# National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

## 2016 Report to Congress

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# Acronyms

| | |
|---|---|
| **AC** | Alternating Current |
| **ACL** | Administration for Community Living |
| **ADA** | Americans with Disabilities Act |
| **ADA-PARC** | ADA Participatory Action Research Consortium |
| **ADAKTC** | American with Disabilities Act Knowledge Translation Center |
| **APR** | Annual Performance Reporting Data System |
| **ARRT** | Advanced Rehabilitation Research Training Project |
| **BMS** | Burn Injury Model Systems |
| **CDC** | Centers for Disease Control |
| **DRRP** | Disability and Rehabilitation Research Project |
| **ED** | Department of Education |
| **FCC** | Federal Communication Commission |
| **FIP** | Field-Initiated Project |
| **FY** | Fiscal Year |
| **HHS** | Department of Health and Human Services |
| **HUD** | Department of Housing and Urban Development |
| **ICDR** | Interagency Committee on Disability Research |
| **ICT** | Information and Communications Technology |
| **MSKTC** | Model Systems Knowledge Translation Center |
| **NARIC** | National Rehabilitation Information Center |
| **NDB** | National Database |
| **NHTS** | National Household Travel Survey |
| **NIDILRR** | National Institute on Disability, Independent Living, and Rehabilitation Research |
| **NIHR** | National Institute on Handicapped Research |
| **OCR** | Optical Character Recognition |
| **OSTP** | White House Office of Science Technology and Policy |
| **RERC** | Rehabilitation Engineering Research Centers |
| **ROI** | Return on Investment |
| **RRTC** | Rehabilitation Research and Training Centers |
| **SAMHSA** | Substance Abuse and Mental Health Services Administration |
| **SBIR** | Small Business Innovation Research |
| **SBO** | Survey of Business Owners |
| **SCI** | Spinal Cord Injury |
| **SOS** | State of the Science |
| **SSA** | Social Security Administration |
| **SCIMS** | Spinal Cord Injury Model Systems |
| **TBI** | Traumatic Brain Injury |
| **TBIMS** | Traumatic Brain Injury Model Systems |
| **UI** | Unemployment Insurance |
| **VA-DARS** | Virginia Department of Aging and Rehabilitation Services |
| **WIOA** | Workforce Innovation and Opportunity Act |

# Executive Summary

The National Institute on Disability, Independent Living, and Rehabilitation Research's (NIDILRR) mission is to generate new knowledge and to promote its effective use, to improve the abilities of individuals with disabilities to perform activities of their choice in the community, and to expand society's capacity to provide full opportunities and accommodations for its citizens with disabilities.

NIDILRR programs address a wide range of disabilities and impairments, across all age groups, and promote health and function, community living and participation, and employment. To accomplish these goals, NIDILRR invests in research, knowledge translation, and capacity-building activities through its discretionary grant-funding mechanisms.

## Funding and Grants Management

The allocation of NIDILRR grant funds for FY 2016 totaled $97,101,867. Further, the Substance Abuse and Mental Health Services Administration (SAMHSA) provided $1,350,800 in funds to jointly support four RRTCs relating to mental health Issues.  In addition, NIDILRR awarded $8,083,133 in contracts and other support activities in FY 2016. These funds supported 226 grant awards.

NIDILRR's peer review process for grant competitions is highly rigorous, with 22.5 percent of applicants awarded funding during FY 2016.

## Productivity and Accomplishments

NIDILRR funds research toward the development of new knowledge and innovative new technological devices, prototypes, measurement tools, intervention materials, and other informational products to enhance community living, health and function, and employment among people with disabilities. Grantees employ advanced methodologies to conduct research, including randomized controlled trials, longitudinal studies, and qualitative studies. These investments produced peer-reviewed publications, intervention protocols, software, and databases. Selected examples of NIDILRR grantee accomplishments in FY 2016 include:

- The Traumatic Brain Injury Assessment Conceptualization Therapeutic Intervention Option Narrative (TBI ACTION) to aid clinicians working with persons with TBI to develop case conceptualizations and consider treatment options.
- A self-assessment tool for use by employers that leads to planning and information resources that will result in improved employment practices for workers with disabilities.
- A clinical tool that creates virtual (real-world) soundscapes to support testing and adjustment of hearing aid parameters so as to optimize a user's auditory performance in real world contexts.
- Studies to identify disparities experienced by people with disabilities in community living, participation, and work.  The grantee has created an interactive website that allows users to compare and contrast data at the national, state and city levels for over 35 cities.
- Task prompting technologies for workers with Intellectual Disabilities. Supervisors search a nationwide repository of pre-built instructions, and then tailor or adjust their selection for their specific needs.

## Research Capacity Building

Research capacity-building efforts under the Advanced Rehabilitation Research Training Projects (ARRT) and Switzer Fellowship Program develop a diverse cadre of emerging disability and rehabilitation researchers. In addition, NIDILRR directs targeted resources to minority-serving institutions, such as Historically Black Colleges and Universities and Tribal Colleges and Universities, to develop and implement programs to build disability and rehabilitation research capacity among minority-serving institutions.

## Training and Technical Assistance on the Americans with Disabilities Act (ADA)

NIDILRR sponsors the ADA National Network, which delivers training, technical assistance, and dissemination of materials for stakeholders with rights and responsibilities under the ADA through its network of 10 regional centers. The ADA Participatory Action Research Consortium (ADA-PARC) complements the Network's activities through research on factors influencing the community living of persons with disabilities and health disparities at state, regional, and community levels.

## Knowledge Translation

NIDILRR is committed to ensuring that the products of its sponsored research and development are used to promote the independent living, health and function, employment, and community living outcomes of individuals with disabilities. Through its Knowledge Translation Centers, NIDILRR ensures that new knowledge and products gained through research and development are effectively communicated to stakeholders and used to improve the lives of individuals with disabilities.

## Future Directions

NIDILRR continues to focus on finalizing its transition into the Department of Health and Human Services' (HHS) Administration for Community Living (ACL), enhancing its current partnerships within the disability and rehabilitation research communities, and sponsoring research of the highest quality in support of those communities.

In alignment with these established priorities, NIDILRR initiated development of its statutorily-required FY 2018–2022 Long-Range Plan, defining its organizational and programmatic vision.  Activities included the convening of internal work teams and outside experts to assess the current and emerging state of the science, and otherwise inform the development of strategic goals and objectives for the organization. NIDILRR systematically collected input from people with disabilities, staff, ACL colleagues, federal partners, and other stakeholders during the long-range planning process. This was done through internal working groups within NIDILRR, a series of regional public listening sessions moderated by the NIDILRR Director, and the collection of comments from the public via email.

Strategic partnerships with other agencies in HHS and across the federal government have been instrumental in advancing NIDILRR's mission. NIDILRR's Director serves as the Chair of the Interagency Committee on Disability Research (ICDR). Mandated by statute (29 U.S. Code § 763), the mission of the ICDR is to promote a cohesive, strategic federal program of disability, rehabilitation, and independent living research and to facilitate coordination and collaboration among federal departments and agencies. Partners within the ICDR include agencies across the federal government, and subcommittees include the Executive Committee, Assistive Technology & Universal Design, Community Integration &

Participation, Employment & Education, Government Wide Inventory, and Health, Functioning & Wellness. NIDILRR plans to build upon the ongoing work of the ICDR through its leadership and contribution to the development of a government-wide disability and rehabilitation research strategic plan.

