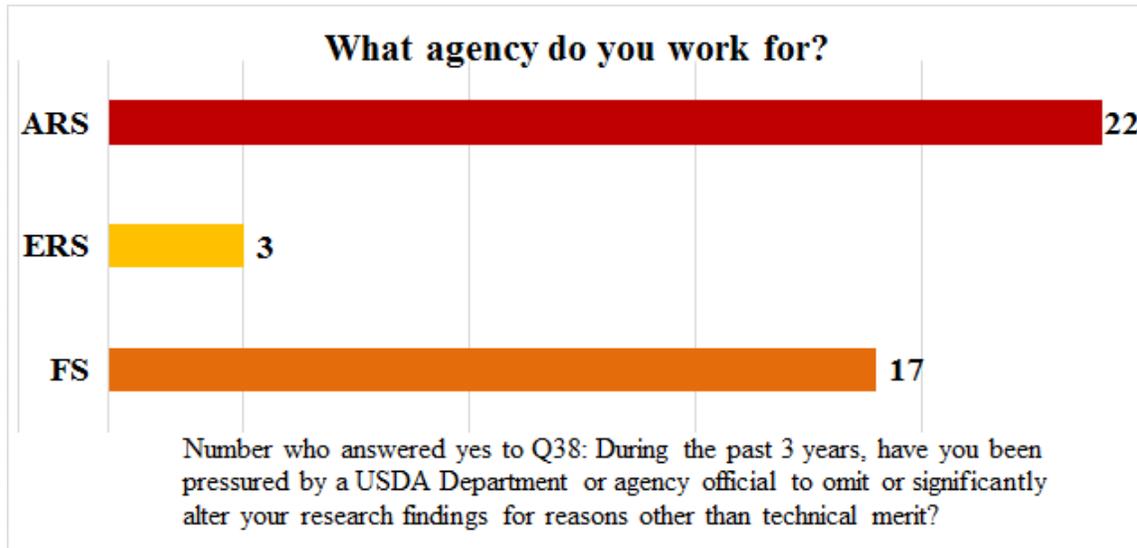
The table below shows some additional answer choices of the 29 scientists.

<i>Other survey answers provided by the 29 scientists who, in the last 3 years, had been pressured by external interest groups (i.e., non-USDA entities such as businesses, advocacy/stakeholder groups, etc.) to omit or significantly alter their research findings for reasons other than technical merit.</i>	<i>Number Of Participants Who Answered Affirmatively</i>
Ability to publish in professional or scholarly journals, to participate in peer reviews as a reviewer of scientific manuscripts, to present research findings at professional meetings or conferences, to participate in professional societies, to communicate scientific findings with the media has increased	0
The SIP has not been beneficial to them	12
Disagree or strongly disagree that USDA's SIP prevents political interference/conflict of interest with research results and reporting	13
Agreed or strongly agreed that their research findings (i.e., data and results) had been altered or suppressed for reasons other than technical merit	11
During the past 3 years, they had been pressured by a USDA Departmental or agency official to omit or significantly alter their research findings for reasons other than technical merit	9
During the past 3 years, a USDA Departmental or agency official requested that they provide inaccurate or misleading scientific information to groups such as the public, industry, media, or elected/senior Government officials	2
They feel like they had been the subject of retaliation by management/supervisor/authoritative individual because of their research results	7
Since the implementation of the SIP in May 2013, they have been asked to retract or omit data or results that significantly changed information from studies or the publication of their research results for reasons other than technical merit	7
Unaware of an established procedure for filing a scientific integrity complaint within your agency	18
Does not know who to contact in case of scientific integrity concerns	18
Ever filed a scientific integrity complaint for an alleged violation of the 2013 SIP	0

## 7. Pressure by a USDA Departmental or Agency Official

We asked if, during the past 3 years, the scientists had been pressured by a USDA Departmental or agency official to omit or significantly alter their research findings for reasons other than technical merit (Question 38). Forty-two out of 1,315 respondents (3 percent) answered “yes.” The narrative, table, and figures in this section will focus only on those 42 respondents and their answers to the rest of the survey questions.

Twenty-two of the 42 respondents work for ARS, 17 for FS, and 3 for ERS.



Thirty-eight of the 42 (90 percent) had worked as a research-grade scientist prior to the implementation of the SIP; 31 of these worked for 11 years or more.

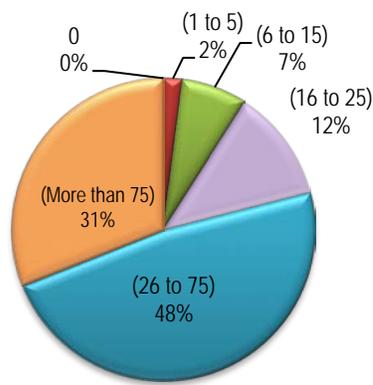
Below are the grade levels (optional question) of the 42.

GS 11	GS 12	GS 13	GS 14	GS 15	Other	Skipped
1	1	3	17	14	1	5

Most research areas were represented by those who said “yes” with earth/environmental science/ecology and entomology having the higher counts—seven answers in each. Thirty-three scientists stated that they are in a supervisory position, and nine identified themselves as non-supervisory personnel. Thirty-nine of the 42 (93 percent) were in a principal investigator or researcher role. The following figures show how those 42 scientists communicate their research (more than one answer choice was permitted for this question), how many times they were the author or co-author, and their awareness of the SIP.

	Publish in Peer-Reviewed Journals	Publish in Trade Journals	News Media Releases and/or Interviews	Social Media	Professional Conferences and Workshops	Agency Website/ Newsletter/ Publications	Other (please specify)
Q38: Yes	100%	29%	71%	14%	95%	67%	7%
	42	12	30	6	40	28	3

**During your career with the USDA, how many scientific peer-reviewed journal articles have you authored or co-authored?**



**Are you aware of the USDA's Scientific Integrity Policy (SIP) (DR 1074-001)?**



Twenty-two of the 42 participants answered that their supervisor “seldom” or “never” emphasizes scientific integrity:

	Frequently	Regularly	Seldom	Never	No Opinion	Total
Q38: Yes	7%	31%	29%	24%	10%	100%
	3	13	12	10	4	42

When asked to what extent they feel their agency promotes a culture of scientific integrity, the answers were more evenly split between those who did and those who did not (20 answered *Strongly* or *Somewhat* and 20 answered *Generally No* or *Rarely*).

	Strongly	Somewhat	Generally No	Rarely	No Opinion	Total
Q38: Yes	14%	33%	24%	24%	5%	100%
	6	14	10	10	2	42

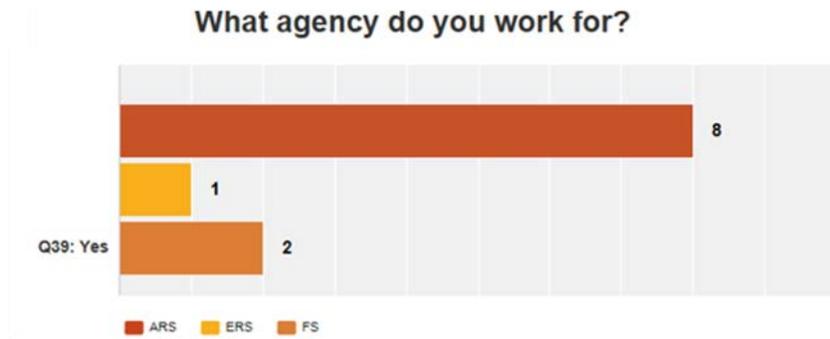
The table below shows some additional answer choices of the 42 scientists:

<i>Other survey answers provided by the 42 scientists who, in the last 3 years, had been pressured by a USDA Departmental or agency official to omit or significantly alter their research findings for reasons other than technical merit</i>	<i>Number Of Participants Who Answered Affirmatively</i>
The SIP has not been beneficial to them	23
Based on information provided to the scientists by their agency, the use of social media as a communication tool with respect to their scientific expertise in their official and personal capacity is completely or mostly unclear.	30
Disagree or strongly disagree that USDA's SIP prevents political interference/conflict of interest with research results and reporting	25
Agreed or strongly agreed that their research findings (i.e., data and results) had been altered or suppressed for reasons other than technical merit	24
During the past 3 years, they had been pressured by external interest groups (i.e., non-USDA entities such as businesses, advocacy/stakeholder groups, etc.) to omit or significantly alter their research findings for reasons other than technical merit	9
During the past 3 years, a USDA Departmental or agency official requested that they provide inaccurate or misleading scientific information to groups such as the public, industry, media, or elected/senior Government officials	4
They feel like they had been the subject of retaliation by management/supervisor/authoritative individual because of their research results	14
Since the implementation of the SIP in May 2013, they have been asked to retract or omit data or results that significantly changed information from studies or the publication of their research results for reasons other than technical merit	18
Unaware of an established procedure for filing a scientific integrity complaint within your agency	31
Does not know who to contact in case of scientific integrity concerns	28
Ever filed a scientific integrity complaint for an alleged violation of the 2013 SIP	0

## 8. USDA Official Requesting Inaccurate or Misleading Scientific Information

We asked our participants if, during the past 3 years, a USDA Departmental or agency official had requested that they provide inaccurate or misleading scientific information to groups such as the public, industry, media, or elected or senior Government officials (Question 39). Eleven out of 1,315 respondents (1 percent) answered “yes” to this question. The narrative in this section will only focus on those 11 respondents and their answers to the rest of the survey questions.

