

**Burden Disclosure**

Public reporting burden for this collection of information is estimated to average of 15-20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: NIH, Project Clearance Branch, 6705 Rockledge Drive, MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA#0925-0648. Do not return the completed form to this address.

**NIH FORECASTING SCIENCE STUDY**

The NIH Office of Research Services (ORS) is conducting a study to gauge the resources needed to advance your research, including clinical and basic research support. Please take **15-20 minutes** to fill out this survey so we can align scientific resources and support with your needs. Your participation is essential to being sure we get this right. The survey will remain open until **January 31, 2018**. Your responses will be aggregated with all other responses, so complete confidentiality will be maintained. Thank you for taking the time to complete this survey.

**ABOUT YOU**

|   |  |    |
|---|--|----|
| 1 | In which of the following NIH Institutes and Centers do you work?<br><i>Please select only one</i> |    |
|   | CC (NIH Clinical Center)   | 1  |
|   | CIT (Center for Information Technology)  | 2  |
|   | CSR (Center for Scientific Review)   | 3  |
|   | FIC (Fogarty International Center)   | 4  |
|   | NCATS (National Center for Advancing Translational Sciences)                                       | 5  |
|   | NCCIH (National Center for Complementary and Integrative Health)                                   | 6  |
|   | NCI (National Cancer Institute)  | 7  |
|   | NEI (National Eye Institute)   | 8  |
|   | NHGRI (National Human Genome Research Institute)   | 9  |
|   | NHLBI (National Heart, Lung, and Blood Institute)  | 10 |
|   | NIA (National Institute on Aging)  | 11 |
|   | NIAAA (National Institute on Alcohol Abuse and Alcoholism)   | 12 |
|   | NIAID (National Institute of Allergy and Infectious Diseases)                                      | 13 |
|   | NIAMS (National Institute of Arthritis and Musculoskeletal and Skin Diseases)                      | 14 |
|   | NIBIB (National Institute of Biomedical Imaging and Bioengineering)                                | 15 |
|   | NICHD ( <i>Eunice Kennedy Shriver</i> National Institute of Child Health and Human Development)    | 16 |
|   | NIDA (National Institute on Drug Abuse)  | 17 |
|   | NIDCD (National Institute on Deafness and Other Communication Disorders)                           | 18 |
|   | NIDCR (National Institute of Dental and Craniofacial Research)                                     | 19 |
|   | NIDDK (National Institute of Diabetes and Digestive and Kidney Diseases)                           | 20 |
|   | NIEHS (National Institute of Environmental Health Sciences)  | 21 |

|  |    |
|--|----|
| NIGMS (National Institute of General Medical Sciences)               | 22 |
| NIMH (National Institute of Mental Health)                           | 23 |
| NIMHD (National Institute on Minority Health and Health Disparities) | 24 |
| NINDS (National Institute of Neurological Disorders and Stroke)      | 25 |
| NINR (National Institute of Nursing Research)                        | 26 |
| NLM (National Library of Medicine)                                   | 27 |
| OD (NIH Office of the Director)                                      | 28 |
| OTHER, SPECIFY: _____  | 99 |

|   |                                  |   |
|---|----------------------------------|---|
| 2 | How long have you worked at NIH? |   |
|   | Less than a year                 | 1 |
|   | 1 to 3 years                     | 2 |
|   | 4 to 5 years                     | 3 |
|   | 6 to 10 years                    | 4 |
|   | 11 to 15 years                   | 5 |
|   | 16 to 20 years                   | 6 |
|   | More than 20 years               | 7 |

|   |  |    |
|---|--|----|
| 3 | From the following list, please indicate the one that <b>best</b> describes your role on the clinical/research team. <i>Please select only one</i> |    |
|   | Research Fellow (RF) / Senior RF   | 1  |
|   | Clinical Fellow (CF) / Senior CF   | 2  |
|   | Postdoc IRTA/CRTA  | 3  |
|   | Postdoc Visiting Fellow  | 4  |
|   | Investigator   | 5  |
|   | Assistant Clinical Investigator  | 6  |
|   | Senior Investigator  | 7  |
|   | Staff Scientist/Clinician  | 8  |
|   | OTHER, SPECIFY: _____  | 99 |

