

# Service dogs in the chemistry laboratory

The use of service dogs by individuals with disabilities is increasing, and their presence in the chemistry laboratory raises issues of compliance with the Americans with Disabilities Act (ADA), the needs of the individual chemist, and concerns about the safety of the dog and of other individuals in the laboratory. This paper addresses these issues and gives some guidelines for discussions with the dog's partner.

## By Patricia Ann Redden

The use of service animals is becoming more widespread, and it is likely that the issue of bringing a service animal into the laboratory will arise in a workplace or academic setting. The discussion is complicated by the fact that there is no national, or even local, registry or process to certify service animals, and there continue to be misunderstandings about what constitutes a service animal and what their access rights are. The only recognized service animals, by ADA definition, are service dogs and, in some cases, miniature horses. In this paper we will confine the discussion to service dogs.

The regulations affecting service dogs are defined in Titles II and III of the American with Disabilities Act (ADA), in revisions that took effect on March 15, 2011. Title II covers state and local governmental programs; Title III refers to private businesses.<sup>1</sup> Under these regulations, a service dog is allowed to accompany its partner into any public area, defined as an area where members of the public are allowed, even in private businesses. This would include laboratories, offices, and classrooms; the ADA also requires that reasonable accommodations must be made to allow the service dog access. There are, however, some restrictions on access in cases where the presence of the service dog would

cause safety or health hazards. The usual example given is a burn area of a hospital, which must be kept rigidly sterile. Some states also have their own laws dealing with the rights of a service dog team, but these are either equal to or greater than the rights described in the ADA. In addition, some states afford the same access rights to puppies being raised to be service dogs or to dogs in training.

To qualify as a service dog, the dog must be individually trained to perform a task specifically related to its partner's disability; the disability itself may be physical, intellectual or sensory. Most people are familiar with guide dogs for individuals with visual impairment, but a dog may also be trained to work with an individual who has motor impairment affecting balance or requiring the use of a wheelchair or other aids, a person with partial or complete loss of hearing, an individual with Post Traumatic Stress Disorder (PTSD) who is subject to anxiety attacks, a person with autism, or one subject to seizures or other physical or neurological conditions. The service dog and its human partner are usually referred to as a team because of the importance of the dog to its partner. "Emotional support" animals, which provide comfort to their partners but do not perform any physical task, and therapy dogs, which typically interact with a number of individuals in a hospital or other setting, do not fall into these categories and as such do not have access rights as service dogs.

A major difficulty in determining if a dog is a service dog and therefore has access rights, as noted in the opening paragraph, is that there is no process or

even requirement for certifying the dog. Many individuals obtain a fully trained dog through a service dog organization such as The Seeing Eye<sup>2</sup> for visual impairment or Canine Companions for Independence<sup>3</sup> for disabilities other than visual. (These are two of the oldest service dog organizations, but there are many other comparable organizations.) Other organizations provide dogs that are specifically trained to alert a partner subject to trauma flashbacks, diabetic shock or seizures. Still other individuals prefer to train their own dogs privately to perform needed tasks. Unfortunately, there are also people who either misunderstand the definition of service dog or who knowingly and falsely claim their untrained dog is a service dog so they can bring the dog with them wherever they go. It is possible to buy vests and identification cards online with no check on legitimacy, exacerbating the problem. In fact, neither documentation, proof of specialized training, nor a vest is required for a service dog (Photo 1).

As a result, the instructor or supervisor may wonder how to determine if a particular animal is in fact a service dog that must be given access. If it is obvious what disability the person has, no questions may be asked. This would be the case if the individual with the dog uses a wheelchair or is blind. If the disability is not obvious, only two questions may be asked: (1) is the dog required because of a disability and (2) what task(s) has the dog been trained to carry out. You may not ask what the person's disability is, ask for documentation that the dog has been trained as a service dog, or

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**Photo 1. Grace in training.**

ask that the dog demonstrate the task(s). If the answers are that the dog is required and that it performs some specific task or work, the dog can only be denied access under ADA if it is not under control or is not housebroken.