Eight of the 11 respondents work for ARS, 2 for FS, and 1 for ERS.



Nine of the 11 (82 percent) had worked at USDA as a research-grade scientist prior to the implementation of the SIP; all 9 had worked 11 years or more.

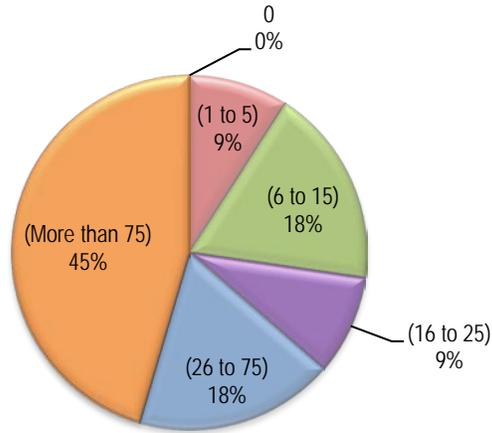
Below are the grade levels (optional question) of the 11 scientists:

GS 11	GS 12	GS 13	GS 14	GS 15	ST	Skipped
1	1	0	2	3	1	3

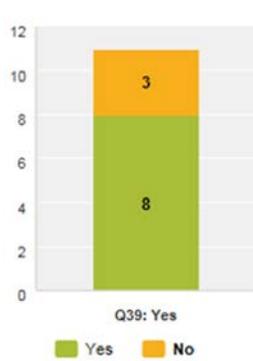
All research areas were represented by those who said “yes” except public health, engineering, chemistry, and social science. Nine of the 11 (82 percent) were in a principal investigator or researcher role. The following figures show how those 11 scientists communicate their research (more than one answer choice was permitted for this question), how many times they were the author or co-author, and their awareness of the SIP.

	Publish in Peer-Reviewed Journals	Publish in Trade Journals	News Media Releases and/or Interviews	Social Media	Professional Conferences and Workshops	Agency Website/ Newsletter/ Publications	Other (please specify)
Q39: Yes	100%	55%	73%	0%	100%	64%	27%
	11	6	8	0	11	7	3

**During your career with the USDA, how many scientific peer-reviewed journal articles have you authored or co-authored?**



**Are you aware of the USDA's Scientific Integrity Policy (SIP) (DR 1074-001)?**



Eight of the 11 participants answered that their supervisor “seldom” or “never” emphasizes scientific integrity:

	Frequently	Regularly	Seldom	Never	No Opinion	Total
Q39: Yes	0%	9%	36%	36%	18%	100%
	0	1	4	4	2	11

When asked to what extent they feel their agency promotes a culture of scientific integrity, the answers were more evenly split:

	Strongly	Somewhat	Generally No	Rarely	No Opinion	Total
Q39: Yes	18%	18%	18%	27%	18%	100%
	2	2	2	3	2	11

The table below shows some additional answer choices of the 11 scientists:

<i>Other survey answers provided by the 11 scientists who stated that, in the last 3 years, a USDA Departmental or agency official requested that they provide inaccurate or misleading scientific information to groups such as the public, industry, media, or elected/senior Government officials.</i>	<i>Number Of Participants Who Answered Affirmatively</i>
The SIP has not been beneficial to them	7
Ability to publish in professional or scholarly journals, to participate in peer reviews as a reviewer of scientific manuscripts, to present research findings at professional meetings or conferences, to participate in professional societies, to communicate scientific findings with the media has increased	1
Based on information provided to the scientists by their agency, the use of social media as a communication tool with respect to their scientific expertise in their official and personal capacity is completely or mostly unclear.	10
Disagree or strongly disagree that USDA's SIP prevents political interference/conflict of interest with research results and reporting	8
Agreed or strongly agreed that their research findings (i.e., data and results) had been altered or suppressed for reasons other than technical merit	6
During the past 3 years, they had been pressured by external interest groups (i.e., non-USDA entities such as businesses, advocacy/stakeholder groups, etc.) to omit or significantly alter their research findings for reasons other than technical merit	2
They stated that during the past 3 years they had been pressured by a USDA Departmental or agency official to omit or significantly alter their research findings for reasons other than technical merit	4
They feel like they had been the subject of retaliation by management/supervisor/authoritative individual because of their research results	5
Since the implementation of the SIP in May 2013, they have been asked to retract or omit data or results that significantly changed information from studies or the publication of their research results for reasons other than technical merit	3
Unaware of an established procedure for filing a scientific integrity complaint within your agency	10
Does not know who to contact in case of scientific integrity concerns	8
Ever filed a scientific integrity complaint for an alleged violation of the 2013 SIP	0

## Participants’ Experiences Related to Scientific Integrity Violations Since the Implementation of the 2013 SIP (Subsection 6, 7, and 8 Overview)

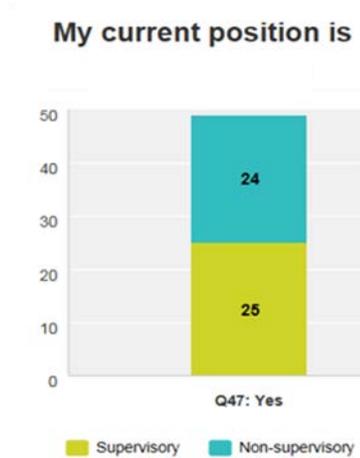
Subsections 6, 7, and 8 show how many participants answered “yes” to specific questions pertaining to various types of scientific integrity violations since the implementation of the 2013 SIP. The table below presents how many participants answered “yes” to more than one of these questions (Questions 37, 38, and 39, respectively).

Number of participants	During the past 3 years:		
	Pressured by external interest groups (i.e., non-USDA entities such as businesses, advocacy/stakeholder groups, etc.) to omit or significantly alter research findings for reasons other than technical merit	Pressured by a USDA Departmental or agency official to omit or significantly alter research findings for reasons other than technical merit	Requested by a USDA Departmental or agency official to provide inaccurate or misleading scientific information to groups such as the public, industry, media, or elected/senior Government officials
1	Yes	Yes	Yes
1	Yes	Yes	Don't Know / Don't Recall / No Opinion
1	No	Yes	Don't Know / Don't Recall / No Opinion
1	Yes	No	Yes
3	No	Yes	Yes
7	Yes	Yes	No
6	No	No	Yes
19	Yes	No	No
29	No	Yes	No
Total number who answered "Yes"	29	42	11

## 9. Retaliation by Management Because of Research

We asked our survey participants if they felt as if they had ever been the subject of retaliation by management, or a supervisor, or an authoritative individual because of their research results (Question 47). Due to the nature of this question, we are not reporting the number of responses by agency. Forty-nine out of 1,313 scientists (4 percent) who answered this question said “Yes.”<sup>28</sup>

The split between supervisors and non-supervisors is almost even.

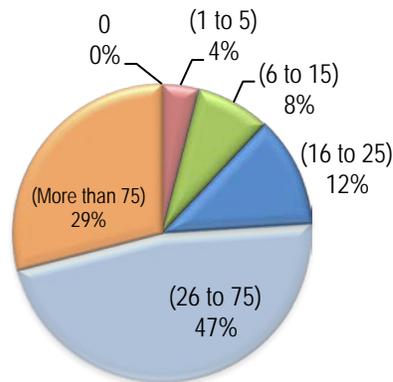


Forty-eight of these respondents (98 percent) were in a principal investigator or researcher role. The following figures show how those 49 scientists communicate their research (more than one answer choice was permitted for this question), how many times they were the author or co-author, and their awareness of SIP.

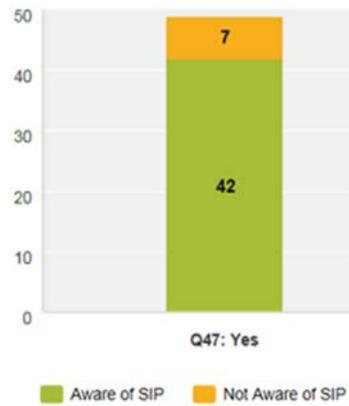
	Publish in Peer-Reviewed Journals	Publish in Trade Journals	News Media Releases and/or Interviews	Social Media	Professional Conferences and Workshops	Agency Website/ Newsletter/ Publications	Other (please specify)
Q47: Yes	100%	31%	49%	8%	94%	59%	8%
	49	15	24	4	46	29	4

<sup>28</sup> Over 96 percent answered “No” to Question 47; however, 10 of these 1,264 respondents provided remarks that stated they knew of colleagues who were the subject of retaliation, they had been the subject of retaliation due to personal conflicts with managers, or provided other negative remarks.

