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# **APDT Research Spotlight:**

Project ROVER's Survey of Assistance Dog Providers

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With the increasing demand for assistance dogs by individuals with physical and/or psychiatric disabilities (Nondiscrimination on the Basis of Disability in State and Local Government Services, 2010), rapid growth is expected in the number of provider organizations that acquire, breed, train, and place dogs with individuals with disabilities. Unfortunately, there is a lack of information about this burgeoning service industry. For example, little is known about how many providers exist, the populations served by these organizations, the breeds of dogs used, and the specific tasks the dogs are trained to perform. To address these and other questions, a web-based survey of assistance dog provider organizations was conducted.

This survey is part of Project ROVER (Returning Our Veterans to Employment and Reintegration) which is a research collaboration between the National Institute for Occupational Safety and Health (NIOSH) and West Virginia University (WVU). The focus of Project ROVER is on the role that pets and assistance dogs may play in helping U.S. veterans reintegrate into civilian life and return to work. One objective is to obtain more information about how service dogs are aiding this process for veterans with disabilities. Psychiatric service dogs are of particular interest because veterans with post-traumatic stress disorder (PTSD) have lower rates of employment (Chan, Cheadle, Reiber, Unützer & Chaney, 2009) and service dogs for psychiatric disabilities are increasing in number (Smith, Esnayra & Love, 2003). A preliminary review of the professional literature and other media reports on assistance dog organizations revealed an absence of information on organizational characteristics, the services offered, the populations served, the types and breeds of dogs used, and the supply of trained dogs. This information is lacking not only for organizations serving veterans, but also for organizations revealeds of the populations. Therefore this survey targeted all types of assistance dog organizations, regardless of the populations served.

# The Survey

A comprehensive list of assistance dog organizations was not available; thus potential survey respondents were identified with a convenience sampling approach. Multiple search strategies were used, including an internet search using several search engines and

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Facebook; a search of organizations by North America Industry Classification System (NAICS) code "812910 Pet Care (except Veterinary) Services" using Hoover's Lead Builder, a marketing database; and existing lists of organizations from websites of assistance dog advocacy groups and accrediting organizations. The searches identified organizations across the U.S. using the following search terms: service dogs, service animals, guide dogs, hearing dogs, seeing eye dogs, eye dogs, sight dogs, mobility dogs, mobility assistance dogs, balance dogs, disability dogs, hearing dogs, hearing ear dogs, signal dogs, psychiatric service dogs, PTSD dogs, anxiety dogs, medic alert dogs, seizure alert dogs, seizure response dogs. Attempts were made to include as many organizations as possible to increase the coverage of the survey results. Organizations that did not have a webpage listing the above search terms or that were not identified with the above search tools were necessarily excluded from the survey. A total of 405 organizations were included in the sample of potential survey respondents.

The purpose of the survey was to collect information from organizations about their structure, goals, target population(s), and services. Information concerning services that focus on veterans returning to work and specific strategies used to address issues related to return to work was also requested. An original survey was developed because no survey tool or similar questionnaires were available. The survey was pilot tested by student volunteers at WVU to assess the time requirements and ease of comprehension. Additional consultations were conducted with survey experts and content experts at NIOSH and WVU.

The survey, mainly consisting of multiple-choice questions, was created, administered, and managed with SurveyMonkey (surveymonkey.com), a web-based survey tool. All identified organizations were contacted initially by email and provided a direct link to the web-based survey. Follow-up telephone calls and additional email messages were sent, if necessary, to encourage participation. The recipients were asked to forward the survey link to the individual within the organization who was qualified and authorized to answer questions about the organization. Participation was voluntary with no incentives for participation beyond self-motivation. The survey required approximately 30 minutes to complete.

#### Results

#### **Organizational Characteristics**

A total of 99 (24.4%) of the 405 organizations responded to the survey. Of the 99 organizations, 43.4% have been in operation five years or less, 62.6% for ten years or less, and 37.4% for more than ten years. The majority of organizations (63.6%) currently had either less than five or 20 or more employees and/or volunteers working in their organizations (Figure 1). Seventy-one (71.7%) organizations anticipated hiring or recruiting additional employees and/or volunteers in the next year, although usually less than five additional individuals (Figure 1). The remaining 28.3% of organizations reported being unsure if they would hire or recruit additional employees and/or volunteers in the next year.

The most common type of organization was non-profit (72.7%) followed by for-profit (23.2%). Among the remaining 4.0% of organizations were two veteran-owned

organizations, one combined for-profit and non-profit organization, and another that had filed for non-profit status. None identified as government or military organizations. On average, organizations reported having three funding sources. Donations, non-profit grants/ contracts, and client fees were most frequently reported (Table 1). Fourteen (14.1%) organizations reported various fundraising activities and foundations as "other" funding sources.

