



## DATA SHARING AND DATA WITHHOLDING IN LIFE SCIENCES RESEARCH

**S1. Before you begin, please indicate your academic rank:**

- <sub>1</sub> Full professor  
<sub>2</sub> Associate professor  
<sub>3</sub> Assistant professor  
<sub>4</sub> Instructor or lecturer

**IF YOU DO NOT HAVE A FACULTY APPOINTMENT AS INDICATED BY ONE OF THE FOUR OPTIONS ABOVE,  
CHECK HERE**

**AND DO NOT COMPLETE THE REST OF THE QUESTIONNAIRE. PLEASE JUST RETURN THE  
QUESTIONNAIRE IN THE ENVELOPE PROVIDED AND PLACE THE POSTCARD IN THE MAIL  
SEPARATELY.**

\*\*\*\*\*

### Instructions for completing the survey:

- Please read each of the questions carefully. Using a blue or black pen, place an “X” in the box next to the appropriate response as indicated:
- If you are asked to provide a written response to a question, please PRINT legibly in the space provided.
- Please answer every question except those that you are specifically instructed to skip. Be sure to follow the “GO TO” instructions carefully.

Please direct any questions or concerns that you may have about this survey to Harris Interactive at (800) 285-5659.

Thank you in advance for your cooperation!

\*\*\*\*\*

*Please return your completed questionnaire in the enclosed postage-paid envelope. Please note that a tracking postcard is included in your questionnaire packet. The purpose of this postcard is to confirm questionnaire completion while maintaining your anonymity. Please be sure to mail back the postcard **separately** from your completed questionnaire.*

*If you have misplaced the envelope, please mail your completed survey to:*

*Harris Interactive  
Job 41286  
c/o ADAPT Inc.  
PO Box 5703  
Hopkins, MN 55343-7022*

**SECTION A: PROFESSIONAL ENVIRONMENT**

**A1. Which of the following types of research are you currently conducting? Please select all that apply.**

- <sub>1</sub> Basic research
- <sub>2</sub> Early clinical/Phase I clinical trials
- <sub>3</sub> Phase II clinical trials
- <sub>4</sub> Phase III clinical trials
- <sub>5</sub> Health services research, clinical epidemiology
- <sub>6</sub> Other clinical: \_\_\_\_\_
- <sub>7</sub> Other non-clinical: \_\_\_\_\_
- <sub>8</sub> Not currently involved in research

**A2. In the last 3 years have you conducted research that involved living humans as research subjects?**

- <sub>1</sub> Yes
- <sub>2</sub> No

**A3. How many articles have you published in refereed journals in the last 3 years? If none, please enter "00."**

**A4. In the last 3 years has the research that you do at your university resulted in...?**

|   | Yes                                   | No                                    |
|---|---------------------------------------|---------------------------------------|
| a. Patents applied for  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| b. Patents issued   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| c. Patents licensed   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| d. Trade secrets (information kept secret to protect its proprietary value) | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| e. A product under regulatory review  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| f. A start-up company   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| g. A product on the market  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| h. A service currently being marketed                                       | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |

**A5. Please indicate which of the following you are currently receiving or have received in the past 3 years. Please include only those received from a company whose work is related to your area(s) of scientific expertise.**

|  | Yes                                   | No                                    |
|--|---------------------------------------|---------------------------------------|
| a. Royalties from licenses   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| b. Research grants or contracts  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| c. Equity in a firm in return for your professional services or intellectual property                              | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| d. Funds from industry to support students or post-doctoral fellows  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| e. Gift(s), independent of a grant or contract, that support your research   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| f. Speaking fees or honoraria  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| g. Payments for services other than speaking, e.g., consulting, serving on an advisory board or board of directors | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |

**A6. With how many other research labs or groups do you currently collaborate? If none, please enter "000."**

A7. With how many of these groups are you currently in a formal consortium? *If none, please enter "000."*

A8. How would you characterize the overall level of collaboration in your specific area of research?

- <sub>1</sub> Highly collaborative
- <sub>2</sub> Moderately collaborative
- <sub>3</sub> Slightly collaborative
- <sub>4</sub> Not at all collaborative

A9. How would you characterize the overall level of competitiveness in your specific area of research?