**During your career with the USDA, how many scientific peer-reviewed journal articles have you authored or co-authored?**



**Are you aware of the USDA's Scientific Integrity Policy (SIP) (DR 1074-001)?**



Thirty-two of the 49 participants answered that their supervisor “seldom” or “never” emphasizes scientific integrity.

	Frequently	Regularly	Seldom	Never	No Opinion	Total
Q47: Yes	12%	12%	27%	39%	10%	100%
	6	6	13	19	5	49

When asked to what extent they felt that their agency promotes a culture of scientific integrity, the answers were more evenly split.

	Strongly	Somewhat	Generally No	Rarely	No Opinion	Total
Q47: Yes	16%	29%	24%	27%	4%	100%
	8	14	12	13	2	49

Compared to the other respondents, our data show that those who believed they had been the subject of retaliation by a manager or supervisor because of research results were more likely to answer negatively to most questions regarding their supervisors, their training, and the SIP in general. Based on the survey responses, none of these scientists ever filed a scientific integrity complaint for an alleged violation of the 2013 SIP.<sup>29</sup>

Eighteen of the respondents who felt they had experienced retaliation answered “yes” to at least one of the questions related to: (A) research influence from outside entities (Question 37), (B) influence from USDA officials (Question 38), and (C) were asked by a USDA official to provide misleading or inaccurate research (Question 39). The table below shows those who felt they had experienced retaliation and answered “yes” to one or more of these questions.

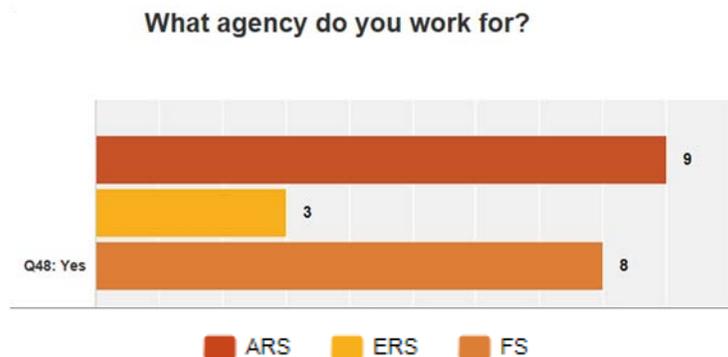
Of the 49 respondents who felt retaliated against, 18 answered yes to at least one of these:			
Number of participants	A (Q37)	B (Q38)	C (Q39)
1	Yes	Yes	Yes
2	Yes	Yes	
1	Yes		Yes
3	Yes		
3		Yes	Yes
8		Yes	

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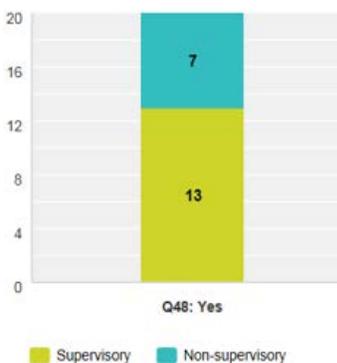
<sup>29</sup> Forty-eight answered this question, and all answers were negative; in other words, they never filed a complaint.

## 10. Retracting or Omitting Data

Question 48 asked the following: “*Since the implementation of the SIP in May 2013, have you been asked to retract or omit data or results that significantly changed information from studies or the publication of your research results for reasons other than technical merit?*” Twenty out of 1,313 scientists (1.5 percent) who answered this question said “yes.” The split between supervisors and non-supervisors was 65 and 35 percent, respectively. Nine of the 20 respondents work for ARS, three for ERS, and eight for FS. The chart below shows the proportion of those who said “yes” per agency.



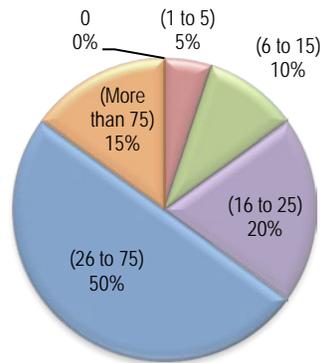
### My current position is



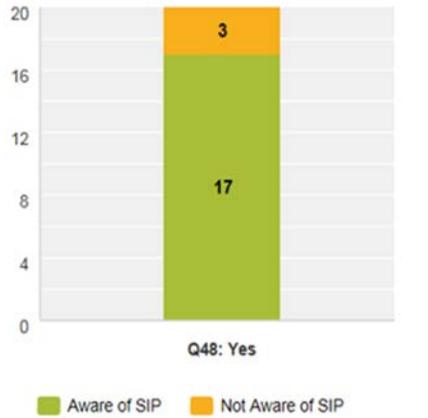
Nineteen of the 20 (95 percent) were in a principal investigator or researcher role. The following figures show how those 20 scientists communicate their research (more than one answer choice was permitted for this question), how many times they were the author or co-author, and their awareness of the SIP:

	Publish in Peer-Reviewed Journals	Publish in Trade Journals	News Media Releases and/or Interviews	Social Media	Professional Conferences and Workshops	Agency Website/ Newsletter/ Publications	Other (please specify)
Q48: Yes	100%	25%	70%	10%	95%	80%	0%
	20	5	14	2	19	16	0

During your career with the USDA, how many scientific peer-reviewed journal articles have you authored or co-authored?



Are you aware of the USDA's Scientific Integrity Policy (SIP) (DR 1074-001)?



Eleven of the 20 respondents answered that their supervisor “seldom” or “never” emphasizes scientific integrity.

	Frequently	Regularly	Seldom	Never	No Opinion	Total
Q48: Yes	0%	35%	25%	30%	10%	100%
	0	7	5	6	2	20

When asked to what extent they feel their agency promotes a culture of scientific integrity, the answers were slightly more positive, with 40 percent answering “somewhat,” and 15 percent stating “strongly.”

	Strongly	Somewhat	Generally No	Rarely	No Opinion	Total
Q48: Yes	15%	40%	25%	20%	0%	100%
	3	8	5	4	0	20

Compared to the other respondents, our data show that those who had been asked to retract or omit data or results that significantly changed information from studies or the publication of their research results for reasons other than technical merit were more likely to answer negatively to most questions regarding their supervisors, their training, and the SIP in general. Each of the 20 scientists responded that they had never filed a scientific integrity complaint for an alleged violation of the 2013 SIP.

Many of the respondents who were asked to retract or omit research information answered “yes” to at least one of the questions related to: (A) research influence from outside entities (Question 37), (B) influence from USDA officials (Question 38), and (C) were asked by a USDA official to provide misleading or inaccurate research (Question 39). The table below provides more detail about those who felt retaliation and answered “yes” to one or more of these questions.

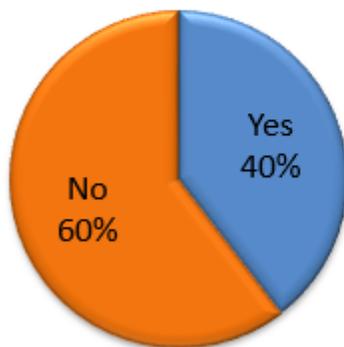
Of the 20 who said they had been asked to retract or omit data, 19 answered yes to at least one of these:			
Number of participants	A (Q37)	B (Q38)	C (Q39)
1	Yes	Yes	Yes
5	Yes	Yes	
1	Yes		
2		Yes	Yes
10		Yes	

## 11. Scientific Integrity Complaints

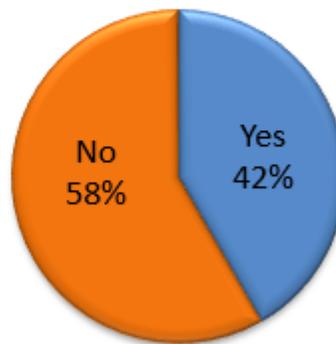
In general, the data show that the process of filing an SIP complaint is not clear to many scientists. Based on the survey responses, we note that very few of the scientists had ever filed a scientific integrity complaint for an alleged violation of the 2013 SIP. To preserve the scientists' anonymity, the details of their answers about the complaint process covered in Questions 52, 53, and 54 will not be shown here.

Sixty percent of our respondents stated that they are unaware of an established procedure for filing a scientific integrity complaint within their agency (Question 49). Furthermore, 58 percent answered that they did not know who to contact in case of scientific integrity concerns (Question 50).

**Are you aware of an established procedure for filing a scientific integrity complaint within your agency?**



**Do you know who to contact in case of scientific integrity concerns?**



Based on comments provided in the survey, we note that respondents had concerns about reporting a scientific integrity incident because some felt that problems that came from management could not be reported to the same management. Others mentioned fear of retaliation, reprisal, and reprimand. Some of the quotes below illustrate these sentiments.

