**Attachment 1**

**Survey Instrument**

# NIEHS DERT Extramural Grantee DATA COLLECTION

**DEMOGRAPHICS AND BACKGROUND INFORMATION**

What is your age?
- ❑ <30
- ❑ 30-39
- ❑ 40-49
- ❑ 50-59
- ❑ 60+

What degrees do you hold? (*Please check all that apply*)
- ❑ AB, BA, BS, BSc
- ❑ MA, MS, MHS, MPH, MPA, MED, MSIH
- ❑ PhD, Sc.D, DSc
- ❑ MD
- ❑ Other clinical degree (e.g. DO, DDS, MBBS, RN)
- ❑ Other please specify_____
- ❑ None

In what year did you receive your highest degree? _____ (drop down menu)

What is your current position?
_____

How long have you held that position? _____ Years _____ Months

In what type of research do you engage? (*Please check all that apply*)

| ❑ Basic Science | What types of basic research? (*Please check all that apply*) <br>    ❑   Biochemistry <br>    ❑   Biophysics <br>    ❑   Botany <br>    ❑   Cellular biology <br>    ❑   Ecology <br>    ❑   Environmental Sciences <br>    ❑   Epigenetics <br>    ❑   Genetics <br>    ❑   Immunology <br>    ❑   Medicine <br>    ❑   Microbiology <br>    ❑   Molecular biology <br>    ❑   Physiology <br>    ❑   Toxicology <br>    ❑   Other please specify_____ |
|---|---|
| ❑ Applied Science | What types of applied research? (*Please check all that apply*) |
| |    ❑   Clinical Research <br>    ❑   Public Health Research <br>    ❑   Health Services Research <br>    ❑   Intervention Research <br>    ❑   Program or Policy Research <br>    ❑   Technology Innovation <br>    ❑   Translational Research <br>    ❑   Other please specify_____ |

**FUNDING**

Please indicate which sources of selected science portfolio-related funding you have had during your career to date.

| Funding Source | Please check all sources of selected science portfolio - **related** funding *(Please select all that apply)* | | Please indicate which funding source was the primary funder for this research. | |
|---|---|---|---|---|
| | **Career** | **Last 10 years** | **Career** | **Last 10 years** |
| NIEHS | ❑ | ❑ | ❑ | ❑ |
| NHLBI | ❑ | ❑ | ❑ | ❑ |
| NIAID | ❑ | ❑ | ❑ | ❑ |
| NICHD | ❑ | ❑ | ❑ | ❑ |
| Other NIH | ❑ | ❑ | ❑ | ❑ |
| CDC | ❑ | ❑ | ❑ | ❑ |
| AHRQ | ❑ | ❑ | ❑ | ❑ |
| FDA | ❑ | ❑ | ❑ | ❑ |
| EPA | ❑ | ❑ | ❑ | ❑ |
| HUD | ❑ | ❑ | ❑ | ❑ |
| NSF | ❑ | ❑ | ❑ | ❑ |
| Other US government (not listed above) | ❑ | ❑ | ❑ | ❑ |
| Foundations | ❑ | ❑ | ❑ | ❑ |
| Industry | ❑ | ❑ | ❑ | ❑ |
| University discretionary/ start-up funds | ❑ | ❑ | ❑ | ❑ |
| Local, state or regional government | ❑ | ❑ | ❑ | ❑ |
| Other, specify_____ | ❑ | ❑ | ❑ | ❑ |

For your NIH-funded selected science portfolio research, please indicate which types of funding you have received. (*Please check all that apply*).
❑ Research (e.g., R01, R03, R21)
❑ Program/Center (e.g., M, P and U awards)
❑ Career Development Individual (e.g., K awards; R23, R29)
❑ Fellowships (e.g., F awards)
❑ Institutional Training (e.g., T32)
❑ Technology Development (e.g., SBIR, STTR; R41-44, N43-44, U43-44)
❑ Other funding type (specify): _____

Please describe if and how you have used NIEHS funds to leverage other resources, including monetary and non-monetary support._____