|   |   |    |
|---|---|----|
| 4 | What is your work location?<br><i>Please select only one</i>      |    |
|   | Baltimore, MD   | 1  |
|   | Bethesda, MD (on the NIH Campus) [ASK Q4a]                        | 2  |
|   | Bethesda, MD (not on the NIH Campus)                              | 3  |
|   | Frederick, MD   | 4  |
|   | Gaithersburg, MD  | 5  |
|   | Phoenix, AZ   | 6  |
|   | Poolesville, MD   | 7  |
|   | Research Triangle Park, NC  | 8  |
|   | Rocksprings Cluster Area (Democracy, Rockledge), MD               | 9  |
|   | Rockville (Executive Blvd, Fishers Lane, Parklawn, Twinbrook), MD | 10 |
|   | Rocky Mountain Labs, MT   | 11 |

|                        |    |
|------------------------|----|
| Washington, DC         | 12 |
| Other, please specify: | 99 |

If Q4 = Bethesda, MD (on the NIH Campus), ask:

|    |  |    |
|----|--|----|
| 4a | Where on the Bethesda campus are you located?<br><i>Please select only one</i> |    |
|    | Building 1 (James Shannon Building)  | 1  |
|    | Building 2   | 2  |
|    | Building 3   | 3  |
|    | Building 4   | 4  |
|    | Building 5   | 5  |
|    | Building 6, 6A, or 6B  | 6  |
|    | Building 7   | 7  |
|    | Building 8 or 8A   | 8  |
|    | Building 9   | 9  |
|    | Building 10  | 10 |
|    | Building 11  | 11 |
|    | Building 12, 12A, or 12B   | 12 |
|    | Building 13  | 13 |
|    | Building 14  | 14 |
|    | Building 15  | 15 |
|    | Building 16 (Stone House)  | 16 |
|    | Building 17  | 17 |
|    | Building 18 or 18T   | 18 |
|    | Building 21  | 19 |
|    | Building 22  | 20 |
|    | Building 25  | 21 |
|    | Building 26  | 22 |
|    | Building 28 or 28A-D   | 23 |
|    | Building 29 or 29A&B   | 24 |
|    | Building 30  | 25 |
|    | Building 31 (Claude Pepper Building)   | 26 |
|    | Building 32  | 27 |
|    | Building 33  | 28 |
|    | Building 34  | 29 |
|    | Building 35  | 30 |
|    | Building 37  | 31 |
|    | Building 38 (National Library of Medicine)                                     | 32 |
|    | Building 38A (Lister Hill Center)  | 33 |
|    | Building 39T (Fitness Center)  | 34 |
|    | Building 40 (Vaccine Research Center)  | 35 |
|    | Building 41  | 36 |
|    | Building 45 (Natcher Building)   | 37 |
|    | Building 46  | 38 |
|    | Building 46T (East Center)   | 39 |

|  |    |
|--|----|
| Building 49 (Silvio O. Conte Building)                     | 40 |
| Building 50 (Louis Stokes Laboratories)                    | 41 |
| Building 51 (New Fire Station)                             | 42 |
| Building 60 (The Cloisters Convent)                        | 43 |
| Building 61 (Cloister – Office of Patient Recruitment)     | 44 |
| Building 62 (Children’s Inn)                               | 45 |
| Building 63  | 46 |
| Building 64  | 47 |
| Building 65 (Safra Family Lodge)                           | 48 |
| Building 66 (Gateway Center)                               | 49 |
| Building 66A – Gateway Inspection Station                  | 50 |
| Building 67 – Commercial Vehicle Inspection Center (CVIF)  | 51 |
| Building 68  | 52 |
| Building 82 (Bloch Building)                               | 53 |
| Other building/location on the NIH Campus, please specify: | 99 |

*Present list as a drop-down*

|   |   |   |
|---|---|---|
| 5 | Is your <b>primary</b> research ...?<br><i>Please select only one</i> |   |
|   | Clinical  | 1 |
|   | Translational   | 2 |
|   | Basic   | 3 |

**FORECASTING SCIENCE**

|    |   |    |
|----|---|----|
| 6a | When you think about your current research, what are the 1 or 2 most important tools/resources/services that you use? |    |
|    | <INPUT LONG TEXT>   | OT |

|    |   |    |
|----|---|----|
| 6b | How can those tools/resources/services be improved to accelerate your research? |    |
|    | <INPUT LONG TEXT>   | OT |

|    |   |    |
|----|---|----|
| 6c | Are there better tools/resources/services you use than those you currently have available to you? |    |
|    | <INPUT LONG TEXT>   | OT |