*“I cannot afford to be fired.”*

*“I didn't want to get fired!!!”*

*“Tried to report to the same people who are responsible, which does not work.”*

*“To whom?”*

*“Nothing was done about it after I reported it...”*

*“I reported my situation and was subjected to extreme retaliation.”*

*“...more subtle tampering is common: with interpretations on politically sensitive topics, whether and how we address a certain research question, how we interpret our findings for the public are all interfered with on occasion...”*

## Appendix A – One-way Tables

This appendix shows one-way tables derived from the survey data. These tables display categorical data in the form of frequency counts and percentages.

<b>Q1. Do you participate in scientific research that may result in communicating the findings/outcomes/results to others outside your agency?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Yes	99.5%	1,342
No	0.5%	7
<b><i>answered question</i></b>		<b>1,349</b>
<b><i>skipped question</i></b>		<b>0</b>

<b>Q2. What agency do you work for? *</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
ARS	69.2%	928
ERS	6.3%	84
FS	24.1%	323
NRCS	0.3%	4
Other (please specify)	0.1%	2
<b><i>answered question</i></b>		<b>1,341</b>
<b><i>skipped question</i></b>		<b>8</b>

\* Nine additional respondents chose “Other (please specify)”; however, these nine respondents specified that they worked for the Forest Service, so they were subsequently converted to the “FS” category in this and all other tables and charts.

**Q3. Which category best describes the field of research you conduct for the USDA?**

Answer Options	Response Percent	Response Count
Economist / Mathematics	7.0%	94
Earth / Environmental Science / Ecology	11.5%	154
Biology	6.6%	89
Entomology	9.8%	131
Plant Pathology / Physiology / Genetics	20.4%	273
Forestry	5.1%	68
Soil Science	6.4%	86
Animal Science	7.5%	101
Public Health	1.0%	13
Engineering	4.8%	65
Chemistry	5.7%	76
Social Science	2.0%	27
Other forms of Biology not listed above	2.9%	39
Other forms of Ecology not listed above	1.7%	23
Other (Or, optionally, you may add your Job Series description or code here)	7.6%	102
<b><i>answered question</i></b>		<b>1,341</b>
<b><i>skipped question</i></b>		<b>8</b>

**Q4. Please select a category that best represents your work location. I work in:**

Answer Options	Response Percent	Response Count
Agency HQ	7.0%	94
Agency Field Office	25.5%	342
Agency Regional Lab/Center(s)	49.7%	667
University	14.3%	192
Other (please specify)	3.4%	46
<b><i>answered question</i></b>		<b>1,341</b>
<b><i>skipped question</i></b>		<b>8</b>

**Q5. My current position is**

Answer Options	Response Percent	Response Count
Supervisory	64.6%	866
Non-supervisory	35.4%	475
<b><i>answered question</i></b>		<b>1,341</b>
<b><i>skipped question</i></b>		<b>8</b>

**Q6. What is the highest level of education you have completed? \***

Answer Options	Response Percent	Response Count
Bachelors	0.0%	0
Masters	2.5%	33
Ph.D.	96.9%	1299
Other (please specify)	0.7%	9
<b><i>answered question</i></b>		<b>1341</b>
<b><i>skipped question</i></b>		<b>8</b>

\* Of the nine respondents who answered "Other," seven indicated that they have a Ph.D.; two of these have post-doctoral experience, and four others also have their DVM. Thus, 97.4 percent (1,306 of 1,341) have at least their Ph.D.

**Q7. In relation to the research you perform, what role closest describes your position?**

Answer Options	Response Percent	Response Count
Principal Investigator/Researcher	98.3%	1,318
Research Associate	0.4%	5
Support Personnel to the Research Project	0.1%	2
Postdoctoral Researcher	1.0%	13
Other (please specify)	0.2%	3
<b><i>answered question</i></b>		<b>1,341</b>
<b><i>skipped question</i></b>		<b>8</b>

**Q8. How do you directly communicate your research results? (select all that apply)**

Answer Options	Response Percent	Response Count
Publish in Peer-Reviewed Journals	99.4%	1,330
Publish in Trade Journals	30.0%	401
News Media Releases and/or Interviews	38.4%	514
Social Media	7.4%	99
Professional Conferences and Workshops	91.4%	1,223
Agency Website/Newsletter/Publications	55.2%	739
Other (please specify)	8.6%	115
<b><i>answered question</i></b>		<b>1,338</b>
<b><i>skipped question</i></b>		<b>11</b>

**Q9. During your career with the USDA, how many scientific peer-reviewed journal articles have you authored or co-authored?**

Answer Options	Response Percent	Response Count
(0)	1.3%	18
(1 to 5)	6.6%	88
(6 to 15)	7.7%	103
(16 to 25)	9.1%	122
(26 to 75)	42.0%	562
(Greater than 75)	33.3%	445
<i>answered question</i>		<b>1,338</b>
<i>skipped question</i>		11

**Q10. On average, how many times are you requested to speak about your work within a calendar year?**

Answer Options	Response Percent	Response Count
(0 - 2)	29.4%	393
(3 - 5)	46.3%	619
(6 - 10)	15.9%	213
(11 - 15)	4.6%	61
(15 or more)	3.9%	52
<i>answered question</i>		<b>1,338</b>
<i>skipped question</i>		11

**Q11. Are you aware of the USDA's Scientific Integrity Policy (SIP) (DR 1074-001)?**

Answer Options	Response Percent	Response Count
Yes	82.4%	1,102
No	17.6%	235
Optional Comment		50
<i>answered question</i>		<b>1,337</b>
<i>skipped question</i>		12

**Q12. How did you become aware of the SIP? (select all that apply)**

Answer Options	Response Percent	Response Count
Training	45.0%	497
Agency Bulletins	30.2%	333
Supervisory Notification	22.8%	252
Departmental Memo	29.6%	327
Staff/Leadership Team Meetings	11.8%	130
New Hire Orientation	7.8%	86
Not Sure / Don't Remember	23.8%	263
Other (please specify)	4.0%	44
<b><i>answered question</i></b>		<b>1,104</b>
<b><i>skipped question</i></b>		<b>245</b>

**Q13. Since the implementation of the SIP in May 2013, have you received training on the policy? (select all that apply) \***

Answer Options	Response Percent	Response Count
I received AgLearn training	53.5%	591
I received classroom training	1.6%	18
I attended a webinar	8.2%	91
I received the PDF-version training	4.9%	54
I received this training during new-hire orientation	2.6%	29
I have not received any training	9.1%	101
Not sure / Don't Remember	32.5%	359
<b><i>answered question</i></b>		<b>1,104</b>
<b><i>skipped question</i></b>		<b>245</b>

\* Ninety-four respondents selected "I have not received any training," 352 selected "Not sure / Don't Remember," and 7 chose both.

**Q14. Did you consider the training to have been adequate and sufficient to make you familiar with the USDA's SIP? \***

Answer Options	Response Percent	Response Count
Yes	82.0%	821
No	18.0%	180
Optional Comment		114
<b><i>answered question</i></b>		<b>1,001</b>
<b><i>skipped question</i></b>		<b>348</b>

\* Of the 1,001 who answered this question, 352 indicated in Q13 that they did not receive any training or that they were not sure / did not remember. Specifically, 349 answered "Not sure / Don't Remember" to Q13 and 3 answered "I have not received any training." Of the 649 who explicitly remembered taking training on the SIP, 603 answered "Yes" to Q14 (93 percent) and 46 answered "No" (7 percent). Thirty-one of the 649 wrote optional comments.

**Q15. If you have any recommendations about how to improve the training on the SIP, please list them below. (Optional) \***

Answer Options	Response Count
	109
<b><i>answered question</i></b>	<b>109</b>
<b><i>skipped question</i></b>	<b>1,240</b>

\* When a question was marked as "Optional," the survey allowed the respondent to skip the question and continue to the next survey question without providing an answer.