# National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

# 2016 Report to Congress

## Introduction

The National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) is committed to improving independent living and community participation by funding research and development in the areas of community living and participation, health and function, and employment. This Annual Report to Congress will describe NIDILRR's actions on this commitment during the 2016 fiscal year. It begins with a brief summary of NIDILRR's history, continues with a description of its funding process and fiscal allocations, and follows with descriptions of outcomes impacting the community, highlighting a number of accomplishments by researchers and organizations funded by NIDILRR. This report concludes by describing future initiatives and directions within the organization.

Congress established NIDILRR in response to a deficit of knowledge on the needs of and services for individuals with disabilities across the lifespan. NIDILRR was established as the National Institute on Handicapped Research (NIHR) by the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978 (Pub. L. No. 95—602), amending the Rehabilitation Act of 1973. The organization was originally housed in the Department of Health, Education, and Welfare, and later the Department of Education. Its original goal was to carry out research on all aspects of disability and the socio-economic implications of the problems encountered by individuals with disabilities. The 1986 amendments to the Rehabilitation Act changed the agency's name to the National Institute on Disability and Rehabilitation Research (NIDRR). On July 22, 2014, the agency was renamed the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) and transferred from ED to the Administration for Community Living (ACL) within the Department of Health and Human Services (HHS) by the signing of Pub. L. No. 113-128, the Workforce Innovation and Opportunity Act (WIOA). NIDILRR personnel officially became HHS/ACL employees on February 8, 2015.

Today, NIDILRR's mission is to generate new knowledge and promote its effective use to improve the abilities of individuals with disabilities to perform activities of their choice in the community, and to expand society's capacity to provide full opportunities and accommodations for its citizens with disabilities. To accomplish this mission NIDILRR:
- Supports research, development, demonstration, training, technical assistance, and related activities to build new knowledge.
- Promotes the transfer, use and adoption of technology for individuals with disabilities to improve independent living options.
- Provides for research training to increase the number of qualified researchers, including researchers with disabilities and from minority backgrounds.
- Fosters widespread dissemination of practical scientific and technological information to advance policy, practice, and services to improve outcomes for people with disabilities.

NIDILRR programs address community living and participation, health and function, and employment outcomes of people with disabilities. NIDILRR's investments in research, development, knowledge translation, and capacity-building activities are carried out through the following discretionary grant-funding mechanisms:

- **Rehabilitation Research and Training Centers (RRTC)** conduct advanced research and training on health, rehabilitation, employment, and community living topics.
- **Rehabilitation Engineering Research Centers (RERC)** conduct engineering research and development on technological solutions to rehabilitation problems or environmental barriers.
- **Disability and Rehabilitation Research Projects (DRRP)** conduct research, development, technical assistance, training, and utilization activities on health, rehabilitation, employment, and community living topics.
- **Americans with Disabilities Act (ADA) National Network** projects conduct research and provide information, training and technical assistance to ADA stakeholders.
- **Small Business Innovation Research (SBIR)** projects support small businesses to explore the feasibility, development, or evaluation of the commercialization potential of new technology products for people with disabilities.
- **Knowledge Translation** projects promote the use of research-based knowledge in NIDILRR's community of stakeholders.
- **Field-Initiated Projects (FIP)** conduct three-year studies on topics proposed by applicants to address disability and rehabilitation issues in promising and innovative ways.
- **Model Systems** programs in spinal cord injury, traumatic brain injury, and burn injury conduct research on rehabilitation and long-term outcomes of individuals with these conditions. Research in these programs includes collaborative, multisite research, and collection and analysis of longitudinal data.
- **Advanced Rehabilitation Research Training Projects (ARRT)** support institutions of higher education to provide advanced interdisciplinary research training to postdoctoral Fellows.
- **Research Fellowship Program (RFP), or *Mary E. Switzer Fellowships,*** are awarded to qualified individuals to conduct one-year independent research projects.
- **Section 21** projects focus on research capacity-building for minority-serving institutions, including Historically Black Colleges and Universities and other institutions with significant racial/ethnic minority student populations. Section 21 of the Rehabilitation Act requires that one percent of NIDILRR appropriations be set-aside to address traditionally underserved populations.

# Grant Mechanisms

## Grant Competition and Peer Review Process

NIDILRR supports quality disability research in the domains of community living and participation, health and function, and employment. Funding is provided to the disability, independent living, and rehabilitation research communities through its funding mechanisms, with priorities within these mechanisms determined by the agency. NIDILRR ensures a rigorous research portfolio by administering a systematic peer review process and internal and external program evaluation. NIDILRR's process assures that only the highest-quality research is funded, as required by federal regulation. During the

peer review process, subject matter experts with the appropriate credentials and content knowledge are tasked with evaluating the scientific, technical, and management aspects of proposals submitted in response to NIDILRR funding opportunity announcements. This process generates an average score across reviewers, reducing bias and facilitating the ranking of projects by scientific merit. Only the highest-ranking proposals are recommended for funding by NIDILRR.

NIDILRR also incentivizes the private sector through its participation in the Small Business Innovation Research (SBIR) program. NIDILRR SBIR grantees develop marketable products that promote the community living and participation, health and function, and employment function outcomes of individuals with disabilities. Phase I SBIR grants support the initial feasibility-testing and prototype-development phase. NIDILRR funded 16.9 percent of the SBIR Phase I applications that it received in FY 2016.  Phase II projects, which are selected from a pool of successfully funded Phase I grants for further development, were also highly competitive at a funding rate of 23.5 percent.

## Monitoring and Oversight

NIDILRR provides rigorous oversight of its funded initiatives through its Annual Performance Reporting (APR) Data System, formative review mechanisms, and close monitoring of grant activities by NIDILRR staff. NIDILRR's APR is a web-based grants performance system used by grantees to provide data about goals and objectives, staffing, budget, research and development issues such as sample size and method, progress, outputs and accomplishments. This data is used to determine whether continuation funding should be provided to a grantee. For a new grantee, the first reporting period begins on the start date of the award and extends until May 31 of the following year. Subsequent reporting periods begin June 1 and end May 31. Grantees submit their progress reports annually on July 1.

Formative evaluations of funded awards are also conducted to provide oversight and technical assistance to grantees. Such reviews are conducted when NIDILRR program officers believe that a grantee could benefit from targeted technical assistance. A panel of subject matter experts is chosen to provide the technical assistance and make recommendations for improvement.

NIDILRR staff are highly accomplished program administrators and researchers who provide informed and collaborative oversight to NIDILRR's grantees. They maintain ongoing, routine communication and oversight with grantees to help inform their scientific programs and ensure grantees are meeting goals and objectives. Program Officers use the HHS Grants Policy Administration Manual to provide consistent oversight across projects. Risk assessments are conducted with poor-performing grantees, with additional oversight and technical support provided as needed. Though rare, findings of ongoing poor performance can lead to discontinuing funding to a grantee. No grants were discontinued in FY 2016.

## Funding Overview

The allocation of NIDILRR grant funds for FY 2016 for the 11 funding mechanisms discussed in this section is shown in Table 1. For each funding mechanism, the table includes the number of new and continuation awards. NIDILRR's overall grant allocations across all 11 funding mechanisms totaled $97,101,867 for FY 2016. NIDILRR awarded $8,083,133 in contracts and other support activities for FY 2016.