**Collaboration (ask All)**

The NIH IRP CREx (Collaborative Research Exchange) [<https://nih.scientist.com>] is an online research marketplace exclusively available to NIH. It is designed to foster innovation by exposing the expertise and technologies available through the Intramural Research Program staff, cores, the Office of Research Services (ORS), and external vendors.

|                                |  |
|--------------------------------|--|
| 6d                             | If you have ever used the Collaborative Research Exchange (CREx), what are its strengths, weaknesses, and what improvements would you recommend?<br><i>If you have never used CREx, please indicate as such.</i> |
| Yes, Strengths:                | <insert open text>   |
| Yes, Recommended improvements: | <insert open text>   |
| No, I have never used CREx     | -9   |

|                   |  |
|-------------------|--|
| 6e                | <b>Future needs for collaboration:</b> <ul style="list-style-type: none"> <li>Thinking about the next 5 years, how could collaborative tools/resources/services for your research be improved?</li> <li>How do you see the needs and technologies for collaboration changing?</li> <li>What services, resources, tools, or technologies for collaboration would accelerate your research if available to you?</li> </ul> |
| <INPUT LONG TEXT> | OT   |

In the next section, we will ask questions specific to each of the ORS program areas. Please consider what you currently rely on and what enhancements ORS might add to their service mix to accelerate your science.

**NIH Library**

(<https://nihlibrary.nih.gov/agency/nih>)

|   |   |                    |                    |                |          |
|---|---|--------------------|--------------------|----------------|----------|
| 7ab   | <p><b>a. CURRENT needs from the NIH Library:</b> Thinking about the present state of your research, what services, resources, tools, or technologies do you rely on as critical to performing your science, and which are less important that could possibly be de-emphasized to make way for more critical resources?</p> <p>Please review each of the following and indicate on the scale from <b>Not at all Important</b> to <b>Critical</b>.<br/>Select one on each row</p> |                    |                    |                |          |
| <b>NIH Library:</b>   | Not at all Important  | Not Very Important | Somewhat Important | Very Important | Critical |
| Bioinformatics – <i>consultation, training &amp; analysis tools</i>   | 1   | 2                  | 3                  | 4              | 5        |
| Data Management – <i>consultation, training &amp; analysis tools</i>  | 1   | 2                  | 3                  | 4              | 5        |
| Technology Hub – <i>highlighting emerging technologies (including 3D Modeling &amp; Printing, Data Visualization &amp; Modeling, Electronic Laboratory Notebooks, and Virtual &amp; Augmented Reality)</i>  | 1   | 2                  | 3                  | 4              | 5        |
| <p><b>b. FUTURE needs from the NIH Library:</b><br/>Thinking about the next 5 years, how could your research be better supported?<br/>How do you see the needs and technologies changing?<br/>What services, resources, tools, or technologies would accelerate your science if available to you?</p> | <insert open text>  |                    |                    |                |          |

**Division of Occupational Health and Safety**

(<https://www.ors.od.nih.gov/sr/dohs>)

|   |  |                    |                    |                |          |
|---|--|--------------------|--------------------|----------------|----------|
| 8ab   | <p>a. The NIH uses an electronic system to register certain types of research including that involving the use of recombinant and synthetic nucleic acids, biological toxins, human, animal and plant pathogens, and research with dual use implications. These registrations are required to minimize the risks to NIH as we conduct wide-ranging life science research.</p> <p><i>Please review the following and indicate on the scale from <b>Not at all Important</b> to <b>Critical</b>.</i></p> |                    |                    |                |          |
| <b>Division of Occupational Health and Safety:</b>  | Not at all Important   | Not Very Important | Somewhat Important | Very Important | Critical |
| Research involving the use of genomic editing tools (CRISPR/Cas9, etc.) should be registered by the NIH | 1  | 2                  | 3                  | 4              | 5        |
| b. Please explain your response:  | <insert open text>   |                    |                    |                |          |

**Division of Radiation Safety**

(<http://drs.ors.od.nih.gov/>)

|   |   |
|---|---|
| 9a  | Does your research involve radioactive material, or do you anticipate using radioactive material in the future? |
| Yes, <b>currently</b> my research involves radioactive material   | 1   |
| Yes, I anticipate using radioactive material in the <b>future</b> | 2   |
| No, neither a current nor anticipated future need                 | 3   |