#### Services

Among the services made available to clients, 90% of organizations reported training and education services or matching dogs and clients, and more than half (65.7%) reported locating dogs for placement (Table 2). Nineteen (19.2%) organizations reported "other" available services including specific owner training, support groups, and occasional legal help. Follow-up services were also frequently offered (Table 3). More than 90% of the organizations reported offering follow-up support services for over a year in duration after placement.

Among the training services offered, dogs are trained to perform several specialized skills and tasks to assist clients, including veteran clients returning to work (Figure 2). Forty-four (44.4%) organizations reported incorporating dogs into vocational therapy or tasks specifically related to returning veterans to work. As a group, organizations reported training an average of nine different skills or tasks for clients, while an average of three skills or tasks are trained for veterans returning to work. Twenty-eight (28.3%) organizations reported "other" skills and tasks such as alerting to low and high blood sugar, seizure response, and emotional support tasks. With regard to veterans returning to work, 8.1% of organizations offer "other" services such as facilitating reconnection to family and community, therapy dog modality for rehabilitation therapies, or vocational preparation for self-employment in dog training.

By proximity to the training facility, organizations have placed dogs with clients in a variety of locations. Sixty-nine (69.7%) organizations have placed dogs with clients in their state of operation, 45 (45.5%) have made placements in neighboring states, 42 (42.4%) have made placements elsewhere in the U.S., and 11 (11.1%) have made international placements.

#### **Populations Served**

Organizations indicated whether services are provided to children (0–12 years), adolescents (13–17 years), adults (18–64 years), older adults (65 years and over), and veterans. Among the age groups, the greatest number of organizations serve adults followed by older adults. Twenty-seven (27.3%) organizations do not serve children and 21 (21.2%) do not serve adolescents. Organizations also reported how the number of clients in each age group had changed over the past five years (Figure 3). Sixty-seven (67.6%) organizations reported that the number of adult clients had increased over the past five years and 48 (48.5%) reported an increase in child clients. The number of older adult clients was unchanged over the past five years for 54.5% of organizations. Few organizations reported a decrease in clients over the past five years within any age group or among veterans.

Ninety-three (93.9%) organizations serve veterans and 63 (63.6%) reported an increase in veteran clients over the past five years. Among veterans served by these organizations, the most common health conditions encountered were mobility impairment, traumatic brain injury, and psychological conditions (Table 4). Organizations also reported serving veterans with "other" health conditions including those with any disability, multiple conditions, or specific conditions such as substance abuse or narcolepsy.

#### **Dog Characteristics**

Labrador and Golden Retrievers were the two most commonly-trained breeds among the organizations (Figure 4). "Other" dogs ranked third most-commonly trained. These included dogs from animal shelters/rescue, mixed-breed dogs, other breeds (e.g., Doberman Pinschers, Great Danes, Collies), or dogs that meet the clients' needs instead of targeting specific breeds. On average, three breeds are trained most often at each organization. Reported perceptions of client preference for specific breeds were similar to the breeds trained most often, except for a stronger preference for German Shepherds among veteran clients. Within the "other" dog category, the content of the responses was similar across dogs trained and dogs preferred by clients and veteran clients. Five (5.1%) organizations were not sure of the breeds preferred by clients and 16 (16.2%) were not sure of the breeds preferred by veteran clients.

Three sources of dogs were reported by a majority of the organizations. Sixty-four (64.6%) organizations reported obtaining dogs through donations, 59 (59.6%) obtained dogs from shelters/rescue, and 50 (50.5%) purchased dogs. Thirty-four (34.3%) organizations obtained dogs from in-house breeding programs. Seventeen (17.2%) organizations reported "other" sources, including training owner-provided dogs, dogs from known breeders, and dogs from breeding cooperatives.

#### Supply of Trained Dogs

Over half of the organizations (62.6%) reported having a wait list for assistance dog placement with clients. A total of 54 (54.5%) organizations reported the approximate wait time as two years or less (Figure 5). Seven (7.1%) organizations were not sure of their wait time and 28 (28.3%) did not provide a response.

Organizations were asked specifically about their experience training assistance dogs, differentiated into four categories as described below.

- A service dog performs specialized skills directly related to the handler's disability. Service dogs meet the standards for public access as protected by the Americans with Disabilities Act (ADA).
- A **professional therapy dog** is handled, utilized, or supervised by a health or human services professional in a therapeutic setting.
- A visitation therapy dog provides support, comfort, and companionship to individuals in settings such as hospitals and nursing homes.

• A **support dog** provides emotional or physical support or assistance related to the handler's disability, usually only in the handler's home. They may have very limited public access rights (Parenti, Foreman, Meade, & Wirth, 2013).