**Table 1. NIDILRR-Funded Centers and Projects: Funding and Awards, FY 2016**

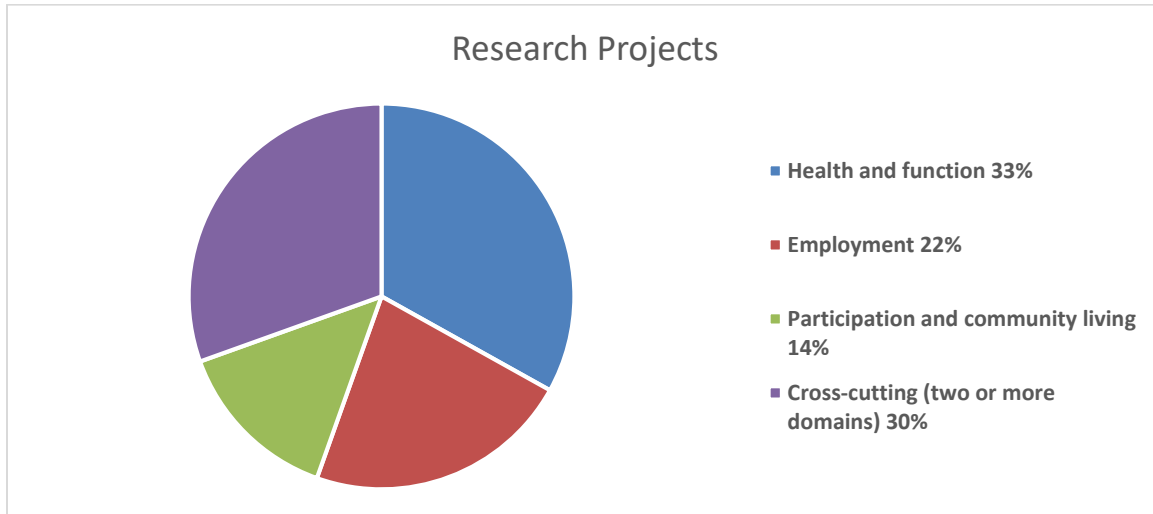| NIDILRR-Funded Centers and Projects | | FY 2016 | | Grant Amount | |
|---|---|---|---|---|---|
| **Funding Mechanism** | Award Type | Number of Awards | Total | In Thousands of Dollars | Total |
| **RRTC** | Continuations | 21 | 23 | 16,624 | 18,373* See Note |
| | New Awards | 2 | | 1,749 | |
| **RERC** | Continuations | 15 | 17 | 11,2405 | 13,965 |
| | New Awards | 2 | | 1,850 | |
| **DRRP** | Continuations | 24 | 29 | 11,579 | 14,241 |
| | New Awards | 5 | | 2,662 | |
| **ADA Network** | Continuations | 1 | 12 | 614 | 12,537 |
| | New Awards | 11 | | 11,923 | |
| **SBIR** | Continuations | 5 | 19 | 1,370 | 3,279 |
| | New Awards | 14 | | 1,909 | |
| **KT** | Continuations | 6 | 9 | 2,577 | 3,669 |
| | New Awards | 3 | | 1,092 | |
| **FIP** | Continuations | 33 | 51 | 6,373 | 9,962 |
| | New Awards | 18 | | 3,589 | |
| **Model Systems** | | | | | |
| **SCI** | Continuations | 0 | 14 | 0 | 6,500 |
| | New Awards | 14 | | 6,500 | |
| **TBI** | Continuations | 17 | 18 | 7,599 | 8,262 |
| | New Awards | 1 | | 633 | |
| **Burn** | Continuations | 5 | 5 | 1,850 | 1,850 |
| | New Awards | 0 | | 0 | |
| **ARRT** | Continuations | 16 | 19 | 2,096 | 2,546 |
| | New Awards | 3 | | 450 | |
| **Switzer Fellowships** | | 4 | 4 | 280 | 280 |
| **Section 21** | | 6 | 6 | 1,774 | 1,774 |
| **Total** | | | 226 | | 97,238 |

*Note: SAMHSA also provided grant funding in the amount of $1,350,800 to RRTCs to partially support four RRTCS related to mental health Issues.
Source: U.S. Department of Health and Human Services, Administration for Community Living, NIDILRR. 2016 Annual Performance Reports.

Exhibits 1 & 2 (see below) illustrate the distribution of funded research and development grant projects in FY 2016 across NIDILRR's three domains: health and function, community living and participation, and employment. "Cross-cutting" is a composite category used in the Annual Performance Report to describe projects that reflect two or more domains. About 50 percent of development projects, and about 33 percent of research projects were described as cross-cutting. "Research projects" are defined by NIDILRR as "an intensive systematic study, based on a clear hypothesis or research question that is directed toward producing new scientific knowledge about the subject or problem being studied."
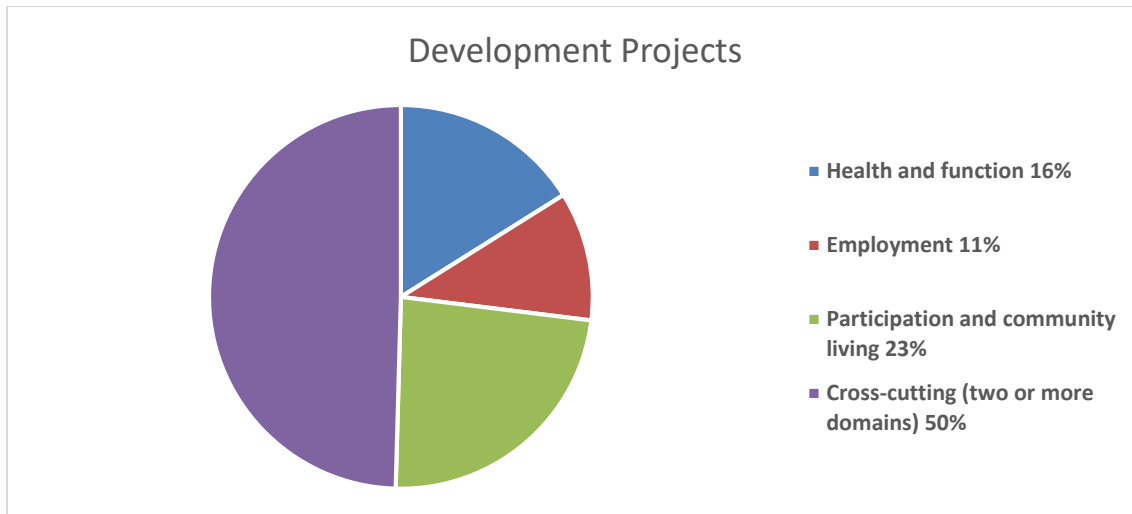
"Development Projects" are defined as "the use of knowledge and understanding gained from research to create materials, devices, systems, or methods beneficial to the target population, including design and development of prototypes and processes."

**Exhibit 1. Research Grant Projects by Domain, FY 2016**



Research Projects

- Health and function 33%
- Employment 22%
- Participation and community living 14%
- Cross-cutting (two or more domains) 30%

Source: U.S. Department of Health and Human Services, Administration for Community Living, NIDILRR. 2016 Annual Performance Reports-Program Performance Report Table 9.