- <sub>1</sub> Highly competitive
- <sub>2</sub> Moderately competitive
- <sub>3</sub> Slightly competitive
- <sub>4</sub> Not at all competitive

**SECTION B: REQUESTS FOR MATERIALS OR INFORMATION FROM OTHERS**

B1. In the last 3 years, have you requested any of the following from *another academic scientist after a finding was published?*

|   | I made no request                     | I received all of what I requested on every request | One or more of my requests was <i>denied</i> | The information or materials for one or more requests was significantly <i>delayed</i> |
|---|---------------------------------------|---|--|--|
| a. Additional information about lab techniques <i>not</i> included in the publication                 | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub>               | <input type="checkbox"/> <sub>3</sub>        | <input type="checkbox"/> <sub>4</sub>  |
| b. Pertinent findings that were <i>not</i> in the publication   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub>               | <input type="checkbox"/> <sub>3</sub>        | <input type="checkbox"/> <sub>4</sub>  |
| c. Phenotypic information <i>not</i> included in the publication                                      | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub>               | <input type="checkbox"/> <sub>3</sub>        | <input type="checkbox"/> <sub>4</sub>  |
| d. Genetic sequences <i>not</i> included in the publication   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub>               | <input type="checkbox"/> <sub>3</sub>        | <input type="checkbox"/> <sub>4</sub>  |
| e. Biomaterials (probes, cell lines, tissues, reagents, organisms, etc.) mentioned in the publication | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub>               | <input type="checkbox"/> <sub>3</sub>        | <input type="checkbox"/> <sub>4</sub>  |
| f. Research tools (analytical instruments, machines, software, etc.)                                  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub>               | <input type="checkbox"/> <sub>3</sub>        | <input type="checkbox"/> <sub>4</sub>  |
| g. Other (specify one) _____  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub>               | <input type="checkbox"/> <sub>3</sub>        | <input type="checkbox"/> <sub>4</sub>  |

B2. In the last 3 years, about how many times have you made requests of another *academic scientist* for information, data or materials concerning published research?

# of times → *If none, please enter "000" and go to question B4.*

B3. In the last 3 years, how many times have your requests to another *academic scientist* for additional information, data or materials concerning *published* research been...? *If none, please enter "000."*

# of times

Denied <sub>1</sub>

Honored only after a significant delay <sub>2</sub>

Honored in a way that was misleading or inaccurate <sub>3</sub>

**B4. As a result of another academic scientist's failure to share information, data or materials, have you ever...?**

|   | Yes                                   | No                                    |
|---|---------------------------------------|---------------------------------------|
| a. Had a publication significantly delayed  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| b. Expended significant scientific resources to reproduce others' work                        | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| c. Been unable to confirm others' published results   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| d. Questioned the quality or integrity of another scientist's work                            | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| e. Abandoned a promising line of research   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| f. Appealed to a colleague to act as an intermediary to obtain information, data or materials | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| g. Appealed to a funding agency, journal, or professional association                         | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| h. Stopped collaborating with another academic scientist                                      | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| i. Refused to share your information, data or materials with that person or group             | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| j. Delayed sharing with that person or group  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| k. Begun a different line of research that resulted in a better scientific approach           | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| l. Begun a different line of research that resulted in a new collaboration                    | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |

**B5. In the last 3 years, about how many times have you initiated requests with a third party repository for information, data or materials concerning published research?**

# of times → If none, please enter "000" and go to question B7.

**B6. In the last 3 years, how many times have your requests to a third party repository for information, data or materials concerning published research been...? If none, please enter "000."**

|  | # of times  |
|--|---|
| Denied   | <input type="text"/> <input type="text"/> <input type="text"/> <sub>1</sub> |
| Honored only after a significant delay             | <input type="text"/> <input type="text"/> <input type="text"/> <sub>2</sub> |
| Honored in a way that was misleading or inaccurate | <input type="text"/> <input type="text"/> <input type="text"/> <sub>3</sub> |
| Abandoned due to protracted delays or difficulties | <input type="text"/> <input type="text"/> <input type="text"/> <sub>4</sub> |

**B7. How does data withholding among academic scientists currently affect...?**

|   | Enhances greatly                      | Enhances somewhat                     | No effect                             | Detracts somewhat                     | Detracts greatly                      |
|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. Your satisfaction with your professional career                  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| b. The quality of your relationships with other academic scientists | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| c. The education of students and post-doctoral fellows              | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| d. The level of communication in your field                         | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| e. The progress of your research                                    | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| f. The progress of science in your field                            | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| g. Your field overall   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |

## SECTION C: HANDLING REQUESTS FOR MATERIALS AND INFORMATION

**C1. In the last 3 years, about how many times have you received requests from *academic scientists* for information, data or materials concerning your *published* research?**

# of times → *If none, please enter "000" and go to question C4.*

**C2. In the last 3 years, how many times have you denied or significantly delayed giving other *academic scientists* requested information, data or materials related to your *published* research? *If none, please enter "000."***

<sub>1</sub> # of times denied

<sub>2</sub> # of times honored only after a significant delay

**C3. On those occasions when you have intentionally withheld information, data or materials about your *published* results from other *academic scientists*, how important was each of the following as a motivating factor?**

|  | Very important                        | Moderately important                  | Not very important                    | Not at all important                  | Not applicable                        |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. My need to protect my ability to publish  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| b. My need to protect a graduate student, post-doctoral fellow or a junior faculty member's ability to publish | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| c. My need to honor the requirements of an industrial research sponsor   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| d. My need to protect the commercial value of the results  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| e. My need to preserve patient confidentiality   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| f. The effort required to actually produce the materials or information  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| g. The financial cost of actually providing the materials or information transfer                              | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| h. The likelihood that the other person will never reciprocate   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| i. Lab no longer has data or materials   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| j. Lab no longer has expertise to easily generate data or materials because of personnel changes               | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| k. Supply only sufficient for internal use   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |

**C4. In the last 3 years, how often have you excluded pertinent information from the following because you wanted to protect your scientific lead?**

|  | Never                                 | Rarely                                | Usually                               | Always                                | Did not present/submit in last 3 years |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|
| a. Manuscript(s) submitted for publication                             | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub>  |
| b. Presentation(s) of published work at national conference or meeting | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub>  |

**C5. In the last 3 years, has publication of your results been delayed by more than 6 months to...?**

|  | Yes                                   | No                                    |
|--|---------------------------------------|---------------------------------------|
| a. Allow time for a patent application   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| b. Meet the requirements of a non-industrial sponsor   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| c. Meet the requirements of an industrial sponsor  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| d. Protect your scientific lead  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| e. Protect the priority of a graduate student, post-doctoral fellow or junior faculty member | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| f. Honor an agreement with a collaborator  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |

**C6. As a result of sharing your information, data or materials with another *academic scientist* after publication have you ever...?**

|   | Yes                                   | No                                    |
|---|---------------------------------------|---------------------------------------|
| a. Been “scooped” by another scientist  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| b. Compromised the ability of a graduate, student post-doctoral fellow, or junior faculty member to publish | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| c. Been unable to benefit commercially from your results  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| d. Opened a new line of research  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| e. Performed research that would otherwise not have been possible   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| f. Formed collaborations that led to publications   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| g. Formed collaborations that led to grants   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |

**SECTION D: DATA SHARING ENVIRONMENT**

**D1. Overall, how much influence does each of the following have on your sharing of information, data or materials with other academic scientists?**

|  | Large influence against sharing       | Small influence against sharing       | No influence                          | Small influence towards sharing       | Large influence towards sharing       | Not applicable                        |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. Attitudes and practices of former advisors or mentors   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| b. Formal instruction you received while in training (Responsible Conduct of Research training, classes, seminars, etc.) | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| c. Policies governing material transfer agreements (MTAs) at your institution  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| d. Technology transfer policies, other than MTAs, at your institution  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| e. Agreements with industrial sponsors   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| f. Your commercial activities (i.e., patenting, licensing, etc.)   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| g. Publication policies of professional journals   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| h. Informal rules/norms of your research field   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |

**D2. Overall, how much influence does each of the following policies of funding organizations have on your sharing of information, data or materials with other academic scientists?**

|   | Large influence against sharing       | Small influence against sharing       | No influence                          | Small influence towards sharing       | Large influence towards sharing       | Not applicable                        |
|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. Overall data sharing policies of the National Institutes of Health (NIH)                               | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| b. Data sharing policies of the National Human Genome Research Institute (NHGRI)                          | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| c. NIH policies governing genome-wide association studies (GWAS)  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| d. Data sharing policies of the National Science Foundation (NSF)   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| e. Data sharing policies of government agencies-other than NIH or NSF (e.g., Department of Defense, USDA) | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |
| f. Policies of private funding organizations and foundations (e.g., HHMI, Wellcome Trust)                 | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |

**D3a. Please indicate whether, in the past 3 years, you have been required by a journal to...? For each "yes" response, please answer question D3b.**

**D3b. How often did you submit, make available or transfer this information?**

|   | No                                    | Yes                                   |   | Never                                 | Sometimes                             | Always                                | Not applicable                        |
|---|---------------------------------------|---------------------------------------|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. Submit detailed description of methods as online supplement  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | → | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| b. Make data available as online supplement   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | → | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| c. Submit biomaterials (e.g., tissues, reagents, organisms, etc.) to third party repository                 | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | → | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| d. Submit data to third party repository (e.g., GenBank)  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | → | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| e. Transfer biomaterials (e.g., tissues, reagents, organisms, etc.) to accommodate request from another lab | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | → | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| f. Make data available to accommodate request from another lab  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | → | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |

**D4. Overall, how much has each of the following hindered or helped the progress of your research?**

|  | Hindered a lot                        | Hindered a little                     | No effect                             | Helped a little                       | Helped a lot                          |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. Online methods supplements            | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| b. Online data supplements               | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| c. Third party biomaterials repositories | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| d. Third party data repositories         | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |

**D5. In the last 10 years, how has the overall willingness of academic scientists in your area of research to share information, data or materials changed?**

- <sub>1</sub> They are much more willing to share now  
<sub>2</sub> They are somewhat more willing to share now  
<sub>3</sub> Remained about the same  
<sub>4</sub> They are somewhat less willing to share now  
<sub>5</sub> They are much less willing to share now

**D6. In the last 3 years, have you served as a reviewer of grant proposals for federal agencies that dealt with life science research grants (e.g., NIH, NSF, Department of Defense, Department of Energy)?**

- <sub>1</sub> Yes  
<sub>2</sub> No → Go to question D8.

**D7. How influential was the quality of the data sharing plans in your overall evaluation of the proposals you reviewed?**

- <sub>1</sub> Very important  
<sub>2</sub> Important  
<sub>3</sub> Somewhat important  
<sub>4</sub> Not at all important

- D8. In the last 3 years, how often have you shared data or materials with someone outside your institution *without* a material transfer agreement (MTA), even though you knew such an agreement was required by your institution?**
- <sub>1</sub> Never → *Go to question E1.*
- <sub>2</sub> Rarely
- <sub>3</sub> Sometimes
- <sub>4</sub> Always
- <sub>5</sub> Not applicable → *Go to question E1.*
- <sub>6</sub> I am not aware of policies at my institution requiring an MTA. → *Go to question E1.*

- D9. In those instances when you did not get an MTA from your institution, please indicate the importance of the following factors.**

|   | Very important                        | Moderately important                  | Not very important                    | Not at all important                  |
|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. Scope of MTA overly broad                                      | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| b. MTA takes too much time to arrange                             | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| c. MTA requires too much red tape at own institution              | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| d. MTA negotiations between own and other institution too onerous | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| e. Philosophically opposed to MTA restrictions                    | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| f. Other (specify one) _____                                      | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |

## SECTION E: DATA SHARING IN GENETICS

- E1. Do you consider yourself a genetics researcher?** *By genetics researcher we mean someone whose research involves any of the following: (1) identification of genomes, genes, or gene products in any organism; (2) study of the structure, function, or regulation of genes or genome; (3) comparison of genes and genomes between species and populations.*
- <sub>1</sub> Yes → *Go to question E2.*
- <sub>2</sub> No → *Go to question F1.*
- E2. In the last 3 years, has your lab conducted or collaborated on a project that generated primary data for a genome wide association study (GWAS)?**
- <sub>1</sub> Yes
- <sub>2</sub> No → *Go to question F1.*
- E3. In your most recently completed GWAS, were you required to deposit data generated from the study into a data repository (e.g., dbGaP)?**
- <sub>1</sub> Yes
- <sub>2</sub> No → *Go to question F1.*
- E4. In your most recently completed GWAS, did you deposit the required data into the data repository?**
- <sub>1</sub> Yes
- <sub>2</sub> No → *Go to question F1.*