If Q9a = Yes (current or future), ask Q9 series:

|  |   |                      |                    |                    |                |          |
|--|---|----------------------|--------------------|--------------------|----------------|----------|
| 9bc  | <p><b>b. CURRENT needs from Radiation Safety:</b> Thinking about the present state of your research, what services, resources, tools, or technologies do you rely on as critical to performing your science, and which are less important that could possibly be de-emphasized to make way for more critical resources?</p> <p>Please review each of the following and indicate on the scale from <b>Not at all Important</b> to <b>Critical</b>. Select one on each row</p> <p><i>Disclaimer: Radiation Safety resources are regulated and required, and therefore not candidates for de-emphasizing. Nevertheless, please indicate their importance to you and your work.</i></p> |                      |                    |                    |                |          |
| <b>Division of Radiation Safety:</b>   |   | Not at all Important | Not Very Important | Somewhat Important | Very Important | Critical |
| Hot labs service for radioiodinations or high activity usage   |   | 1                    | 2                  | 3                  | 4              | 5        |
| Adopting replacement techniques that will decrease the need for radioactivity usage in NIH labs  |   | 1                    | 2                  | 3                  | 4              | 5        |
| <p><b>c. FUTURE needs from Radiation Safety:</b><br/>Thinking about the next 5 years, how could your research be better supported?<br/>How do you see the needs and technologies changing?<br/>What services, resources, tools, or technologies would accelerate your science if available to you?</p> |   | <insert open text>   |                    |                    |                |          |

|  |   |  |  |  |    |
|--|---|--|--|--|----|
| 9d   | If you ever needed to take the “Radiation Safety for Authorized Users” training course, would you prefer to attend a 3.5-day class in person as an option or take the current online version of this course (which takes nearly as much time and has a substantial failure rate)? |  |  |  |    |
| Would prefer classroom setting as a better support environment to learning |   |  |  |  | 1  |
| Would prefer online approach and failure rate does not concern me          |   |  |  |  | 2  |
| N/A, do not need this training   |   |  |  |  | -9 |

If Q9a = Yes, ask:

|         |  |  |               |             |
|---------|--|--|---------------|-------------|
| 9e      | Do you use, or are you planning to use PET, non-PET radioactive material, or both? |  |               |             |
|         |  |  | Currently Use | Plan to Use |
| PET     |  |  |               |             |
| Non-PET |  |  |               |             |



**Division of Scientific Equipment & Instrumentation Services**

(<https://www.ors.od.nih.gov/sr/dseis>)

| 10ab  | <p>a. <b>CURRENT needs from Scientific Equipment &amp; Instrumentation:</b> Thinking about the present state of your research, what services, resources, tools, or technologies do you rely on as critical to performing your science, and which are less important that could possibly be de-emphasized to make way for more critical resources?</p> <p><i>Please review each of the following and indicate on the scale from <b>Not at all Important</b> to <b>Critical</b>. Select one on each row</i></p> |                      |                    |                    |                |          |
|---|---|----------------------|--------------------|--------------------|----------------|----------|
| <p><b>Division of Scientific Equipment &amp; Instrumentation Services:</b></p>  | <table border="1"> <thead> <tr> <th data-bbox="738 483 893 598">Not at all Important</th> <th data-bbox="901 483 1055 598">Not Very Important</th> <th data-bbox="1063 483 1218 598">Somewhat Important</th> <th data-bbox="1226 483 1380 598">Very Important</th> <th data-bbox="1388 483 1510 598">Critical</th> </tr> </thead> </table>  | Not at all Important | Not Very Important | Somewhat Important | Very Important | Critical |
| Not at all Important  | Not Very Important  | Somewhat Important   | Very Important     | Critical           |                |          |
| Centralizing scientific equipment sales   | <table border="1"> <tr> <td data-bbox="738 602 893 640">1</td> <td data-bbox="901 602 1055 640">2</td> <td data-bbox="1063 602 1218 640">3</td> <td data-bbox="1226 602 1380 640">4</td> <td data-bbox="1388 602 1510 640">5</td> </tr> </table>  | 1                    | 2                  | 3                  | 4              | 5        |
| 1   | 2   | 3                    | 4                  | 5                  |                |          |
| Equipment rental ( <i>rent-to-buy and short-term rentals</i> )  | <table border="1"> <tr> <td data-bbox="738 644 893 714">1</td> <td data-bbox="901 644 1055 714">2</td> <td data-bbox="1063 644 1218 714">3</td> <td data-bbox="1226 644 1380 714">4</td> <td data-bbox="1388 644 1510 714">5</td> </tr> </table>  | 1                    | 2                  | 3                  | 4              | 5        |
| 1   | 2   | 3                    | 4                  | 5                  |                |          |
| Providing a new service for initiating and managing equipment maintenance contracts on behalf of research labs  | <table border="1"> <tr> <td data-bbox="738 718 893 833">1</td> <td data-bbox="901 718 1055 833">2</td> <td data-bbox="1063 718 1218 833">3</td> <td data-bbox="1226 718 1380 833">4</td> <td data-bbox="1388 718 1510 833">5</td> </tr> </table>  | 1                    | 2                  | 3                  | 4              | 5        |
| 1   | 2   | 3                    | 4                  | 5                  |                |          |
| <p>b. <b>FUTURE needs from Scientific Equipment &amp; Instrumentation Services:</b> Thinking about the next 5 years, how could your research be better supported?<br/>How do you see the needs and technologies changing?<br/>What services, resources, tools, or technologies would accelerate your science if available to you?</p> | <p style="color: red; text-align: center;">&lt;insert open text&gt;</p>   |                      |                    |                    |                |          |