**Q16. To what extent do you feel your supervisor(s) emphasize(s) the importance of "scientific integrity" as it pertains to your scientific research activities in the USDA?**

Answer Options	Response Percent	Response Count
Frequently emphasizes the importance	15.5%	207
Regularly emphasizes the importance	38.6%	514
Seldom emphasizes the importance	24.4%	325
Never emphasizes the importance	9.7%	129
I have no opinion	11.8%	157
Optional Comment		161
<b><i>answered question</i></b>		<b>1,332</b>
<b><i>skipped question</i></b>		<b>17</b>

**Q17. To what extent do you feel that your agency promotes a culture of scientific integrity?**

Answer Options	Response Percent	Response Count
Strongly promotes it	49.9%	665
Somewhat promotes it	32.6%	434
Generally does not promote it	5.9%	79
Rarely promotes it	5.9%	78
I have no opinion	5.7%	76
Optional Comment		110
<b><i>answered question</i></b>		<b>1,332</b>
<b><i>skipped question</i></b>		<b>17</b>

**Q18. Have you been informed by management/supervisors/public affairs that certain research topics/papers and conference presentations are sensitive/controversial/prominent/high profile and require additional managerial approval?**

Answer Options	Response Percent	Response Count
Yes	74.4%	990
No	25.6%	341
<b><i>answered question</i></b>		<b>1,331</b>
<b><i>skipped question</i></b>		<b>18</b>

**Q19. Please identify which research areas have been identified to you as sensitive/controversial/prominent/high profile. (select all that apply)**

Answer Options	Response Percent	Response Count
Climate Change	42.7%	422
Pollinator Health	22.2%	220
Anti-Microbial Resistance (AMR)	23.2%	229
Gene Editing/Transgenics	35.2%	348
Wildfire Research	7.9%	78
Other (please specify)	41.9%	414
<b><i>answered question</i></b>		<b>989</b>
<b><i>skipped question</i></b>		<b>360</b>

**Q20. In your opinion, were you informed about the sensitivity of the topic in a timely manner?**

Answer Options	Response Percent	Response Count
Yes	67.7%	670
No	6.9%	68
No Opinion	25.4%	251
Optional Comment		61
<b><i>answered question</i></b>		<b>989</b>
<b><i>skipped question</i></b>		<b>360</b>

**Q21. Does your agency support conducting research on sensitive/controversial/prominent/high profile topics?**

Answer Options	Response Percent	Response Count
Yes	61.0%	809
No	7.5%	99
No Opinion	31.6%	419
Optional Comment		123
<b><i>answered question</i></b>		<b>1,327</b>
<b><i>skipped question</i></b>		<b>22</b>

**Q22. Do you have experience as a research-grade scientist with the USDA prior to the implementation of the USDA's SIP in May 2013?**

Answer Options	Response Percent	Response Count
Yes	84.2%	1,116
No	15.8%	210
<b><i>answered question</i></b>		<b>1,326</b>
<b><i>skipped question</i></b>		<b>23</b>

**Q23. How long have you worked as a research-grade scientist at the USDA? \***

Answer Options	Response Percent	Response Count
4 - 5 years	3.6%	40
6 - 10 years	15.2%	170
11 - 20 years	43.9%	491
21 years or more	37.4%	418
<b><i>answered question</i></b>		<b>1,119</b>
<b><i>skipped question</i></b>		<b>230</b>

\* Percentages do not reflect the entire population of survey respondents. Those for Q23 are based on only 1,119 of the 1,326 who responded to Q22 as follows: 1,116 "Yes" and 3 "No." (The latter 3 initially choose "Yes" for Q22, then "4-5 years" for Q23, then went back to Q22 and changed their "Yes" to "No," which caused them to be advanced to Q32.)

**Q24. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to publish in professional or scholarly journals has:**

Answer Options	Response Percent	Response Count
Increased	0.8%	9
Decreased	2.4%	27
Remained the Same	85.4%	951
Don't Know / No Opinion	11.3%	126
<b><i>answered question</i></b>		<b>1,113</b>
<b><i>skipped question</i></b>		<b>236</b>

**Q25. As a result of the implementation of the USDA SIP in 2013, do you believe your ability to participate in peer reviews as a reviewer of scientific manuscripts has:**

Answer Options	Response Percent	Response Count
Increased	1.3%	15
Decreased	1.4%	16
Remained the Same	88.4%	984
Don't Know / No Opinion	8.8%	98
<b><i>answered question</i></b>		<b>1,113</b>
<b><i>skipped question</i></b>		<b>236</b>

**Q26. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to present research findings at professional meetings or conferences has:**

Answer Options	Response Percent	Response Count
Increased	0.9%	10
Decreased	5.4%	60
Remained the Same	85.1%	947
Don't Know/No Opinion	8.6%	96
<b><i>answered question</i></b>		<b>1,113</b>
<b><i>skipped question</i></b>		<b>236</b>

**Q27. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to participate in professional societies has:**

Answer Options	Response Percent	Response Count
Increased	3.4%	38
Decreased	7.0%	78
Remained the Same	79.2%	881
Don't Know / No Opinion	10.4%	116
<b><i>answered question</i></b>		<b>1,113</b>
<b><i>skipped question</i></b>		<b>236</b>

**Q28. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to communicate scientific findings with the media has:**

Answer Options	Response Percent	Response Count
Increased	1.1%	12
Decreased	14.1%	157
Remained the Same	65.0%	723
Don't Know / No Opinion	19.9%	221
<b><i>answered question</i></b>		<b>1,113</b>
<b><i>skipped question</i></b>		<b>236</b>

**Q29. In your opinion, has the implementation of the 2013 SIP been beneficial to you? \***

Answer Options	Response Percent	Response Count
Yes	14.7%	164
No	22.4%	249
No Opinion	62.9%	700
Optional Comment		126
<b><i>answered question</i></b>		<b>1,113</b>
<b><i>skipped question</i></b>		<b>236</b>

\* Off the 1,113 who answered this question, 167 answered "No" to Q11 (awareness of SIP); 2 of these answered "Yes" to Q29, 40 "No," and 125 "No Opinion." Of the 946 respondents who were aware of the SIP, 17 percent answered "Yes" to Q29, 22 percent "No," and 61 percent "No Opinion."

**Q30. In your opinion, have you experienced any challenges as a result of the implementation of the 2013 SIP? \* (Optional)**

Answer Options	Response Percent	Response Count
Yes	5.7%	63
No	74.7%	824
No Opinion	19.6%	216
Optional Comment		57
<b><i>answered question</i></b>		<b>1,103</b>
<b><i>skipped question</i></b>		<b>246</b>

\* 164 of the 1,103 who answered this question answered "No" to Q11 (awareness of SIP); 6 of these answered "Yes" to Q30, 96 "No," and 62 "No Opinion." Of the 939 respondents who were aware of the SIP, 6 percent answered "Yes" to Q30, 78 percent "No," and 16 percent "No Opinion."

**Q31. If you have any comments regarding anything mentioned on this page, please list them here. (Optional)**

Answer Options	Response Count
	165
<b><i>answered question</i></b>	<b>165</b>
<b><i>skipped question</i></b>	<b>1,184</b>

**Q32. Have you been instructed to (or been made aware that you should) coordinate with your supervisor and/or the agency Public Affairs/Communications office prior to participating in interviews with sources such as the news media about your research results?**

Answer Options	Response Percent	Response Count
Yes	88.1%	1,165
No	7.9%	104
Not Sure	4.0%	53
Optional Comment		73
<b><i>answered question</i></b>		<b>1,322</b>
<b><i>skipped question</i></b>		<b>27</b>

**Q33. Based on information provided to you by your agency, how clear is it how social media may be used as a communication tool with respect to your scientific expertise in your official and personal capacity?**

Answer Options	Response Percent	Response Count
Very Clear	13.5%	178
Somewhat Clear	27.3%	361
Mostly Unclear	26.9%	355
Completely Unclear	18.8%	248
Not Applicable / No Opinion	13.6%	180
Optional Comment		143
<b><i>answered question</i></b>		<b>1,322</b>
<b><i>skipped question</i></b>		<b>27</b>

**Q34. USDA's SIP prevents political interference/conflict of interest with research results and reporting. \***

Answer Options	Response Percent	Response Count
Strongly Agree	11.2%	148
Agree	30.4%	401
I Have No Opinion	27.5%	362
Disagree	9.9%	130
Strongly Disagree	2.7%	35
No Opinion / Not Aware of the SIP Provisions	18.4%	242
<b><i>answered question</i></b>		<b>1,318</b>
<b><i>skipped question</i></b>		<b>31</b>

\* Of the 1,318 who answered this question, 231 answered "No" to Q11 (awareness of SIP); 15 of these answered "Strongly Agree" to Q34, 29 "Agree," 11 "Disagree," 7 "Strongly Disagree," 67 "I Have No Opinion," and 102 "No Opinion / Not Aware of the SIP Provisions." Of the 1,087 respondents who were aware of the SIP, 12 percent answered "Strongly Agree" to Q34, 34 percent "Agree," 11 percent "Disagree," 3 percent "Strongly Disagree," 27 percent "I Have No Opinion," and 13 percent "No Opinion / Not Aware of the SIP Provisions."