Although Project ROVER's focus is on service dogs, all four types of dogs were of interest, in recognition that a number of service dogs in training ultimately prove most suitable as other types of assistance dogs. Among the 83 organizations that responded to this part of the survey, 18 (18.2%) train all four types of assistance dogs, while 25 (25.3%) reported training only service dogs.

All 83 (83.8%) organizations reported training service dogs and 40 (40.4%) of these organizations indicated that 80% or more of their dogs eventually become service dogs. The majority (51.5%) of organizations had 0 to 9 dogs become service dogs in the past year and 57.6% of organizations anticipated less than 20 service dogs in the next year (Figure 6,).

Among organizations training service dogs, 38.4% also train professional therapy dogs. These dogs have been placed with various human service professionals (Table 5). "Other" placements included speech and recreational therapists, teachers, guidance counselors, and victims' advocates. Thirty-three (33.3%) of the organizations training service dogs also train visitation therapy dogs and 36 (36.4%) train support dogs.

#### Summary

Our survey of a convenience sample of assistance dog providers indicates that the organizations are serving the needs of a variety of populations. Many of the clients are older adults, but providers are also serving an increasing number of children. Most organizations reported that they had a wait list for their dogs, suggesting that there is demand for a greater number of organizations to accommodate individuals in need of an assistance dog.

With regard to the types of dogs trained by the organizations, providers often trained specific breeds for clients, but shelter/rescue and mixed-breed dogs were also well represented. Dogs are being trained to detect changes in blood sugar, respond to seizures, and alert to sounds, among other tasks. Almost half of the providers training service dogs indicated that 80% or more of their dogs successfully complete training and become service dogs. This is higher than the 50% success rate reported elsewhere (Batt, Batt, Baguley, & McGreevy, 2008; Coppinger & Coppinger, 2001).

As with any web-based survey, the generalizability of the results is limited and should be considered preliminary. Because of the lack of information about assistance dog provider organizations, the survey provides preliminary baseline data and serves a useful investigative function in stimulating and guiding further research. For example, although a good deal of success was reported in training service dogs, NIOSH and WVU researchers are conducting further research on improving success rates. To this end, a three-part series of articles will appear in The Chronicle focusing on information necessary for selecting quality service dogs. In this issue, Part I discusses morphological and health considerations, including basic genetic information as it relates to health. Part II will evaluate temperament characteristics important for service dog work, and available types of temperament tests.

Part III will consolidate the current available information and recommend best practices for selecting dogs for service dog work.

# Acknowledgments

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# **Biographies**

**Penelope Baughman, PhD,** is an epidemiologist who joined the Project ROVER team during her Epidemic Intelligence Service postdoctoral training experience.

Anne M. Foreman, PhD, is an associate service fellow in the Health Effects Laboratory Division of NIOSH. Her recent research interests include the role of dogs in ameliorating veterans' stress at work and the health and safety implications of the increased presence of dogs in the workplace.

Lindsay Parenti, MA, BCBA, is a certified service dog trainer and a board-certified behavior analyst with extensive experience in dog training, animal behavior modification, and client training. Lindsay currently teaches two courses at West Virginia University in the Animal and Nutritional Sciences Department, teaching students to train service dogs for individuals with mobility impairments and/or psychiatric disabilities (mainly PTSD), and therapy or visitation dogs, with an emphasis on critical evaluation of research in the area. Lindsay also manages a prison program in Morgantown, West Virginia, in which veteran inmates are taught to train service dogs.

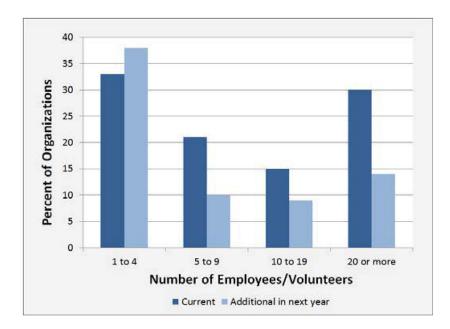
**Joseph R. Scotti, PhD,** is a clinical psychologist and board-certified behavior analyst who has been working with military veterans and their families, along with other special populations (such as children with autism spectrum disorder), for over 40 years. Dr. Scotti coordinated two state-wide surveys of West Virginia veterans, on behalf of the state legislature, to determine the needs of Veterans of all eras (current to World War II),

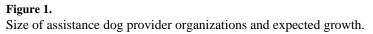
including the rates of post-traumatic stress disorder, depression, and suicide risk. The needs of these veterans and their fFamilies for support and assistance is, in part, being addressed by this work with service dogs.