**Division of Veterinary Resources**

(<https://www.ors.od.nih.gov/sr/dvr>)

|  |  |   |
|--|--|---|
| 11a  | Does your research involve animal use, or do you anticipate using animals in the future? |   |
| Yes, <b>currently</b> my research involves animals   |  | 1 |
| Yes, I anticipate using animals in the <b>future</b> |  | 2 |
| No, neither a current nor anticipated future need    |  | 3 |

If Q11a = Yes (current or future), ask:

|   |   |                    |                    |                |          |
|---|---|--------------------|--------------------|----------------|----------|
| 11bc  | <p><b>b. CURRENT needs from Veterinary Resources:</b> Thinking about the present state of your research, what services, resources, tools, or technologies do you rely on as critical to performing your science, and which are less important that could possibly be de-emphasized to make way for more critical resources?</p> <p><i>Please review each of the following and indicate on the scale from <b>Not at all Important</b> to <b>Critical</b>.<br/>Select one on each row</i></p> |                    |                    |                |          |
| <b>Division of Veterinary Resources:</b>  | Not at all Important  | Not Very Important | Somewhat Important | Very Important | Critical |
| A new central surgical support shared service – expertise for research surgeries in both large and small animals (microsurgery) available on a fee for service basis  | 1   | 2                  | 3                  | 4              | 5        |
| A new central phenotyping shared service – behavioral, pathologic, metabolic, cardiovascular, etc. for all NIH researchers working with genetically engineering mouse models available on a fee for service basis   | 1   | 2                  | 3                  | 4              | 5        |
| <p><b>c. FUTURE needs from Veterinary Resources:</b><br/>Thinking about the next 5 years, how could your science be better supported?<br/>How do you see the needs and technologies changing?<br/>What services, resources, tools, or technologies would accelerate your science if available to you?</p> | <insert open text>  |                    |                    |                |          |

**Medical Arts**

(<https://www.ors.od.nih.gov/mab>)