**Q35. If you have comments you wish to share regarding political interference or conflict of interests, please do so here. (Optional)**

Answer Options	Response Count
	147
<b><i>answered question</i></b>	<b>147</b>
<b><i>skipped question</i></b>	<b>1,202</b>

**Q36. To what extent would you agree that your research findings (i.e., data and results) have not been altered or suppressed for reasons other than technical merit?**

Answer Options	Response Percent	Response Count
Strongly Agree	53.7%	708
Agree	27.2%	359
I Have No Opinion	9.9%	130
Disagree	6.2%	82
Strongly Disagree	3.0%	39
Optional Comment		93
<b><i>answered question</i></b>		<b>1,318</b>
<b><i>skipped question</i></b>		<b>31</b>

**Q37. During the past 3 years, have you been pressured by external interest groups (i.e., non-USDA entities such as businesses, advocacy/stakeholder groups, etc.) to omit or significantly alter your research findings for reasons other than technical merit?**

Answer Options	Response Percent	Response Count
Yes	2.2%	29
No	96.0%	1,262
Don't Know / Don't Recall / I Have No Opinion	1.8%	24
Optional Comment		33
<b><i>answered question</i></b>		<b>1,315</b>
<b><i>skipped question</i></b>		<b>34</b>

**Q38. During the past 3 years, have you been pressured by a USDA Departmental or agency official to omit or significantly alter your research findings for reasons other than technical merit?**

Answer Options	Response Percent	Response Count
Yes	3.2%	42
No	94.4%	1,242
Don't Know / Don't Recall / I Have No Opinion	2.4%	31
Optional Comment		40
<b><i>answered question</i></b>		<b>1,315</b>
<b><i>skipped question</i></b>		<b>34</b>

**Q39. During the past 3 years, has a USDA Departmental or agency official requested that you provide inaccurate or misleading scientific information to groups such as the public, industry, media, or elected/senior Government officials?**

Answer Options	Response Percent	Response Count
Yes	0.8%	11
No	97.7%	1,285
Don't Know / Don't Recall / I Have No Opinion	1.4%	19
Optional Comment		26
<b><i>answered question</i></b>		<b>1,315</b>
<b><i>skipped question</i></b>		<b>34</b>

**Q40. If you answered “yes” to any of the questions on this page, did you report the incident? \***

Answer Options	Response Percent	Response Count
Yes	1.1%	15
No	4.0%	52
Don't Know / Don't Recall / I Have No Opinion	0.6%	8
Not Applicable	94.3%	1,240
Optional Comment		40
<b><i>answered question</i></b>		<b>1,315</b>
<b><i>skipped question</i></b>		<b>34</b>

\* Of the 68 who answered “Yes” to at least one of the following: Q37, Q38, or Q39, 15 (22 percent) answered “Yes” to Q40, 39 (57 percent) “No,” and 14 (21 percent) “Not Applicable.” 30 of the 40 comments were written by these 68 respondents.

**Q41. Who was the incident reported to? (Select all that apply)**

Answer Options	Response Percent	Response Count
Supervisory Chain	73.3%	11
Project Coordinator	6.7%	1
Agency Scientific Integrity Officer	0.0%	0
Departmental Scientific Integrity Officer	0.0%	0
Other (please specify)	46.7%	7
<b><i>answered question</i></b>		<b>15</b>
<b><i>skipped question</i></b>		<b>1,334</b>

**Q42. Under what policy or procedure was the incident reported? (Select all that apply)**

Answer Options	Response Percent	Response Count
Whistleblower Protection Act	0.0%	0
SIP	0.0%	0
Other (please specify)	100.0%	15
<b><i>answered question</i></b>		<b>15</b>
<b><i>skipped question</i></b>		<b>1,334</b>

**Q43. Was your scientific integrity complaint handled to your satisfaction?**

Answer Options	Response Percent	Response Count
Yes	33.3%	5
No	66.7%	10
Optional Comment		6
<b><i>answered question</i></b>		<b>15</b>
<b><i>skipped question</i></b>		<b>1,334</b>

**Q44. Was your scientific integrity complaint handled promptly? \***

Answer Options	Response Percent	Response Count
Yes	40.0%	6
No	60.0%	9
If no, how long did it take?		8
<b><i>answered question</i></b>		<b>15</b>
<b><i>skipped question</i></b>		<b>1,334</b>

\* One of the eight who wrote comments in response to "If no, how long did it take?" chose "Yes."

**Q45. If resolved, who resolved it?**

Answer Options	Response Percent	Response Count
Supervisory Chain	26.7%	4
Project Coordinator	0.0%	0
Agency Scientific Integrity Officer	0.0%	0
Departmental Scientific Integrity Officer	0.0%	0
Departmental Scientific Integrity Review Panel	0.0%	0
Other (please specify)	73.3%	11
<b><i>answered question</i></b>		<b>15</b>
<b><i>skipped question</i></b>		<b>1,334</b>

**Q46. If your incident was not resolved, please explain here.**

Answer Options	Response Count
	7
<b><i>answered question</i></b>	<b>7</b>
<b><i>skipped question</i></b>	<b>1,342</b>

**Q47. Do you feel like you have been the subject of retaliation by management/supervisor/authoritative individual because of your research results? \***

Answer Options	Response Percent	Response Count
Yes	3.7%	49
No	96.3%	1,264
If yes, please explain.		47
<b><i>answered question</i></b>		<b>1,313</b>
<b><i>skipped question</i></b>		<b>36</b>

\* 37 of the 47 who wrote comments in response to "If yes, please explain" chose "Yes"; 10 of the 47 who wrote comments in response to "If yes, please explain" chose "No" (i.e., 10 of the 1,264 "No" respondents offered comments).

**Q48. Since the implementation of the SIP in May 2013, have you been asked to retract or omit data or results that significantly changed information from studies or the publication of your research results for reasons other than technical merit? \***

Answer Options	Response Percent	Response Count
Yes	1.5%	20
No	98.5%	1,293
If yes, please explain.		20
<b><i>answered question</i></b>		<b>1,313</b>
<b><i>skipped question</i></b>		<b>36</b>

\* 7 of the 20 who wrote comments in response to "If yes, please explain." chose "No."

**Q49. Are you aware of an established procedure for filing a scientific integrity complaint within your agency? \***

Answer Options	Response Percent	Response Count
Yes	39.6%	520
No	60.4%	792
If no, why not? (i.e., no training, no supervisor notification, etc.)		276
<b><i>answered question</i></b>		<b>1,312</b>
<b><i>skipped question</i></b>		<b>37</b>

\* 10 of the 276 who wrote comments in response to "If no, why not?" chose "Yes."

**Q50. Do you know who to contact in case of scientific integrity concerns?**

Answer Options	Response Percent	Response Count
Yes	41.7%	547
No	58.3%	765
<b><i>answered question</i></b>		<b>1,312</b>
<b><i>skipped question</i></b>		<b>37</b>

**Q51. Have you ever filed a scientific integrity complaint for an alleged violation of the 2013 SIP?**

Answer Options	Response Percent	Response Count
Yes	0.3%	4
No	99.7%	1,308
<b><i>answered question</i></b>		<b>1,312</b>
<b><i>skipped question</i></b>		<b>37</b>

**Q52. How would you describe your experience with the complaint process?**

Answer Options	Response Percent	Response Count
Very Satisfied	0.0%	0
Somewhat Satisfied	20.0%	1
Mostly Dissatisfied	20.0%	1
Completely Dissatisfied	0.0%	0
I Have No Opinion	60.0%	3
<b><i>answered question</i></b>		<b>5</b>
<b><i>skipped question</i></b>		<b>1,344</b>

\* The "Mostly Dissatisfied" response to Q52 was from someone who initially chose "Yes" for Q51, then after responding to Q52, went back to Q51 and changed "Yes" to "No," which resulted in being advanced to Q54. In addition, one of the three who chose "I Have No Opinion" for Q52 also provided the sole response to Q53 that reads as follows: "My complaint did not undergo a formal complaint process (i.e., I did not submit a complaint through the formal process, just through higher management). However, an investigation did occur."

**Q53. Do you have any suggestions about how to strengthen or improve the complaint process?**

Answer Options	Response Count
	1
<b><i>answered question</i></b>	<b>1</b>
<b><i>skipped question</i></b>	<b>1,348</b>

**Q54. Do you have any other concerns related to scientific integrity that you want to share with OIG? \***

Answer Options	Response Count
	481
<b><i>answered question</i></b>	<b>481</b>
<b><i>skipped question</i></b>	<b>868</b>

\* Over half of the 481 respondents indicated they had no other concerns.

**Q55. What is your grade level? \***

Answer Options	Response Percent	Response Count
GS 11	1.2%	15
GS 12	10.1%	129
GS 13	16.8%	215
GS 14	31.6%	405
GS 15	37.6%	482
ST	2.4%	31
Other (please specify)	0.5%	6

***answered question*** 1,283

***skipped question*** 66

\* Of the six who chose "Other (please specify)," one specified "SSTS," another "GS 13," and four did not specify. Because of this, tables and charts related to grade levels in the report display 216 GS 13 and 5 others (instead of 215 and 6, respectively).