**OUTPUTS**

Research Outputs

Please indicate which of the following research outputs you have produced as part of this project and provide a brief description:

| Research Output | Check all that apply: | Provide a brief description. |
|---|---|---|
| **Biological Materials** | ● Biological material or application identified or developed as a result of the research study. | |
| **Databases, Software, Algorithms** | ● Database resulting from the research study. | |
| | ● Software resulting from the research study. | |
| | ● Algorithm resulting from the research study. | |
| **License Agreements** | ● License agreement executed for intellectual property generated by the research study. | |
| **Measurement Instruments** | ● Measurement instrument developed by the research study. | |
| **Research Data (public or restricted)** | ● Research data generated by the research study. | |
| **Economic Outcomes** | ● Research study findings result in a cost-effective intervention for a disease, condition, or disorder. | |
| | ● Research study findings result in enhancement of existing resources and expertise. | |
| | ● Research study findings result in increased performance, quality, and consistency in the delivery of health care services. | |
| **Health Care Outcomes** | ● Research study findings result in clinically effective approach in the management and treatment of a disease, disorder or condition. | |
| **Quality of Life** | ● Research study findings leads to enhancement of well-being among community members. | |

## Knowledge Transfer Outputs

Please indicate which of the following knowledge transfer outputs you have produced as part of this project and provide a brief description:

| Knowledge Transfer Output | Check all that apply: | Provide a brief description. |
|---|---|---|
| **Alternative/ Informal Dissemination** | ● Research study is referred to or cited in a blog, tweet, wiki or other alternative mode of dissemination. | |
| | ● Research study is cited in a presentation, speech or teaching materials. | |
| **Biological Materials** | ● Subsequent use of a particular biological material or application of the material generated by the research study in a bench study (basic science) or clinical trial study. | |
| | ● Clinical data generated in support of marketing a biological material (BLA) generated by the research study. | |
| **Clinical Guidelines** | ● The clinical guideline refers to the research study or recommends the study for background readings. | |
| **Curriculum Guidelines** | ● The curriculum guideline refers to the research study or recommends the study for background readings. | |
| **License Agreements** | ● License agreement granted for use of intellectual property generated by the research study. | |
| **Mass Media** | ● Mass media publication refers to the research study. | |
| **Material Transfer Agreements (MTA)** | ● MTA executed for transfer of tangible property generated by the research study. | |
| **Medical Devices** | ● Clinical trial study testing of a medical device generated by the research study. | |
| | ● Clinical data generated in support of marketing a medical device (510(k); Investigational Device Exemption, IDE; or Premarket Approval, PMA) generated by the research study. | |
| **Meta-Analyses** | ● Research study cited in a meta-analysis. | |

| Knowledge Transfer Output | Check all that apply: | Provide a brief description. |
|---|---|---|
| Pharmaceutical Preparations | ● Subsequent use of a drug generated by the research study in a bench study (basic science) or clinical trial study. | |
| | ● Clinical data generated in support of marketing a drug (Investigational New Drug Application, IND; New Drug Application, NDA; Abbreviated New Drug Application, ANDA; or 505(b)(2)) generated by the research study. | |
| Ancillary Research Studies | ● Ancillary research study generated as a result of the research study. | |
| New Research Studies | ● New research study generated as a result of the research study. | |
| Subject Headings/ Thesauri | ● New subject heading or thesauri term or phrase resulting or related to the research study is applied. | |

## Career Development Outputs

| Career Development Output | Check all that apply: | Provide a brief description. |
|---|---|---|
| Leadership positions | ● Serve as Center Director, Department Chair, Conference Chair, or some other leadership position | |
| Employment Promotion | ● Received promotion to higher level of employment, such as next level of professor, or scientist | |
| Trained or Mentored Students | ● Served as a mentor or trained students in the field of selected science portfolio | |

Training/Certifications Outputs

| Career Development Output | Check all that apply: | Provide a brief description. |
|---|---|---|
| Teaching | ● Taught courses in the area of the selected science portfolio | Number of courses taught:<br>Number of students taught: |
| New Investigators Recruited to NIEHS | ● Recruited new investigators to submit applications to NIEHS | Number of new investigators recruited: |
| Young Investigators Recruited to NIEHS | ● Recruited young or early stage investigators to submit applications to NIEHS | Number of young or early stage investigators recruited: |

Describe the approaches you used to include/advance young investigators.

Which of these approaches was most effective?
Describe why.

Describe the barriers you face to training the next generation of NIEHS scientists.

Dissemination Outputs

Please indicate which of the following mechanisms you have used to disseminate related knowledge and products stemming from your research. (*Please check all that apply*).