**Exhibit 2. Development Grant Projects by Domain, FY 2016**



Development Projects

- Health and function 16%
- Employment 11%
- Participation and community living 23%
- Cross-cutting (two or more domains) 50%

Source: U.S. Department of Health and Human Services, Administration for Community Living, NIDILRR. 2016 Annual Performance Reports-Program Performance Report Table 11.

# Grantee Activities and Progress

NIDILRR collects output data through the Annual Performance Reporting Data System (APR). Grantees are required to report each output from their funded activities in one of four categories: Publications; Tools, Measures, and Intervention Protocols; Technology Products and Devices; and Informational Products.

A brief description of each category of output type follows:

- **Publications** are documents directly funded by a grantee's current NIDILRR award. Publications include journal articles, periodicals, web journals, proceedings from meetings and symposia, books or book chapters, monographs, abstracts, technical or research reports, and reviews. Within this output category are peer-reviewed and non-peer reviewed publications. Peer-review is an evaluation process of the accuracy of a manuscript, and the validity of the research methodology and procedures by a panel of reviewers from the same scientific or academic discipline. This process is conducted prior to publication, and the review panel can recommend revisions to the work, or reject its submission for publication. Non-peer reviewed publications do not receive this level of critique. Documents that are currently in review, accepted for publication, in press, or self-published are not reported in the APR (Source: APR-PPR, Tables 18 and 19).
- **Tools, measures and intervention protocols** include instruments or processes created to acquire quantitative or qualitative information, knowledge, or data on a specific disability or rehabilitation issue, as well as research-based protocols for delivering interventions to specific target populations of people with disabilities. Examples include checklists; survey questionnaires or interview schedules; interventions; statistical or methodological techniques; databases; and diagnosis or assessment instruments, including physiologic measures and outcome measures (Source: APR-PPR, Table 20).
- **Technology products and devices** are developed, modified, tested, or evaluated by the grantee. This refers to any technology product or device developed under the award that the grantee disseminated or delivered to external audiences during the current reporting period. These include the development of industry standards/guidelines; software or netware; invention, patents, licenses and patent disclosures; working prototypes; product(s) evaluated or field-tested; product(s) transferred to industry for potential commercialization; and product(s) in the marketplace (Source: APR-PPR, Table 21).
- **Information products** refer to items such as training manuals/curricula, fact sheets, newsletters, audiovisual materials, marketing tools, educational aids, Websites, presentations, and other forms of disseminated information (Source: APR-PPR, Table 22).

Exhibit 3 (see page 13) compares the number of output products produced by grantees within each category type in FY 2016. Additional detail has been provided for the category of publications, with peer-reviewed and non-peer-reviewed publications being reported separately.

The most common types of outputs were publications, with the number of peer reviewed publications exceeding the number that were non peer-reviewed.

**Exhibit 3. Total Outputs Produced by all Grantees Across all Program Mechanisms, by Product Type, FY 2016**
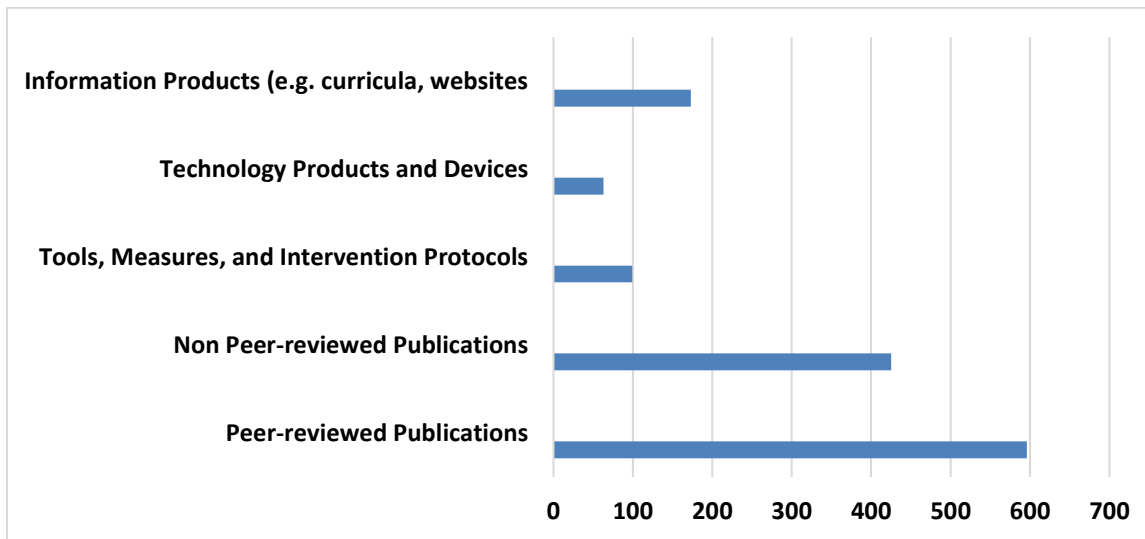


Source: U.S. Department of Health and Human Services, Administration for Community Living, NIDILRR. 2016 Annual Performance Reports, Program Performance Report Tables 18-22.

Data obtained through the 2016 APR shows that NIDILRR supported 226 grantees during FY 2016, whose funding from HHS totaled $97,237,667 across all program mechanisms. These projects reflect the breadth of disability and rehabilitation research within the agency's outcome domains of community living and participation, health and function, and employment. The knowledge and products that are generated by NIDILRR-sponsored research and development grants have a wide variety of important impacts in the field. The summaries that follow, organized by funding mechanism, provide examples of the outcomes and impacts that resulted from NIDILRR's investments. Additional information concerning these projects is available through the National Rehabilitation Information Center (NARIC) website (http://www.naric.com/).

> NIDILRR SUPPORTED 226 GRANTEES DURING FY 2016, TOTALING $97,237,667 ACROSS ALL PROGRAM MECHANISMS.

### Rehabilitation Research and Training Centers (RRTCs)

RRTCs conduct coordinated, integrated and advanced programs of research, training, and information dissemination in topical areas that are specified by NIDILRR. Areas of focus include the improvement of rehabilitation methodology and service delivery systems; the improvement of health and functioning; and the promotion of employment, independent living, family support, and economic and social self-sufficiency for individuals with disabilities. They provide training, including graduate, pre-service, and in-service training to build capacity for disability and rehabilitation research. They also serve as centers of national excellence in rehabilitation research for providers and for individuals with disabilities and their representatives. Awards are normally made for a five-year period.

The following are examples of RRTC accomplishments reported to NIDILRR in FY 2016:

- **Statistical Findings Highlight Transportation and Employment Disparities**
  **University of New Hampshire: RRTC on Disability Statistics and Demographics (StatsRRTC) (Cooperative Agreement # 90RT5022-02-00).** The StatsRRTC at the University of New Hampshire examined National Household Travel Survey (NHTS) data to assess transportation needs among people with disabilities. Findings showed there was no significant difference in the distances traveled among those surveyed, however, trips to medical care facilities by persons with disabilities took longer amounts of time than trips taken by persons without disabilities, holding other variables constant. This paper was highlighted on the Department of Transportation's website featuring the NHTS (http://nhts.ornl.gov/). Another paper examined public housing programs supported by Department of Housing and Urban Development (HUD). Linking Current Population Survey data with the Annual Social and Economic Supplement, analyses showed that working-age people with disabilities who live in public housing but do not receive Social Security Administration (SSA) disability program benefits were significantly less likely to be employed than disabled non-beneficiaries who do not reside in public housing.