**Q56. Are you?**

Answer Options	Response Percent	Response Count
Male	74.6%	932
Female	25.4%	317

***answered question*** 1,249

***skipped question*** 100

**Q57. Please select the racial category or categories with which you most closely identify.**

Answer Options	Response Percent	Response Count
American Indian or Alaska Native	0.6%	7
Asian	11.1%	136
Black or African American	2.0%	25
Hispanic or Latino	3.0%	37
Native Hawaiian or Other Pacific Islander	0.0%	0
White	79.6%	975
Other	3.7%	45

***answered question*** 1,225

***skipped question*** 124

## *Appendix B - Survey Invitation Email*

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The United States Department of Agriculture's (USDA) Office of Inspector General (OIG) is conducting an audit to determine whether USDA's Scientific Integrity Policy has sufficient controls to ensure that USDA scientists may communicate and publish their research findings without undue interference. As part of the audit, we are conducting this survey regarding the scientific integrity of research performed by USDA scientists. This survey is intended to provide information that could be used to improve the adequacy and effectiveness of the existing USDA Scientific Integrity Policy.

This survey is **anonymous and confidential**. OIG is solely responsible for collecting all individual responses and will provide only aggregate information to agency management. Your answers will not be linked to you.

Your responses are essential to us and will allow OIG to assess the perceptions of USDA scientists and researchers regarding their ability to conduct research and communicate results. Please take the survey by clicking the button below.

Thank you for your participation!

*OIG Survey Team  
(816) 926-7665  
Science.Survey@oig.usda.gov*

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**USDA Scientists’ Scientific Integrity Survey  
July 12, 2016–August 12, 2016**

**Full Version**



## Scientists Scientific Integrity Survey

### Introduction

The United States Department of Agriculture's (USDA) Office of Inspector General (OIG) is conducting the following survey regarding the scientific integrity of research performed by USDA scientists. As you go through the survey questions, please keep this Scientific Integrity Policy Handbook definition in mind: scientific integrity is - *"the condition resulting from adherence to professional values and practices when conducting and applying the results of science that ensures objectivity, clarity, and reproducibility, and that provides insulation from bias, fabrication, falsification, plagiarism, interference, censorship, and inadequate procedural and information security."*

The survey is anonymous and confidential. OIG is solely responsible for collecting all individual responses and will provide only an aggregate report to agency management. Your answers will not be linked to you in any way.

This survey is intended to provide information that could be used to improve the adequacy and effectiveness of the existing USDA Scientific Integrity Policy. Your answers are essential to us and will allow OIG to assess the perceptions of USDA scientists and researchers regarding their ability to conduct research and communicate results. The survey will take approximately 25 minutes to complete. OIG greatly appreciates your thoughtful reply. Thank you!



## Scientists Scientific Integrity Survey

\* 1. Do you participate in scientific research that may result in communicating the findings/outcomes/results to others outside your agency?

- Yes  
 No



## Scientists Scientific Integrity Survey

1

## Job Duties

\* 2. What agency do you work for?

- ARS
- ERS
- FS
- NRCS
- Other (please specify)

\* 3. Which category best describes the field of research you conduct for the USDA?

- Economist / Mathematics
- Earth / Environmental Science / Ecology
- Biology
- Entomology
- Plant Pathology / Physiology / Genetics
- Forestry
- Soil Science
- Animal Science
- Public Health
- Engineering
- Chemistry
- Social Science
- Other forms of Biology not listed above
- Other forms of Ecology not listed above
- Other (OR optionally, you may add your Job Series description or code here)

\* 4. Please select a category that best represents your work location. I work in:

- Agency HQ
- Agency Field office
- Agency Regional Lab/Center(s)
- University
- Other (please specify)

\* 5. My current position is

- Supervisory
- Non-supervisory

\* 6. What is the highest level of education you have completed?

- Bachelors
- Masters
- PhD
- Other (please specify)

\* 7. In relation to the research you perform, what role closest describes your position?

- Principal Investigator/Researcher
- Research Associate
- Support Personnel to the Research Project
- Postdoctoral Researcher
- Other (please specify)

 **USDA** Scientists Scientific Integrity Survey

General Communications

\* 8. How do you directly communicate your research results? (select all that apply)

- Publish in Peer Reviewed Journals
- Publish in Trade Journals
- News Media Releases and/or Interviews
- Social Media
- Professional Conferences and Workshops
- Agency Website/Newsletter/Publications
- Other (please specify)

\* 9. During your career with the USDA, how many scientific peer reviewed journal articles have you authored or co-authored?

- (0)
- (1 to 5)
- (6 to 15)
- (16 to 25)
- (26 to 75)
- (Greater than 75)

\* 10. On average, how many times are you requested to speak about your work within a calendar year?

- (0 to 2)
- (3-5)
- (6 - 10)
- (11 – 15)
- (15 or more)



USDA Scientists Scientific Integrity Survey

Scientific Integrity Policy

\* 11. Are you aware of the USDA's Scientific Integrity Policy (SIP) (DR 1074-001)?

- Yes
- No

Optional Comment



## Scientists Scientific Integrity Survey

### Scientific Integrity Policy

\* 12. How did you become aware of the SIP? (select all that apply)

- Training
- Agency Bulletins
- Supervisory Notification
- Departmental Memo
- Staff/Leadership Team Meetings
- New Hire Orientation
- Not Sure / Don't Remember
- Other (please specify)

\* 13. Since the implementation of the SIP in May 2013, have you received training on the policy? (select all that apply)

- I received AgLearn training
- I received classroom training
- I attended a webinar
- I received the PDF version training
- I received this training during new hire orientation
- I have not received any training
- Not sure / Don't Remember



\* 14. Did you consider the training to have been adequate and sufficient to make you familiar with the USDA's SIP?

Yes

No

Optional Comment

15. If you have any recommendations about how to improve the training on the SIP, please list them below. (Optional)



**Definition of Scientific Integrity per the Scientific Integrity Policy Handbook:**

*The condition resulting from adherence to professional values and practices when conducting and applying the results of science that ensures objectivity, clarity, and reproducibility, and that provides insulation from bias, fabrication, falsification, plagiarism, interference, censorship, and inadequate procedural and information security.*

\* 16. To what extent do you feel your supervisor(s) emphasize(s) the importance of "scientific integrity" as it pertains to your scientific research activities in the USDA?

- Frequently emphasizes the importance
- Regularly emphasizes the importance
- Seldom emphasizes the importance
- Never emphasizes the importance
- I have no opinion

Optional Comment

\* 17. To what extent do you feel that your agency promotes a culture of scientific integrity?

- Strongly promotes it
- Somewhat promotes it
- Generally does not promote it
- Rarely promotes it
- I have no opinion

Optional Comment

 **USDA** Scientists Scientific Integrity Survey

Sensitive Topics

\* 18. Have you been informed by management/supervisors/ public affairs that certain research topics/ papers and conference presentations are sensitive/ controversial/ prominent/ high profile and require additional managerial approval?

- Yes
- No

 **USDA** Scientists Scientific Integrity Survey



\* 19. Please identify which research areas have been identified to you as sensitive/ controversial/ prominent/ high profile. (select all that apply)

- Climate Change
- Pollinator Health
- Anti-Microbial Resistance (AMR)
- Gene Editing/Transgenics
- Wildfire Research
- Other (please specify)

\* 20. In your opinion, were you informed about the sensitivity of the topic in a timely manner?

- Yes
- No
- No Opinion

Optional Comment

\* 21. Does your agency support conducting research on sensitive/ controversial/ prominent/high profile topics?

- Yes
- No
- No Opinion

Optional Comment

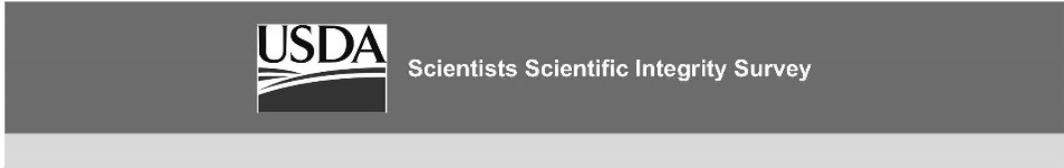


USDA Scientists Scientific Integrity Survey

Engaging in the Broader Scientific Community

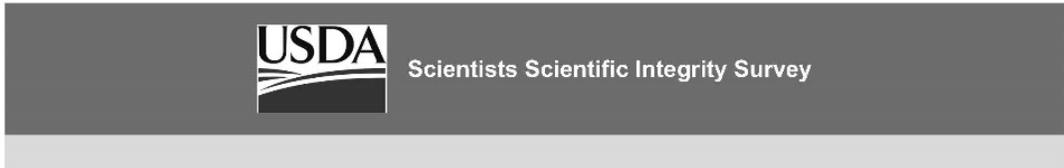
\* 22. Do you have experience as a Research Grade Scientist with the USDA prior to the implementation of the USDA' SIP in May 2013?

- Yes
- No



\* 23. How long have you worked as a research grade scientist at the USDA?