- ☐ Published in peer-reviewed **journals**
- ☐ Presented at scientific **conferences**
- ☐ Participated in **grantee meetings**
- ☐ Developed and disseminated **curricula**
- ☐ Developed and disseminated **interventions**
- ☐ Participated in the development of **clinical guidelines**
- ☐ Developed and disseminated research **tools and methods**
- ☐ Participated in **workshops or trainings** disseminating your research
- ☐ Provided scientific **testimony and briefings** to legislators
- ☐ Developed and published **websites**
- ☐ Presented research in **community forums**
- ☐ Developed **fact sheets and pamphlets**
- ☐ Provided information for **press releases**
- ☐ Other, please specify:_____

As part of your research, you may have had the opportunity to engage with different types of individuals and groups. Please indicate what the nature of your personal engagement has been with each of the following groups. (*Please check all that apply*)

| Group | Share information | Conduct joint projects or activities | Serve on boards or advisory panels | Provide formal testimony | Serve as employee or consultant | No interaction |
|---|---|---|---|---|---|---|
| Other researchers | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| University administration / program directors | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Local, regional or national health officials | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Environmental regulators | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Food and drug regulators | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Legislators and staffers | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Business and industry representatives | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Housing and urban development agencies | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Advocacy groups | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Community groups | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other : _____ | ❑ | ❑ | ❑ | ❑ | ❑ | ❑ |

Commercialization Outputs

We are interested in whether your selected science portfolio -related research, regardless of funding source, has led to the development of intellectual property.

Have you **applied** for one or more patents?
❑ Yes        ❑ No

[IF YES] Provide the patent application number(s):_____

[IF YES] What is the nature of your **patents**(s)?
❑ New drug
❑ New use of drug
❑ Medical product or device
❑ Environmental controls and services
❑ New process or procedure
❑ New research method
❑ New gene
❑ Other please specify  _____

Have you **commercialized** your innovation based on your patent(s)?

❑ Yes ❑ No

Have you **licensed** your innovation(s)?

❑ Yes ❑ No

Did any **Federal agencies support** this work?

❑ Yes ❑ No

[IF YES] **Which other Federal agencies** supported this work? (*Please check all that apply*)

| | |
|---|---|
| NIEHS | ❑ |
| NHLBI | ❑ |
| NIAID | ❑ |
| NICHD | ❑ |
| Other NIH | ❑ |
| CDC | ❑ |
| AHRQ | ❑ |
| FDA | ❑ |
| EPA | ❑ |
| HUD | ❑ |
| NSF | ❑ |
| Other US government (not listed above) | ❑ |

Have you spun-off or started a **new company** based on your research related to the selected science portfolio?

❑ Yes ❑ No

<u>Community Partnership Outputs</u>

Describe any community outreach outputs produced by your project, such as Outreach visits, interventions, curriculums, etc.: _____
_____

Describe the target audience (include specific numbers of people reached if possible):
_____
_____

Describe the goal of the community partnership: _____
_____

Describe the ways community partners participated in the project: _____
_____

Describe any leadership roles community partners had in the project: _____
_____

**IMPACTS**

We are interested in assessing whether you think your research will have effects on long term outcomes (now or in the near future) through a variety of pathways, including clinical practice changes, reduced exposure to environmental hazards, or changes in public behavior and advocacy. For each of the following items, please mark the 'current' box if you believe your research has already affected change in this area and the 'future potential' box if you believe it has the potential to affect change in the next 10 years.

| Impact Area | Impact Timing |
|---|---|
| a. My research has led to greater **understanding of** selected science portfolio **disease mechanisms**<br><br>**Describe impact:** | ❑Current ❑Future potential |
| b. My research has led to greater **understanding of individual, social, and environmental factors** associated with selected science portfolio<br><br>**Describe impact:** | ❑Current ❑Future potential |
| c. My research has led to improved **environmental measurement techniques**<br><br>**Describe impact:** | ❑Current ❑Future potential |
| d. My research has led to increased evidence regarding **effective interventions**<br><br>**Describe impact:** | ❑Current ❑Future potential |
| e. My research has led to improved **environmental control techniques**<br><br>**Describe impact:** | ❑Current ❑Future potential |
| f. My research has led to changes in **education outcomes for clinical/public health students**<br><br>**Describe impact:** | ❑Current ❑Future potential |
| g. My research has led to changes in **education outcomes for K-12 or families**<br><br>**Describe impact:** | ❑Current ❑Future potential |
| h. My research has led to changes in **business practices regarding** <u>selected science portfolio</u><br><br>**Describe impact:** | ❑Current ❑Future potential |
| **Impact Area** | **Impact Timing** |

