**Attachment 4**

**Table Shells for Analysis**

Table 1. Percentage of Investigators receiving each type of funding in the past 10 years and throughout career and primary sources of funding for same time periods

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Funding Source** | **Percentage of Investigators receiving funding**  **Career Last 10 years** | | **Percentage of Investigators receiving primary funding**  **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 |  |  |  |  |

Table 2. Percentage of Investigators receiving specific types of NIH-funding for research

|  |  |
| --- | --- |
| **Type of Funding** | **Percentage of Investigators** |
| 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) |  |

Table 3. Percentage of researchers engaged in basic and applied sciences related to the selected science portfolio by field

|  |  |
| --- | --- |
| **Field of Research** | **Percentage of Investigators** |
| **Basic Sciences**  [Biochemistry](http://en.wikipedia.org/wiki/List_of_basic_biochemistry_topics)  [Biophysics](http://en.wikipedia.org/wiki/Biophysics)  [Botany](http://en.wikipedia.org/wiki/Botany)  [Cellular biology](http://en.wikipedia.org/wiki/Cellular_biology)  [Ecology](http://en.wikipedia.org/wiki/List_of_basic_ecology_topics)  Environmental Sciences  Epigenetics  [Genetics](http://en.wikipedia.org/wiki/Cellular_biology)  Immunology  [Medicine](http://en.wikipedia.org/wiki/Medicine)  [Microbiology](http://en.wikipedia.org/wiki/Microbiology)  [Molecular biology](http://en.wikipedia.org/wiki/Molecular_biology)  [Physiology](http://en.wikipedia.org/wiki/Physiology)  Toxicology  Other please specify\_\_\_\_\_\_\_\_ |  |
| **Applied Sciences**  Clinical Research  Public Health Research  Health Services Research  Intervention Research  Program or Policy Research  Technology Innovation  Translational Research  Other please specify\_\_\_\_\_\_\_\_ |  |

Table 4. Age distribution of investigators

|  |  |
| --- | --- |
| **Age Category** | **Percentage of Investigators** |
| <30 |  |
| 30-39 |  |
| 40-49 |  |
| 50-59 |  |
| 60+ |  |

Table 5. Percentage of investigators by degrees awarded

|  |  |
| --- | --- |
| **Degree** | **Percentage of Investigators** |
| 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) |  |
| None |  |

Table 6. Distribution of year of highest degree

|  |  |
| --- | --- |
| **Year** | **Percentage of Investigators** |
| 1976-1980 |  |
| 1981-1985 |  |
| 1986-1990 |  |
| 1991-1995 |  |
| 1996-2000 |  |
| 2001-2005 |  |
| 2006- |  |

Table 7. Number/Percentage of Research Outputs Produced by Investigators

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Research Output** | | | **Number of Investigators** | **Percentage of Projects** |
| **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. |  |  |

Table 8. Number/Percentage of Knowledge Transfer Outputs Achieved by Investigators

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Knowledge Transfer Output** | | | **Number of Investigators** | **Percentage of Projects** |
| **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. |  |  |
| **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. |  |  |

Table 9. Career Development Outputs

Table 10. Training Outputs

Table 11. Percentage of investigators that have disseminated research by the following mechanisms

|  |  |
| --- | --- |
| **Dissemination mechanism** | **Percentage of investigators** |
| Published in peer-reviewed journals |  |
| Presented at scientific conferences |  |
| Participated in grantee meetings |  |
| Developed and disseminated curricula |  |
| Developed and disseminated interventions |  |
| Developed and disseminated research tools and methods |  |
| Participated in the development of clinical guidelines for the treatment of asthma |  |
| 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 |  |

Table 12. Nature of investigator personal engagement by type of engagement

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Percentage of Investigators** | | | | | |
| 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 |  |  |  |  |  |  |

Table 13. Percentage of Investigators who have applied for patents and commercialized innovation

|  |  |
| --- | --- |
| **IP Action** | **Percentage of Investigators** |
| Patent application |  |
| Patent |  |
| **Nature of patent**  New drug  New use of drug  Medical product or device  Environmental controls and services  New process or procedure  New research method  New gene |  |
| Commercialization of Patent |  |
| License Patent |  |
| Started spin-off or new company |  |

Table 14. Percentage of investigators who received patents and received support from federal agencies, by agency

|  |  |
| --- | --- |
| **Agency** | **Percentage of Investigators** |
| NIEHS |  |
| NHLBI |  |
| NIAID |  |
| NICHD |  |
| Other NIH |  |
| CDC |  |
| AHRQ |  |
| FDA |  |
| EPA |  |
| HUD |  |
| NSF |  |
| Other US government (not listed above) |  |

Table 15. Community Partnership Outputs (Response options will be created based on feedback to open-ended questions).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Community Partnership Output** | | | **Number of Investigators** | **Percentage of Projects** |
|  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |

Table 16. Percentage of investigators who believe research has had or may have future impacts in the next 10 years by impact area

|  |  |  |
| --- | --- | --- |
| **Impact Area** | **Percentage of Investigators** | |
|  | **Current Impact** | **Future Potential Impact** |
| greater understanding of the selected science portfolio’s disease mechanisms |  |  |
| greater understanding of individual, social, and environmental factors associated with the selected science portfolio |  |  |
| improved environmental measurement techniques |  |  |
| increased evidence regarding effective interventions |  |  |
| improved environmental control techniques |  |  |
| to changes in curriculum for clinical/public health students |  |  |
| changes in curriculum for K-12 or families |  |  |
| changes in business practices regarding the selected science portfolio |  |  |
| changes in environmental standards or regulations for the selected science portfolio |  |  |
| changes in public health/environmental legislation related to asthma |  |  |
| changes in clinical guidelines for the selected science portfolio |  |  |
| changes in clinical practice relevant to the selected science portfolio |  |  |
| changes in public knowledge and practices related to the selected science portfolio prevention and control |  |  |
| increased public advocacy for the selected science portfolio prevention and control |  |  |

Table 12. Percentage of investigators who believe research has had impacts by impact area and by NIEHS funding status

|  |  |  |  |
| --- | --- | --- | --- |
| **Impact Area** | **Percentage of Investigators** | | |
|  | **No NIEHS funding** | **NIEHS funding** | **NIEHS funding primary** |
| greater understanding of the selected science portfolio disease mechanisms |  |  |  |
| greater understanding of individual, social, and environmental factors associated with the selected science portfolio |  |  |  |
| improved environmental measurement techniques |  |  |  |
| increased evidence regarding effective interventions |  |  |  |
| improved environmental control techniques |  |  |  |
| changes in curriculum for clinical/public health students |  |  |  |
| changes in curriculum for K-12 or families |  |  |  |
| changes in business practices regarding the selected science portfolio |  |  |  |
| changes in environmental standards or regulations for the selected science portfolio |  |  |  |
| changes in public health/environmental legislation related to the selected science portfolio |  |  |  |
| changes in clinical guidelines for the selected science portfolio |  |  |  |
| changes in clinical practice relevant to the selected science portfolio |  |  |  |
| changes in public knowledge and practices related to the selected science portfolio prevention and control |  |  |  |
| increased public advocacy for the selected science portfolio prevention and control |  |  |  |