- 4 - 5 years
- 6 - 10 years
- 11 - 20 years
- 21 years or more



\* 24. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to publish in professional or scholarly journals has

- Increased
- Decreased
- Remained the Same
- Don't Know / No Opinion

\* 25. As a result of the implementation of the USDA SIP in 2013, do you believe your ability to participate in peer reviews as a reviewer of scientific manuscripts has:

- Increased
- Decreased
- Remained the Same
- Don't Know / No Opinion

\* 26. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to present research findings at professional meetings or conferences has:

- Increased
- Decreased
- Remained the Same
- Don't Know/No Opinion

\* 27. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to participate in professional societies has:

- Increased
- Decreased
- Remained the Same
- Don't Know / No Opinion

\* 28. As a result of the implementation of the USDA SIP in 2013, do you believe that your ability to communicate scientific findings with the media has:

- Increased
- Decreased
- Remained the Same
- Don't Know / No Opinion

\* 29. In your opinion, has the implementation of the 2013 SIP been beneficial to you?

- Yes
- No
- No Opinion

Optional Comment

30. In your opinion, have you experienced any challenges as a result of the implementation of the 2013 SIP?

- Yes
- No
- No Opinion

Optional Comment

31. If you have any comments regarding anything mentioned on this page, please list them here. (optional)



Scientists Scientific Integrity Survey

Agency Procedures For Communicating Research Results

\* 32. Have you been instructed to (or been made aware that you should) coordinate with your supervisor and/or the agency Public Affairs/Communications office prior to participating in interviews with sources, such as the news media about your research results?

- Yes
- No
- Not Sure

Optional Comment

\* 33. Based on information provided to you by your agency, how clear is it how social media may be used as a communication tool with respect to your scientific expertise in your official and personal capacity?

- Very Clear
- Somewhat Clear
- Mostly Unclear
- Completely Unclear
- Not Applicable / No Opinion

Optional Comment



## Scientists Scientific Integrity Survey

### Personal Difficulties Communicating Results

**The following questions address the protections provided by the provisions of the 2013 USDA SIP (DR 1074-001).**

\* 34. USDA's SIP prevents political interference/conflict of interest with research results and reporting.

- Strongly Agree
- Agree
- I Have No Opinion
- Disagree
- Strongly Disagree
- No Opinion / Not Aware of the SIP Provisions

35. If you have comments you wish to share regarding political interference or conflict of interests, please do so here. (optional)

\* 36. To what extent would you agree that your research findings (i.e., data and results) have not been altered or suppressed for reasons other than technical merit?

- Strongly Agree
- Agree
- I Have No Opinion
- Disagree
- Strongly Disagree

Optional Comment



\* 37. During the past 3 years, have you been pressured by external interest groups (i.e., non-USDA entities such as businesses, advocacy/stakeholder groups, etc.) to omit or significantly alter your research findings for reasons other than technical merit?

- Yes
- No
- Don't Know / Don't Recall / I Have No Opinion

Optional Comment

\* 38. During the past 3 years, have you been pressured by a USDA Departmental or agency official to omit or significantly alter your research findings for reasons other than technical merit?

- Yes
- No
- Don't Know / Don't Recall / I Have No Opinion

Optional Comment

\* 39. During the past 3 years, has a USDA Departmental or agency official requested that you provide inaccurate or misleading scientific information to groups such as the public, industry, media, or elected/senior government officials?

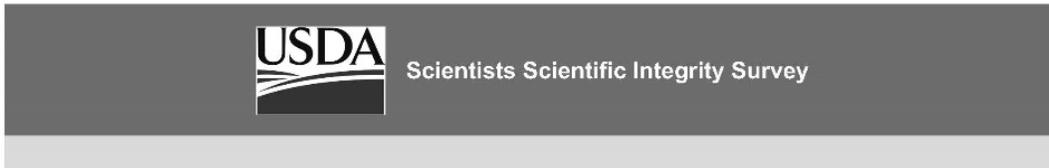
- Yes
- No
- Don't Know / Don't Recall / I Have No Opinion

Optional Comment

\* 40. If you answered "yes" to any of the questions on this page, did you report the incident?

- Yes
- No
- Don't Know / Don't Recall / I Have No Opinion
- Not Applicable

Optional Comment



\* 41. Who was the incident reported to? (Select all that apply)

- Supervisory Chain
- Project Coordinator
- Agency Scientific Integrity Officer
- Departmental Scientific Integrity Officer
- Other (please specify)

\* 42. Under what policy or procedure was the incident reported? (Select all that apply)

Whistleblower Protection Act

SIP

Other (please specify)

\* 43. Was your scientific integrity complaint handled to your satisfaction?

Yes

No

Optional Comment

\* 44. Was your scientific integrity complaint handled promptly?

Yes

No

If no, how long did it take?

\* 45. If resolved, who resolved it?

Supervisory Chain

Project Coordinator

Agency Scientific Integrity Officer

Departmental Scientific Integrity Officer

Departmental Scientific Integrity Review Panel

Other (please specify)

46. If your incident was not resolved, please explain here.



Scientists Scientific Integrity Survey

\* 47. Do you feel like you have been the subject of retaliation by management/supervisor/authoritative individual because of your research results?

- Yes
- No

If yes, please explain.

\* 48. Since the implementation of the SIP in May 2013, have you been asked to retract or omit data or results that significantly changed information from studies or the publication of your research results for reasons other than technical merit?

- Yes
- No

If yes, please explain.



Scientists Scientific Integrity Survey

Scientific Integrity Complaint Process

\* 49. Are you aware of an established procedure for filing a scientific integrity complaint within your agency?

- Yes
- No

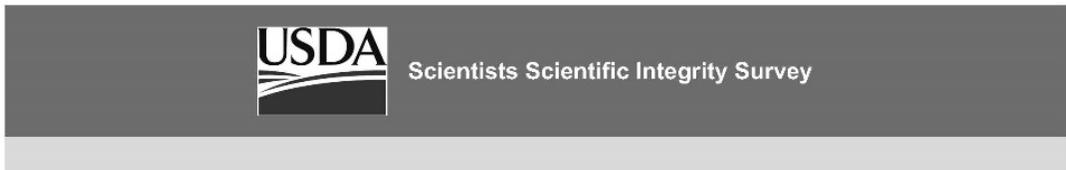
If no, why not?(i.e. no training, no supervisor notification, etc.)

\* 50. Do you know who to contact in case of scientific integrity concerns?

- Yes
- No

\* 51. Have you ever filed a scientific integrity complaint for an alleged violation of the 2013 SIP?

- Yes
- No

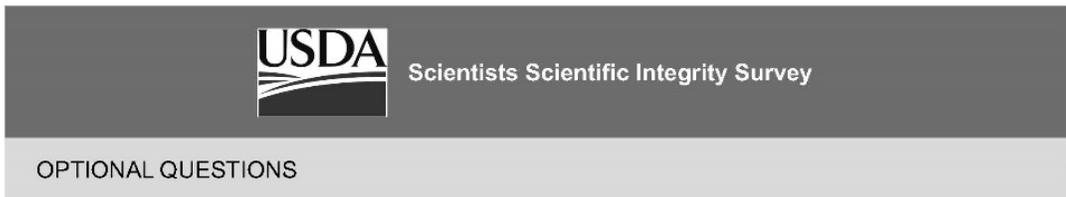


\* 52. How would you describe your experience with the complaint process?

- Very Satisfied
- Somewhat Satisfied
- Mostly Dissatisfied
- Completely Dissatisfied
- I Have No Opinion

53. Do you have any suggestions about how to strengthen or improve the complaint process?

54. Do you have any other concerns related to scientific integrity that you want to share with OIG?



55. What is your grade level?

- GS 11
- GS 12
- GS 13
- GS 14
- GS 15
- ST
- Other (please specify)

56. Are you?

- Male
- Female

57. Please select the racial category or categories with which you most closely identify (mark as many as apply).

- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or Other Pacific Islander
- White
- Other



Scientists Scientific Integrity Survey

**Thank you!**

If you have questions regarding this survey, or would like to provide additional information please call (816) 926-7665 or email [Science.Survey@oig.usda.gov](mailto:Science.Survey@oig.usda.gov). Thank you for your participation!

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## Bibliography

Bruce L. Berg, *Qualitative Research Methods for the Social Sciences* (6<sup>th</sup> ed. 2007).

William G. Cochran, *Sampling Techniques* (3<sup>rd</sup> ed. 1977).

Chase Harrison, *Tip Sheet On Question Wording* (2007).

Leslie Kish, *Survey Sampling* (1995).

Duncan D. Nulty, *The Adequacy Of Response Rates To Online And Paper Surveys: What Can Be Done?* 301–314 (June 2008).

Lyman R. Ott, *An Introduction to Statistical Methods and Data Analysis* (4<sup>th</sup> ed.1992).

Richard L. Scheaffer et al., *Elementary Survey Sampling* (7<sup>th</sup> ed. 2012).

Paul E. Spector, *Measurement of Human Service Staff Satisfaction: Development of the Job Satisfaction Survey* (1985).