- **Researchers Raise Awareness about Aging with Long-term Disability.**
  **University of Washington: RRTC on Healthy Aging & Physical Disability (Grant # 90RT5023).**
  The NIDILRR-funded RRTC on Healthy Aging & Physical Disability at the University of Washington has published seven new studies that advance knowledge about secondary conditions (depression, anxiety, fatigue) that are prevalent among individuals with post-polio syndrome. Within these studies, they have examined the average age of onset for secondary conditions for adults with physical disabilities, helping to determine risk factors over time. They have also discovered that participants with long-term disability had lower resilience than adults without disabilities. This has highlighted the need for targeted wellness interventions to help this population manage these conditions. Plain language research summaries of this work are available at (http://agerrtc.washington.edu/info/summaries).

- **BenchmarkABILITY: Benchmarking and Online Training Tools Inform Employer Practices**
  **Cornell University: The RRTC on Employer Practices Related to Employment Outcomes Among Individuals with Disabilities (Grant Number # 90RT5010).** The RRTC on Employer Practices Related to Employment Outcomes Among Individuals with Disabilities developed a self-assessment tool for use by employers that leads directly to planning and information resources for improved disability inclusion practices. The tool includes six sections of items: 1) recruitment and hiring; 2) career development and retention; 3) accessibility and accommodation; 4) compensation and benefits; 5) diversity and inclusion; and 6) metrics and analytics. The tool has been promoted by several organizations, including: the Center for Advanced Human Resource Studies in the Cornell University Industrial & Labor Relations School; the Society for Human Resources Management, QED Consulting, and the International Labour Organization Global Business and Disability Network. It has also been used by the Royal Canadian Mounted Police and various government organizations in Singapore. The tool can be found at: http://www.benchmarkability.org/

## Rehabilitation Engineering Research Centers (RERCs)

The purpose of the RERC program is to improve the effectiveness of services authorized under the Rehabilitation Act by conducting advanced engineering research and development of innovative technologies designed to solve particular rehabilitation problems or remove environmental barriers. RERCs also demonstrate and evaluate such technologies, facilitate service delivery systems changes, stimulate the production and distribution of equipment in the private sector, and provide training opportunities to enable individuals, including individuals with disabilities, to become researchers and practitioners of rehabilitation technology. Awards are normally made for a five-year period.

Examples of RERC accomplishments reported to NIDILRR in FY 2016 follow:

- **Sign Finder Technology Aids Users with Visual Impairments.**
  **Smith-Kettlewell Eye Research Institute: RERC on Blindness and Low Vision (Grant # 90RE5024)**
  Researchers at the RERC, along with collaborators at the University of Wisconsin-Madison and Wicab, Inc., developed real-time sign detection algorithms for blind users. The computer vision algorithms detect two common and important types of signs (standard Exit and Restroom signs); these signs are difficult or impossible to detect and recognize reliably by standard text detection and OCR techniques, and therefore required the development of entirely new algorithms. The algorithms were implemented for use on either a standard computer or smartphone, and they run at several frames per second on both platforms. The code for this software has been released under an open source license, with the "Sign Finder Application Technical Report" written to document the algorithms. The report is available online at http://www.ski.org/sign-finder-application-technical-report.

- **RERC for Wireless Inclusive Technologies Aides in the Development of Emergency Service Accessibility**
  **Georgia Tech University:  RERC for Wireless Inclusive Technologies (Grant # 90RE5025).** The RERC is contributing to the development of ICT systems infrastructure to support broad access by persons with sensory impairments to the 911 Emergency Notification System. This service provision tool will improve the safety of individuals with sensory impairments living in the community.

## Disability and Rehabilitation Research Projects (DRRPs)

The DRRP funding program supports projects that carry out one or more of the following activities: research; development; demonstration; training; dissemination; utilization; and technical assistance. The purpose of the DRRP program is to plan and conduct research, demonstration projects, training, and related activities to develop methods, procedures, and rehabilitation technology that maximize the full inclusion and integration of individuals with disabilities into society, employment, independent living, and family support; and to promote economic and social self-sufficiency and improve the effectiveness of services authorized under the Rehabilitation Act.

NIDILRR funds several types of DRRPs, including:
(1) Knowledge Translation projects; (2) Model Systems in traumatic brain injury (TBI) and burn injury; (3) ADA National Network projects; (4) Section 21 Program; and (5) individual research projects. The SCI Model System is not included with the other model systems as a DRRP because it has its own statutory authority. The first four types of DRRPs are managed as separate programs and, therefore, only individual research DRRPs are described here under the general DRRP heading. DRRPs differ from RRTCs and RERCs in that they generally do not provide training and technical assistance. Awards range from three to five years.

## Knowledge Translation

In the disability context, knowledge translation is a process of ensuring that new knowledge and products gained through the course of research and development can ultimately be used to improve the lives of individuals with disabilities and further their participation in society. Knowledge translation is built upon and sustained by ongoing interactions, partnerships, and collaborations among various stakeholders in the production and use of such knowledge and products, including researchers, practitioners, policymakers, individuals with disabilities, and others. NIDILRR has invested in knowledge translation by directly funding research and development projects in its Knowledge Translation portfolio and by integrating the underlying knowledge translation principles of interactions, partnerships, and collaborations among stakeholders into the content of all priorities. The projected long-term outcomes are knowledge and products that can be used to solve real issues faced by individuals with disabilities.

The following are examples of Knowledge Translation accomplishments reported to NIDILRR in FY 2016:

- **Factsheets produced by the Model Systems Knowledge Translation Center are well-used by the public.**
  **American Institutes for Research: The Model Systems Knowledge Translation Center (MSKTC) (Grant # 90DP0012).** The Model Systems Knowledge Translation Center (MSKTC) is a knowledge translation project funded, in part, to produce consumer materials that are based on the best available research findings. The MSKTC, in collaboration with the Spinal Cord Injury (SCI), Traumatic Brain Injury (TBI), and Burn Injury (Burn) Model Systems Centers, produce consumer factsheets in various areas for use by people with spinal cord injury, traumatic brain injury, and burn injury. These research-based factsheets address topics that are directly relevant to the lives of people with these traumatic injuries and are written in language that all users can read and understand. Examples of factsheet topics include Recognizing and Treating Pressure Sores; Pain After SCI; Understanding TBI/The Recovery Process for Traumatic Brain Injury; Alcohol Use After Traumatic Brain Injury; Sleep Problems after Burn Injury; and Psychological Distress after Burn Injury, among others. In a span of one year, the factsheets in all three injury areas were

downloaded more than 600,000 times, and the MSKTC web site itself received over 1,000,000 unique visitors, indicating users' high levels of interest in, and use of, this information.