| 12ab   | <p>a. <b>CURRENT needs from Medical Arts:</b> Thinking about the present state of your research, what services, resources, tools, or technologies do you rely on as critical to performing your science, and which are less important that could possibly be de-emphasized to make way for more critical resources?</p> <p>Please review each of the following and indicate on the scale from <b>Not at all Important</b> to <b>Critical</b>.<br/>Select one on each row</p> |                      |                    |                    |                |          |
|--|--|----------------------|--------------------|--------------------|----------------|----------|
| <b>Medical Arts:</b>   | <table border="1"> <thead> <tr> <th data-bbox="761 478 922 562">Not at all Important</th> <th data-bbox="922 478 1083 562">Not Very Important</th> <th data-bbox="1083 478 1243 562">Somewhat Important</th> <th data-bbox="1243 478 1404 562">Very Important</th> <th data-bbox="1404 478 1541 562">Critical</th> </tr> </thead> </table>   | Not at all Important | Not Very Important | Somewhat Important | Very Important | Critical |
| Not at all Important   | Not Very Important   | Somewhat Important   | Very Important     | Critical           |                |          |
| Interactive data visualization service – to drive broad use of biomedical big data, interactive data visualizations that mine data repositories can be a key step aiding with the understanding of quantitative information.   | <table border="1"> <tr> <td data-bbox="761 562 922 753">1</td> <td data-bbox="922 562 1083 753">2</td> <td data-bbox="1083 562 1243 753">3</td> <td data-bbox="1243 562 1404 753">4</td> <td data-bbox="1404 562 1541 753">5</td> </tr> </table>   | 1                    | 2                  | 3                  | 4              | 5        |
| 1  | 2  | 3                    | 4                  | 5                  |                |          |
| Medical illustration Image bank – MAB illustrations retrieved and formatted to specifications (fee-based service)  | <table border="1"> <tr> <td data-bbox="761 753 922 871">1</td> <td data-bbox="922 753 1083 871">2</td> <td data-bbox="1083 753 1243 871">3</td> <td data-bbox="1243 753 1404 871">4</td> <td data-bbox="1404 753 1541 871">5</td> </tr> </table>   | 1                    | 2                  | 3                  | 4              | 5        |
| 1  | 2  | 3                    | 4                  | 5                  |                |          |
| Paperless scientific posters – alternative presentation mediums like cloth, projections, or other new media  | <table border="1"> <tr> <td data-bbox="761 871 922 989">1</td> <td data-bbox="922 871 1083 989">2</td> <td data-bbox="1083 871 1243 989">3</td> <td data-bbox="1243 871 1404 989">4</td> <td data-bbox="1404 871 1541 989">5</td> </tr> </table>   | 1                    | 2                  | 3                  | 4              | 5        |
| 1  | 2  | 3                    | 4                  | 5                  |                |          |
| <p>b. <b>FUTURE needs from Medical Arts:</b> Thinking about the next 5 years, how could your research be better supported?<br/>How do you see the needs and technologies changing?<br/>What services, resources, tools, or technologies would accelerate your science if available to you?</p> | <p style="text-align: center; color: red;">&lt;insert open text&gt;</p>  |                      |                    |                    |                |          |

|   |   |
|---|---|
| 13a   | Does your research involve genomic needs, or do you anticipate engaging in genomic research or have bioinformatics needs? |
| Yes, <b>currently</b> my research involves genomic or bioinformatics needs            | 1   |
| Yes, I anticipate engaging in genomic research or bioinformatics in the <b>future</b> | 2   |
| No, neither a current nor anticipated future need                                     | 3   |

If Q13a = Yes (current or future), ask Sequencing questions in Q13 series; otherwise skip to Q14:

|  |  |   |   |   |   |
|--|--|---|---|---|---|
| 13b  | Which of the following <b>sequencing</b> applications, if any, do you use, <b>from each source</b> , and <b>how many projects per year for each?</b> |   |   |   |   |
| <b>Source:</b>                                 | <b>Institute Facility</b>  | <b>Collaborator Facility</b>                        | <b>Other NIH Facilities (e.g., NCI, NHLBI, NHGRI)</b> | <b>Commercial Vendors</b>                           | <b>Other</b>  |
| RNA  | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+  | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+   | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ |
| DNA  | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+  | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+   | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ |
| Single Cell                                    | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+  | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+   | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ |
| Microbiome                                     | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+  | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+   | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ |
| Other sequencing applications, please specify: | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+  | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+   | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ | 0 0<br>0 1 to 4<br>0 5 to 10<br>0 11 to 15<br>0 16+ |

|     |  |    |
|-----|--|----|
| 13c | Currently, do you have sufficient support for your sequencing needs? |    |
| Yes |  | 1  |
| No  |  | 2  |
| N/A |  | -9 |