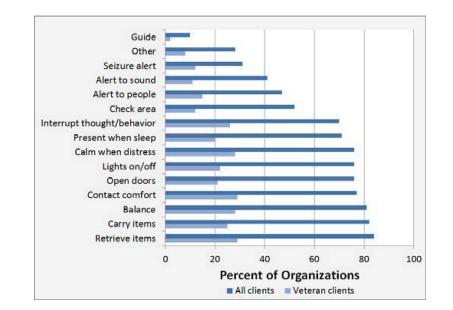
**B. Jean Meade, DVM, MD, MPH, PhD,** has over 30 years of experience in veterinary medicine. She spent her academic career in the field of immuno-toxicology and is now using her combined experience in veterinary and human medicine along with her basic science background to investigate the many facets of the human-animal bond.

**Matthew E. Wilson, PhD,** is principal investigator for Project ROVER. He is also a professor of animal and nutritional sciences at Davis College, West Virginia University.

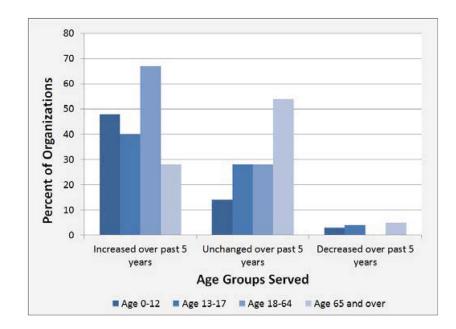
**Oliver Wirth, PhD,** is a research psychologist in the Health Effects Laboratory Division of NIOSH. His recent research interests include veterans' issues and the role that assistances dogs may play in assisting veterans to adjust to civilian life and return to work. He is principal investigator on Project ROVER.



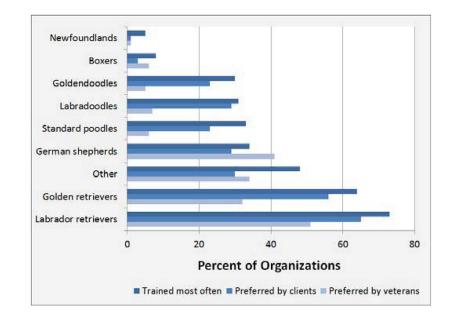




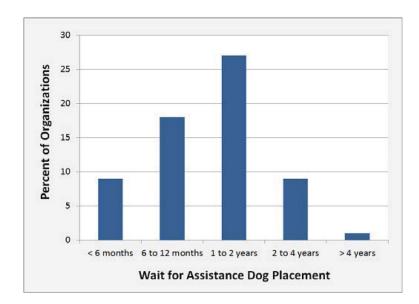
**Figure 2.** Specialized dog skills and tasks trained



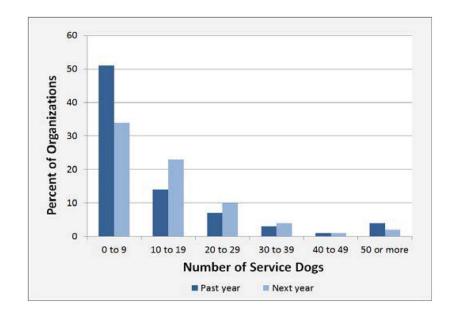
**Figure 3.** Clients served by age group and change over time

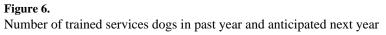


**Figure 4.** Dog breed training and preference



**Figure 5.** Length of wait for assistance dog placement





# Organizational funding sources

Donations	Percent of Organizations
Private individual	76.8
Corporate or business	62.6
Non-profit or charity	53.5
Grants/contracts	
Federal government	7.1
State or local government	11.1
Non-profit	38.4
Military contracts	2.0
Insurance	5.1
Client fees	55.6
Other	14.1
No response	1.1

# Services available to clients

	Percent of Organizations
Locating dogs for placement	65.7
Matching dogs and clients	89.9
Disability screening	45.5
Training and education	92.9
Financial support	21.2
Legal assistance	12.1
Other	19.2
No response	2.0

# Table 3

# Follow-up services available to clients

	Percent of Organizations
Train new skills	84.8
Correct behavior problems	93.9
Find equipment/supplies	79.8
Financial assistance	11.1
Legal assistance	14.1
None	0.0
Other	21.2
No response	0.0

#### Health conditions of veteran clients

	Percent of Organizations
Mobility impaired	82.8
Blind/visually impaired	11.1
Deaf/hearing impaired	31.3
Seizures	39.4
Diabetes	38.4
Traumatic brain injury	69.7
Depression/mood	63.6
Posttraumatic stress disorder	74.7
Anxiety/fears/phobias	67.7
Not sure	1.1
None	1.1
Other	11.1

# Professional therapy dog placements

	Percent of Organizations
Occupational therapists	15.1
Physical therapists	8.1
Psychologists	15.1
Physicians or psychiatrists	11.1
Counselors	19.2
Nurses	6.1
Social workers	14.1
Other	14.1
No response	10.1

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