| | | |
|---|---|---|
| i. My research has led to changes in environmental **standards or regulations for change to reflect selected science portfolio**<br><br>**Describe impact:** | ❑Current | ❑Future potential |
| j. My research has led to changes in environmental **policies for selected science portfolio**<br><br>**Describe impact:** | ❑Current | ❑Future potential |
| k. My research has led to changes in **clinical practice** relevant to **selected science portfolio**<br><br>**Describe impact:** | ❑Current | ❑Future potential |
| l. My research has led to changes in **public knowledge and practices** related to **selected science portfolio** prevention and control<br><br>**Describe impact:** | ❑Current | ❑Future potential |
| m. My research has led to increased **public advocacy** for **selected science portfolio** prevention and control<br><br>**Describe impact:** | ❑Current | ❑Future potential |
| n. My research has led to changes in behavior related to the field of **selected science portfolio** | ❑Current | ❑Future potential |

**SCIENTIFIC GOALS AND OBJECTIVES**

Describe the key scientific findings associated with your funded research.

Describe the impact or potential impact of these findings on public health.

Describe the impact or potential impact of these findings on the field of XXX.

<u>RFA Goals (if applicable)</u>

The goals of the RFAs for this portfolio include: (list goals here.)

To what extent did your project address each of these goals?

<u>Research Agenda</u>

What **selected science portfolio** -related research topics would you like to see included among the NIEHS extramural research priorities over the next 5-10 years to address emerging science areas or areas where there are gaps in current research

_____

_____

**RESEARCH COLLABORATIONS**

Do/Did you collaborate with other grantees who are doing similar work? Yes/No

If so, describe the collaboration:_____
_____

Is there a collaborator or partner that you would like to work with more? Yes/No

If so, who and why? _____

What has prevented you from pursuing that relationship?_____

Is there anything NIEHS can do to help facilitate that relationship?_____
_____


**PROGRAM SUPPORT**

How satisfied are you with the support you received from program staff, such as grantee meetings, communications, etc.?

| | Everything was Great (5) | Mostly OK (4) | So-So (3) | Could have been better (2) | Provided little or no help (1) | Not Applicable |
|---|---|---|---|---|---|---|
| Grantee meetings | | | | | | |
| Regular communication | | | | | | |
| Workgroups | | | | | | |
| Sharepoint sites or similar web-based sharing | | | | | | |
| Webinars | | | | | | |
| Data or sample sharing | | | | | | |
| Methods or technologies | | | | | | |
| Other activities provided based on program or portfolio selected | | | | | | |

What was the most beneficial type of support you received from program staff? And why?

Are there other support activities that NIEHS program staff could have provided that would have facilitated your research project? Yes/No

If yes, please describe:_____

**IF COLLABORATIVE OR CONSORTIUM TYPE FUNDING:**
Describe your participation in the current consortium.

In addition to your individual grant accomplishments, what do you see as the main accomplishments of the consortium efforts? (both methods and findings)

 [if history of funding from NIEHS] How does your experience with this consortium model differ from other grants you have been involved with at NIEHS?

What do you see as the primary benefits with funding this research through a consortium?

What are the primary challenges associated with funding this research through a consortium?

To what extent have joint products emerged from the consortium (e.g., joint publications, presentations, new collaborations, shared datasets, new grants?)
What were the benefits and challenges involved in working on these joint products?

How satisfied are you with those efforts?

Do you anticipate continuing to collaborate with any of these consortium members after this grant is over?  Please describe your plans.

**LESSONS LEARNED** *(Note to OMB: this section will be customized for each portfolio or program evaluation to address unique characteristics of the portfolio or program, such as the funding mechanism used or partnering and collaboration requirements. Potential questions are provided below.)*

Would you recommend that NIEHS use the consortium model in future funding announcements?

What (if anything) would you want to see done differently related to how the consortium was convened or managed?

Many grant programs today are specifically looking at research translation and the broader societal impacts of the use of research findings including informing regulation. Based on your experiences with this grant, what do you think is the best way to conduct research to translate findings to affect broader social impacts and/or to inform the regulatory process?

Are there any other lessons learned you would like to share regarding your participation in this grant?