If Q13c = No, ask:

|  |   |             |          |       |
|--|---|-------------|----------|-------|
| 13d  | You indicated that you do not currently have sufficient support for your sequencing needs. What are the issues?<br><i>Select one response on each row</i> |             |          |       |
|  |   | None at All | A Little | A Lot |
| Funding                                      |   |             |          |       |
| Expertise in your lab                        |   |             |          |       |
| Expertise within the institute               |   |             |          |       |
| Bioinformatics support                       |   |             |          |       |
| Identifying a competent outsourcing resource |   |             |          |       |

|                           |   |  |   |
|---------------------------|---|--|---|
| 13e                       | In the next five years, do you expect the number of genomic projects you have to go up, down, or stay the same? |  |   |
| They will go up           |   |  | 1 |
| They will go down         |   |  | 2 |
| They will remain the same |   |  | 3 |
| Can't say at this time    |   |  | 4 |

|   |  |             |          |       |
|---|--|-------------|----------|-------|
| 13f   | Currently, in which areas do you need more help?<br><i>Select all that apply</i> |             |          |       |
|   |  | None at All | A Little | A Lot |
| Experimental design/planning (number of replicates, randomization)          |  |             |          |       |
| Sample preparation and/or sequencing library generation                     |  |             |          |       |
| NGS sequencing (running instrument)   |  |             |          |       |
| Bioinformatics  |  |             |          |       |
| N/A (I am comfortable with the help I have now) <b>[MUTUALLY EXCLUSIVE]</b> |  |             |          |       |

## Bioinformatics (ask All)

|     |   |    |
|-----|---|----|
| 14  | Currently, do you have sufficient bioinformatics resources for your research program? |    |
| Yes |   | 1  |
| No  |   | 2  |
| N/A |   | -9 |

If Q14 = No, ask:

|    |   |             |          |       |
|----|---|-------------|----------|-------|
| 15 | You indicated that you currently do not have sufficient bioinformatics resources for your research program. In which areas do you need the most help?<br><i>Select one response on each row</i> |             |          |       |
|    |   | None at All | A Little | A Lot |
|    | Experimental design/planning (replicates, randomization)  | 1           | 2        | 3     |
|    | Data analysis   | 1           | 2        | 3     |
|    | Statistics  | 1           | 2        | 3     |
|    | Software/Software planning  | 1           | 2        | 3     |
|    | Storage   | 1           | 2        | 3     |
|    | Security  | 1           | 2        | 3     |
|    | Computers/Equipment   | 1           | 2        | 3     |
|    | New technology  | 1           | 2        | 3     |
|    | Training  | 1           | 2        | 3     |
|    | Consulting  | 1           | 2        | 3     |
|    | Standards   | 1           | 2        | 3     |
|    | Sharing/Collaborating   | 1           | 2        | 3     |
|    | Licensing   | 1           | 2        | 3     |

## CLOSING

|                      |                             |    |
|----------------------|-----------------------------|----|
| 16                   | Are you Hispanic or Latino? |    |
| Yes                  |                             | 1  |
| No                   |                             | 2  |
| Prefer not to answer |                             | -9 |

|    |   |    |
|----|---|----|
| 17 | Please select the racial category or categories with which you most closely identify.<br><i>Select all that apply</i> |    |
|    | American Indian or Alaska Native  | 1  |
|    | Asian   | 2  |
|    | Black or African American   | 3  |
|    | Native Hawaiian or Other Pacific Islander   | 4  |
|    | White   | 5  |
|    | Other, please specify:  | 99 |
|    | Prefer not to answer <b>[MUTUALLY EXCLUSIVE]</b>  | -9 |

|    |                              |    |
|----|------------------------------|----|
| 18 | Please indicate your gender. |    |
|    | Male                         | 1  |
|    | Female                       | 2  |
|    | Prefer not to answer         | -9 |

|    |   |    |
|----|---|----|
| 19 | Is there anything else you want to share regarding current and future needs for your science? |    |
|    | <INPUT LONG TEXT>   | OT |

Those are all of our questions. Thank you for participating in our survey.

If you have questions, please contact Kate Oliver at [Kathleen.Oliver@nih.gov](mailto:Kathleen.Oliver@nih.gov)

Please click on the “EXIT” button below.

**EXIT**

© Outsell, Inc. 2017

*Outsell Inc.’s information, analysis, opinion, and reports (the “Information”), are based on qualitative and/or quantitative research methods and its staff’s extensive professional expertise in the industry. Outsell, Inc. has used its best efforts and judgment in the compilation and presentation of the Information and believes the Information is accurate as of the date furnished, but the industry and the Information are subject to rapid change. Except as aforesaid, Outsell, Inc. makes no other representations or warranties, express or implied, concerning or relating to the Information.*