- **The American with Disabilities Act Knowledge Translation Center (ADAKTC) hosted the first State of the Science conference on ADA research**
  **University of Washington: The American with Disabilities Act Knowledge Translation Center (ADAKTC) (Grant # 90DP0086).** The ADAKTC organized the 2016 ADA State of the Science (SOS) conference to disseminate information about the latest ADA-related research, as well as to discuss future research directions related to the ADA. This event was the first time that research from regional ADA centers was spotlighted along with leading national legal and academic researchers on the ADA. The conference was attended by many stakeholder groups including ADA researchers, federal agencies' staff, and representatives from consumer organizations, advocates, individuals with disabilities, and others. A common theme that emerged from national and regional research activities was the acknowledgement of the need to move from a focus on providing simple information about the ADA to a focus on more sophisticated, longer term technical assistance and knowledge translation activities. Presenters noted that questions about the ADA often require a deep understanding of the specific contexts from which the questions are coming and that general information, while important, is not sufficient.

## Model Systems

NIDILRR's Model Systems programs in spinal cord injury (SCIMS), traumatic brain injury (TBIMS), and burn injury (BMS) provide coordinated systems of rehabilitation care and conduct research on recovery and long-term outcomes. These centers serve as platforms for collaborative, multisite research, including research on interventions using randomized controlled trials. Founded in 1973, the National SCI Database has collected injury follow-up data through a total of 29 funded centers. Fourteen funded, plus an additional five unfunded centers, actively collected SCI follow-up data in 2016. Their actions have contributed to the collection of SCI data from 45,809 individuals as of the end of FY 2016. TBIMS and BMS centers have 15,305 and 5,936 persons, respectively, enrolled in their National Databases. Nineteen centers contributed data to the TBIMS National Database in 2016. The BMS collected data from four centers in FY 2016. Studies using these databases have provided researchers opportunities to explore the social and environmental factors influencing the community

> AS OF OCTOBER 2015, THE SPINAL CORD INJURY MODEL SYSTEMS (SCIMS) HAS OVER 45,809 INDIVIDUALS IN ITS NATIONAL DATABASE. TRAUMATIC BRAIN INJURY (TBIMS) AND BURN INJURY (BMS) HAVE 15,305 AND 5,936 PERSONS, RESPECTIVELY, ENROLLED IN THEIR NATIONAL DATABASES.

living and participation of individuals affected by these injuries, best clinical practices for screening and treatment, physiological aspects of the conditions, and long-term outcomes.

The following is an example of a Model Systems accomplishment reported to NIDILRR in FY 2016:

- **Joint CDC-NIDILRR TBIMS Policy Factsheet Released: "Moderate and Severe TBI is a Lifelong Condition"**
  **Craig Hospital: Traumatic Brain Injury Model Systems National Data and Statistical Center. (Grant # 90DP0084).** CDC and NIDILRR collaborated with NIDILRR's TBIMS Centers Program to conduct research utilizing the TBIMS National Database (NDB). The long-term, longitudinal nature of the TBIMS-NDB and its known relationship to the U.S. population provided a unique opportunity to estimate the prevalence of disability among Americans over the age of 15 who require inpatient rehabilitation for more severe TBIs. This project has resulted in several studies characterizing the natural course of moderate and severe TBI as a chronic, disabling health condition. In addition to producing numerous scientific peer-reviewed publications, the collaborating agencies have produced an evidence-based policy factsheet entitled, "Moderate and Severe TBI is a Lifelong Condition". The fact sheet outlines the estimated burden of TBI on public health and offers key policy strategies to address the long term consequences of TBI. The factsheet can be found at:
  https://www.cdc.gov/traumaticbraininjury/pdf/moderate_to_severe_tbi_lifelong-a.pdf
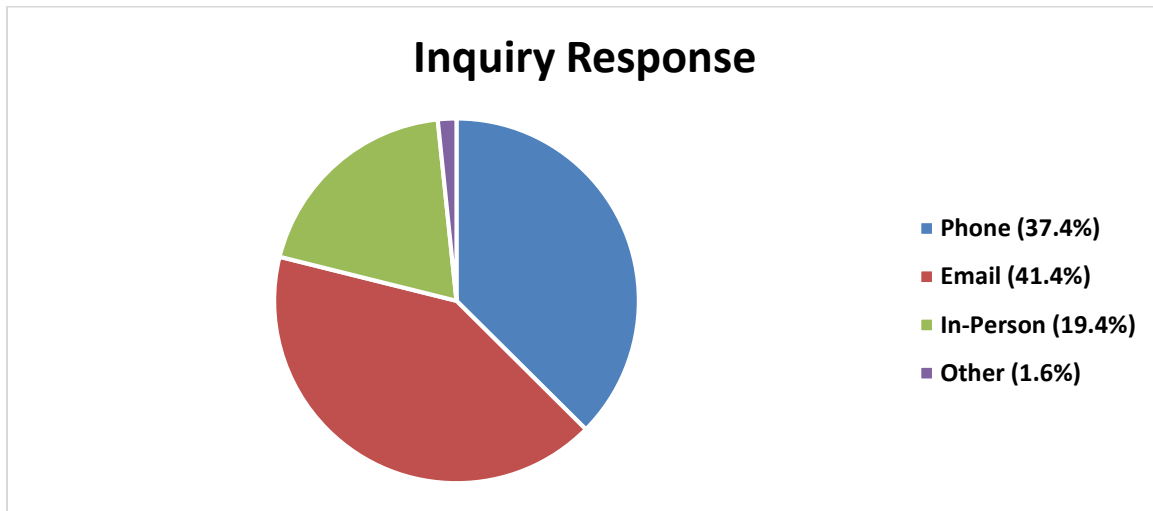
## ADA National Network

The ADA National Network consists of 10 regional centers that provide information, training, and technical assistance to individuals, businesses, and agencies with rights and responsibilities under the ADA. The network also includes research and knowledge translation components, which are carried out by two network grantees, the ADA National Network Collaborative Research Project, and the ADA National Network Knowledge Translation Center.

Research funded under the first grantee is known as the ADA Participatory Action Research Consortium (ADA-PARC). ADA-PARC activities focus on: 1) looking at participation disparities experienced by people with disabilities post ADA and Olmstead; 2) identifying and examining key environmental factors contributing to these disparities; 3) benchmarking participation disparities and highlighting promising practices at state and city levels; and, 4) planning strategies for dissemination and utilization of findings to be used by ADA Centers and others in community capacity building and systems change initiatives.

Knowledge Translation (KT) efforts in the ADA National Network are led by the ADA Knowledge Translation Center. The Center has three primary goals; 1) increase efficiency and impact by serving as a central resource to support the development, coordination, and deployment of ADA information, training, technical assistance, and capacity building activities across the AD National Network; 2) increase awareness and use of ADA research findings to inform practice; and, 3) improve understanding of stakeholders' need for and receipt of ADA services.

ADA National Network Grantees are highly responsive to the community, providing advice, information and training through multiple modalities. In FY 2016, the Centers received 98,815 inquiries from the public. Exhibit 4 presents the modalities used to respond to these questions.

Exhibit 4. Inquiry Response



The 10 ADA National Network Centers delivered 165 training activities/projects during the 2016 APR Reporting Year. Audiences included service providers, individuals with disabilities and their families, business groups, state and local government agencies, architects and design professionals, and other professional groups.

In addition to training and technical assistance, the ADA National Network and its regional centers produce numerous, highly popular products to aid in disseminating information to the public, employers, and individuals with disabilities about their rights and responsibilities. Table 1 shows the types and number of times a product was disseminated.