**E5. Please indicate the amount of time that elapsed between the date that data from your most recently completed GWAS was submitted to the repository and the date you submitted your first publication using that data.**

- <sub>1</sub> Less than 6 months
- <sub>2</sub> Between 6 and 12 months
- <sub>3</sub> Between 12 and 24 months
- <sub>4</sub> More than 24 months
- <sub>5</sub> Data from the GWAS have not been included in any manuscripts submitted for publication

## SECTION F: BACKGROUND INFORMATION

**F1. Are you...?**

- <sub>1</sub> Female
- <sub>2</sub> Male

**F2. Please indicate your race/ethnicity.**

- <sub>1</sub> White (non-Hispanic)
- <sub>2</sub> Asian
- <sub>3</sub> African-American (non-Hispanic)
- <sub>4</sub> Hispanic
- <sub>5</sub> Pacific Islander
- <sub>6</sub> Native American
- <sub>96</sub> Other (specify) \_\_\_\_\_

**F3. Please indicate the degrees you hold. (Include only earned degrees.)**

- <sub>1</sub> MD
- <sub>2</sub> PhD
- <sub>3</sub> Other doctorate
- <sub>6</sub> Other \_\_\_\_\_

**F4. In what year did you receive your highest earned degree?**

**F5. Did you receive your highest earned degree from an institution in the US?**

- <sub>1</sub> Yes
- <sub>2</sub> No

**F6. About how many hours do you spend on professional activities during a typical work week? Please include patient care, research, teaching, consulting, professional travel, writing, professional reading, administration. Please exclude time on call when not actually working. Your total hours need not add to 40.**

hours

**F7. In a typical work week, what percent of your time is spent on research activities excluding grant writing (i.e. writing papers and reports, planning and executing projects, reviewing articles, working in the laboratory)?**

%

**F8. What is your gross annual income from all sources?**

- <sub>1</sub> Under \$50,000
- <sub>2</sub> \$50,000 to \$74,999
- <sub>3</sub> \$75,000 to \$99,999
- <sub>4</sub> \$100,000 to \$149,999
- <sub>5</sub> \$150,000 to \$199,999
- <sub>6</sub> \$200,000 to \$249,999
- <sub>7</sub> \$250,000 to \$299,999
- <sub>8</sub> \$300,000 to \$349,999
- <sub>9</sub> \$350,000 and over

**F9. Other than yourself, how many other research staff do you currently support financially or supervise?** *Please include other faculty, post-doctoral fellows, graduate students, non-faculty scientists, technicians, research assistants, and any other research staff. If none, please enter "000."*

**F10. What is your total research budget for this fiscal year for all grants, contracts and projects from all sources (including industry) on which you are the principal investigator?** *Please include only research projects funded through your university and exclude overhead/indirect costs.*

\$ , ,

**F11. Please indicate the percentage (%) of your total research budget for this fiscal year that is funded by the following sources.** *If none, please enter "000." Your total must add up to 100%.*

- <sub>1</sub> % NIH
  - <sub>2</sub> % Your institution
  - <sub>3</sub> % Private foundations
  - <sub>4</sub> % Other government (e.g., NSF, DoD)
  - <sub>5</sub> % Industry
  - <sub>6</sub> % Other (specify) \_\_\_\_\_
- 100% TOTAL**

**F12. All things considered, how satisfied are you with your life as a whole these days?**

- <sub>1</sub> Very satisfied
- <sub>2</sub> Pretty satisfied
- <sub>3</sub> Not very satisfied
- <sub>4</sub> Not at all satisfied

**F13. Please list the names of the journals in which your 5 most recent, peer-reviewed publications appeared.**

**NAME OF JOURNAL  
(PLEASE WRITE FULL NAME OF JOURNAL)**

a.

b.

c.

d.

e.

**F14. If there were one improvement that you could make to the way data sharing occurs, what would that be?**

***THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.***

**PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE IN THE ENCLOSED ENVELOPE  
OR MAIL TO THE ADDRESS NOTED ON THE BOOKLET COVER.**

***REMINDER: PLEASE BE SURE TO MAIL THE POSTCARD SEPARATELY FROM YOUR COMPLETED QUESTIONNAIRE.***