## Table 1. Product Dissemination

| Type | Number Disseminated |
|---|---|
| Journal Articles | 164 |
| Project Publications | 302,935 |
| Video and Audio Tapes | 12,221 |
| CDs and DVDs | 345 |
| Books or Book Chapters | 7,457 |
| Bulletins, Newsletters or Factsheets | 531,515 |
| Research Reports and Conference Proceedings | 2,282 |

The following are examples of ADA Network accomplishments reported to NIDILRR for FY 2016:

- **ADA Center Provides Accessibility Training to Local Government Officials**
  **Institute for Human Centered Design: New England ADA Center (Grant # 90DP0087)**
  The New England ADA Center implemented ADA Field-based Training Day Interventions for a number of local government entities, which recently resulted in completion of several identified projects for access improvement in various communities, one being Bethel, VT. ADA field-based

trainings provided hands-on-training interventions to assist municipalities in identifying the best solutions for structural changes to existing facilities to meet accessibility requirements using the Center's ADA Checklist for Existing Facilities (www.ADAChecklist.org). Training participants were taught how to use survey tools at a facility identified by the local government entity as inaccessible, and received help with identifying short, intermediate and long-term goals toward implementing the ADA. ADA Coordinators, Disability Commission members, town facilities managers, maintenance directors, and planners were the primary audiences. The New England ADA Center then conducted three and six month follow-up activities with training recipients. The Center conducted follow-up activities with Bethel, VT and learned of the town's successful outcome as a result of the field-based training intervention. The town recently began renovation of the bath house, paved accessible parking spaces to comply, and has begun constructing accessible walkways. Further information is available at newenglandada.org/blog/success-story-implementing-ada-bethel-vt.

- **Manual De Derecho De Discapacidad De La Red Nacional De La ADA**
  **TIRR Memorial Hermann, Independent Living Research Utilization (ILRU) (Grant #90DP0092)**
  The Disability Law Handbook is one of the most popular national network products. ADA National Network constituents and regional centers have been requesting that it also be made available in Spanish to meet the needs of the growing Spanish-speaking population within the US. The handbook is a comprehensive guide written in plain language about the ADA and other laws that address the rights of people with disabilities such as construction law, social security law, housing law, and other civil rights laws. The handbook is intended for both individuals with disabilities and entities that have obligations under various disability laws, and provides basic information about disability rights, as well as resources for finding out more. A variety of users of this handbook gain knowledge about disability law and can then use this knowledge to act and ensure disability rights and obligations are realized.

## Section 21

NIDILRR's capacity-building research agenda, as identified in its long-range plan, includes developing the talent of future leaders in rehabilitation research and development, including individuals with disabilities and those from minority backgrounds. This part of the plan also supports NIDILRR's mandate under Section 21 of the Rehabilitation Act to provide one percent of its annual appropriations to address traditionally underserved populations. The Section 21 program focuses on research capacity building for minority entities such as Historically Black Colleges and Universities and institutions serving primarily Hispanic, Asian, and American Indian students, and non-minority entities with an interest in improving understanding about the needs and outcomes of individuals with disabilities from minority populations. Program activities include assisting minority entities with networking that supports enhanced collaboration between minority entities and non-minority entities, and the exchange of expertise and advanced training across program areas.

Over the past fiscal year, NIDILRR has enhanced its efforts under the Section 21 program by implementing specific strategies aimed at increasing minority participation and representation throughout the NIDILRR portfolio and increasing knowledge of NIDILRR funding programs among minority-serving institutions. As part of this initiative, NIDILRR conducted both field-initiated projects

and advanced rehabilitation research training project Section 21 competitions during FY 2016 to improve the quality and use of research related to individuals with disabilities from traditionally underserved racial and ethnic populations and to enhance the opportunity for minority entities to conduct such research across various NIDILRR funding mechanisms.

The following accomplishment is from the RRTC on Research and Capacity Building for Minority Entities:

- **Improving the Pipeline of Qualified Disability and Rehabilitation Researchers from Minority Serving Institutions.**
  **Langston University, RRTC on Research and Capacity Building for Minority Entities (Grant # 90AR5029).** Langston University's RRTC on Research and Capacity Building for Minority Entities is studying ways to enhance research capacity and infrastructure at minority serving institutions. The RRTC is examining factors that contribute to disability and rehabilitation research leaders' career development and success in an effort to increase the number of talented researchers available to mentor junior investigators at minority entities. The grantee conducted a national study investigating contributing factors, with the following elements emerging as key systems facilitators for growing the number of seasoned minority disability and health researchers: 1) research career pathways and pipeline training programs; 2) social justice integration in organizational culture; 3) new designated research capacity building and R&D funding streams; 4) inter-professional multidisciplinary collaboration;  5) mentorship programs; 6) postdoctoral training programs; 7) grant writing training; 8) expert panel reviewer participation; 9) agency advisory/scientific committee participation;  and 10) conference sponsorships.

## Small Business Innovation Research (SBIR)

The intent of NIDILRR's SBIR program is to help support the development of new ideas and projects that are useful to persons with disabilities by inviting the participation of small business firms with strong research capabilities in science, engineering, or educational technology. Small businesses must meet eligibility criteria to participate: the company must be American-owned and independently operated, it must be for-profit, employ no more than 500 employees, and the principal researcher must be employed by the business. During Phase I, NIDILRR funds firms to conduct feasibility studies to evaluate the scientific and technical merit of an idea. During Phase II, NIDILRR-funded firms expand on the results of Phase I to pursue further development.

The following is an example of a SBIR accomplishment reported to NIDILRR during FY 2016:

- **Portable Dialysis Machine Enhances Freedom of Individuals with Impaired Kidney Function**
  **Chemica Technologies, Inc.: Physiologically Compatible Hemodialysis Through Advanced Dialysate Regeneration. (Grant #90BISB0002).** Dr. Tsukamoto (Phase II SBIR) is developing a portable, high performance dialysis device. In addition to great reductions in size and weight differences, Dr. Tsukamoto's dialysis system presents an improvement in terms of efficiency and effectiveness of blood waste product removal. Using separate funding, Dr. Tsukamoto is also determining whether his dialysis unit can be run off battery rather than AC power. In summary, the dialysis unit is a rehabilitation technology (replacing a body function) that will improve

medical and functional outcomes in the domains of Health and Function and Community Living and Participation, of persons with significant (severe, complete) impairment of kidney function.

## Field-Initiated Projects (FIPs)

Field-Initiated Projects (FIPs) are investigator-initiated research projects intended to supplement NIDILRRs agency-directed research portfolio. These projects cross all of NIDILRR's domains, and generate new knowledge through research or development on a smaller scale relative to DRRPs and Center grants. All FIP grantees must carry out research or development projects to further one or both of the following purposes: (1) develop methods, procedures, and rehabilitation technology, that maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities; and (2) improve the effectiveness of services authorized under the Rehabilitation Act of 1973, as amended. Typical FIP awards are three years in duration.

The following is an example of a FIP accomplishment reported to NIDILRR in FY 2016:

- **Return on Investment (ROI) Model Examines the Earnings Outcomes of Individuals with Disabilities Who Received VR Services.**
  **University of Richmond: VR-ROI Project: Estimating Return on Investment in State Vocational Rehabilitation Programs. (Grant # 90DP0070).**
  The University of Richmond examined the earning outcomes of de-identified individuals who received services from the Virginia Department of Aging and Rehabilitation Services (VA-DARS). Findings from longitudinal modeling of agency data showed that 80 percent of Virginians with disabilities who received VA-DARS services, beginning in 2000, earned more in the following decade than they would have if they had not received VA-DARS services. For every $1000 in VA-DARS expenditure, service participants earned an additional $7,100 over the following 10 years compared to a comparison group who had not received VA-DARS services. The top 10 percent of VA-DARS service users earned an additional $45,100 over a 10 year period than a comparison group who had not received VA-DARS services. Similarly supportive findings were shown through an analysis of the Postsecondary Education Rehabilitation Transition (PERT) program, an initiative for high school aged students and young adults. Findings showed that with an average per student investment of $3,500, PERT participants were 31 percent more likely to obtain and maintain employment than a comparison group. Findings also showed that at least one additional year of education increased the chances of obtaining and maintaining employment by 96 percent.

## Advanced Rehabilitation Research Training Projects (ARRTs)

ARRTs seek to increase capacity for high-quality rehabilitation research by supporting grants to institutions to provide advanced research experience to individuals with doctorates or similar advanced degrees who have clinical or other relevant experience. Grants are made to institutions to recruit qualified persons, including individuals with disabilities, and prepare them to conduct independent research related to disability and rehabilitation, with particular attention to research areas that support the implementation and objectives of the Rehabilitation Act and that improve the effectiveness of services authorized under the Act. These research projects may integrate disciplines, teach research methodology, and promote the capacity for disability studies and rehabilitation science. Training

projects must operate in interdisciplinary environments and provide training in rigorous scientific methods.

There were 71 Fellows enrolled in the ARRT program in FY 2016. Fellows contribute to and lead multidisciplinary research projects with mentors and peers and are encouraged to publish their research. In FY 2016, Fellows were the lead author on 72 publications and contributed to 69 others. The program supports a diverse cadre of young research professionals. An estimated 45 percent of Fellows in the ARRT funding program identify themselves as Latino, African American, American Indian, Asian, or Native Hawaiian. Six of the seventy-one Fellows reported having a disability.

> AN ESTIMATED 45 PERCENT OF FELLOWS IN THE ARRT FUNDING PROGRAM IDENTIFY THEMSELVES AS LATINO, AFRICAN AMERICAN, AMERICAN INDIAN, ASIAN, OR NATIVE HAWAIIAN.

### Research Fellowship Program (Mary E. Switzer Fellowship Program)

The Mary E. Switzer Fellowship Program seeks to increase capacity in rehabilitation research by giving qualified individual researchers, including individuals with disabilities, the opportunity to develop new ideas and further their research expertise. Awards go directly to individuals, not their institutions, allowing Fellows to pursue independent research and training activities. Distinguished Fellows are seasoned in their careers, must hold a doctorate or comparable academic status, and have had seven or more years of experience relevant to rehabilitation research. Merit Fellowships are given to persons with rehabilitation research experience who do not meet the qualifications for Distinguished Fellowships, usually because they are in earlier stages of their careers. Fellows work for one year on an independent research project of their design. Individuals with disabilities are encouraged to apply for each of these Fellowships.

Four Switzer Fellowships were awarded in FY 2016, with a total of 13 Fellows submitting Annual or Final Performance Reports in 2016. Five of the thirteen self-identified as a racial/ethnic minority. Similar to ARRT Fellows, Switzer Fellows were actively engaged in independent research. Of the 13 Switzer Fellows submitting an annual or final performance report, four of these Fellows produced 10 publications.

In addition to publications, Fellows also produce tools and measures, technology, products, and information products which are intended to educate various target groups about the findings of their research. In 2016, three of the 13 Switzer Fellows submitting annual or final reports produced three information products. These included scientific presentations (information products) by one Fellow on patient engagement in inpatient spinal cord injury rehabilitation, as well as a presentation highlighting the importance of patient engagement in rehabilitation. A second Switzer Fellow was invited to present at the 2015 Wellness & Epilepsy Conference for the Epilepsy Foundation of Michigan on the topic of "Employment Barriers and Strategies for Transition Youth with Epilepsy".

Switzer Fellowships support the professional development of established and emerging disability and rehabilitation researchers. A recent beneficiary, Dr. Ekaterina Dobryakova, a 2015 Switzer Fellow and Kessler Foundation researcher, was recently featured in a BBC Futures article focusing on brain function

and its influence on fatigue. The article can be found at http://www.bbc.com/future/story/20160817-the-daily-struggle-of-living-with-extreme-fatigue

# Ongoing NIDILRR Activities and Initiatives

The accomplishments presented are a sample of the research and development sponsored by NIDILRR, and its far-reaching impact on individuals with disabilities, the families and care communities who support them, and society writ large. NIDILRR will continue its work identifying the day-to-day needs of individuals with sensory, mental, physical, and developmental/intellectual disabilities, and align goals and initiatives to those needs. Development of the statutorily-required NIDILRR Long-Range Strategic Plan, which began in the final quarter of FY 2016, has continued in FY 2017.

NIDILRR program officers and senior management officials drafted an initial framework for the Long-Range Plan that reflected the organization's mission, long-standing commitments, and its new home within the Administration for Community Living. This new partnership provides ACL an enhanced capacity to use research to drive policy and practice. NIDILRR also initiated an extensive public input campaign which opened in October, 2016. Input was collected from advocacy leaders and experienced researchers during a session held in Washington, DC. Community public input sessions were then held in Denver, San Francisco, Chicago, Boston, and Denver. Supplemental input was collected from callers into each of these sessions, as well as through a dedicated email account. The collected community input was utilized to develop a draft Long-Range Plan for 2018-2022. This draft was announced in the Federal Register in January 2017. Feedback from this draft is being collected by NIDILRR for integration into a finalized Long-Range Plan.

As NIDILRR enters into a new era, several key commitments continue. NIDILRR will continue to sponsor grantee disability and rehabilitation research that is far-reaching, compelling, and impactful. NIDILRR will build on its long history of collaborating across federal departments to identify best practices, conduct co-sponsored research, and address shared goals. The organization's participation and leadership within the Interagency Committee on Disability Research (ICDR), a NIDILRR-led statutorily-required Federal partnership, charged to promote a cohesive, strategic federal program of disability, rehabilitation, and independent living research; broker partnerships; and facilitate coordination and collaboration among federal departments and agencies conducting such research, is key to the organization's commitment to promoting research of the highest quality and greatest impact.

Inclusion and access are longstanding commitments of NIDILRR, commitments that will be built upon in the coming years. Priorities for funding will be established by NIDILRR, with consultative input from an advisory committee that includes NIDILRR leadership, researchers, and representatives from disability groups. NIDILRR will continue to actively include its stakeholders, particularly individuals with disabilities, ethnic minorities, and/or underserved populations, in all aspects of its work, including setting clear standards for grantees. At present, the agency requires grantees to document and report efforts at including persons with disabilities in any capacity, such as by seeking their participation in an advisory committee, soliciting their guidance in the research or development design, recruiting them to help with the dissemination of materials and outputs, employing individuals with disabilities, and recruiting them as research subjects. NIDILRR will also be expanding the inclusiveness and accessibility of its supported research and development activities through its recently instituted Public Access Plan.

This plan will make available free, public access to NIDILRR funded peer reviewed publications through the PubMed system and, to the extent feasible and permissible by law, digital data developed through its federal funding.  These actions will serve to promote research and development that is rigorous, relevant, and accessible to the interested researchers and the public.