Some universities have established detailed policies dealing with service dogs and service dogs in training on their campuses and in their laboratories. Westminster College in Utah, for example, notes that teaching laboratories and any room where protective clothing is worn are off-limits to service animals, although a laboratory director may allow access on a case-by-case basis.<sup>4</sup> Kennesaw State University in Georgia identifies as off-limits research laboratories and other areas where chemicals may be harmful

to the dog, although again that can be reviewed in individual cases.<sup>5</sup> The University of California, Davis, requires an individualized assessment of the area and potential risk before denying access, and also allows departments to require the use of booties and/or lab coats.<sup>6</sup>

The rationale for these restrictions is the safety of the service dog in potentially hazardous settings. There are real concerns about having a service dog in the laboratory, particularly in a relatively crowded academic laboratory. Not only must the dog be protected from predictable and accidental exposure to chemicals, but other individuals in the laboratory should not be adversely affected by the dog's actions.

Consider how students are supposed to dress for lab, as recommended in the

ACS publication *Safety in Academic Chemistry Laboratories, Vol I*,<sup>7</sup> and the reasons for these recommendations. To give protection from splashes and spills, students should wear chemical splash goggles, closed-toe shoes made of leather or leather-like substitutes, long pants or skirt, and a chemical- and fire-resistant apron or lab coat. Hair and loose clothing should be tied back, all jewelry removed, and appropriate gloves used as needed.

Now consider the corresponding safety needs of a dog in the laboratory. The dog's entire body will be potentially exposed to dripping, spilled or splashed chemicals and to materials, including shards of broken glass or chemicals, left on the floor of the laboratory. In order to protect the dog fully, it literally needs a chemical-resistant cover for its entire body, as well as booties and goggles. The coverage must be more comprehensive than a coat for the weather, since the dog's lower body, head, and tail are also exposed and must be protected. Goggles of course must be sized to the dog's face and be comfortable to wear. A recent issue of *C&EN*<sup>8</sup> showed a dog dressed for laboratory in an academic institution, but the only protective equipment provided for that dog was swimming goggles and booties, and a provision that it would lay on a mat during the laboratory period.

Equally important is the question of where the dog should be located in the laboratory during the working hours. The dog will be below bench level and so provides a physical hazard the equivalent of an open drawer, stool, or backpack in the aisle. If there is an area out of the traffic pattern or a recessed "wheelchair access" area under a laboratory bench, the dog could be placed there on a mat. In some cases, dogs have been placed against walls or under coat racks. However, even though service dogs are trained to lie quietly for long periods of time, even the best-trained dog will have some movement, which could result in a tail or legs protruding into more-traveled areas. The result could be a tripping hazard and a startled dog, which would cause additional problems. If the ventilation in the laboratory is not adequate, heavier-than-air vapors

can sink to and travel along the floor, possibly adversely affecting the dog. Glassware dropping near the dog, possibly containing chemicals, spills in the dog's path when walking, and solids brushed off a laboratory bench are all potential hazards to a dog.

The type of work environment must also be considered. A large academic teaching laboratory presents different issues than does an academic research laboratory or an industrial site. The organic laboratory would present different considerations than a general chemistry, microbiology or instrumental laboratory. In other words, each situation must be evaluated individually, considering also that there may be something that would be harmful to the dog but not to humans.

A further topic for discussion with the dog's partner is whether the dog's presence is actually needed in the laboratory. That should be based on the tasks that the dog carries out for its partner, and it really must be evaluated on an individual basis. No one would expect a dog to carry or pick up a dropped piece of laboratory equipment that might be contaminated with chemicals, even if that dog is trained to pick up dropped objects and return them. However, picking up non-laboratory items such as a dropped pen or cell phone is a task often expected of a service dog, and that can also expose the dog to spilled chemicals on a laboratory floor. A laboratory partner can alert an individual with a hearing impairment more effectively than a service dog, since the partner can discriminate between laboratory sounds that are normal (for example, hood operation) and those that signal a situation requiring a response. That

being said, the purpose of the service dog is to allow its partner to be independent, and the partner may feel that the absence of the dog results in reversion to dependence on others, an unacceptable alternative. In that case, every step should be taken to ensure the safety of the dog and of other individuals in the laboratory, as discussed above.

If the partner decides that it would be in the best interest of the dog to leave it in a safe location outside but adjacent to the laboratory, that location has to be identified and made secure for the dog, so that it is safe, not exposed to passers-by, and comfortable. It should also be a location where the dog can be quickly retrieved by or brought to its partner at the end of the laboratory or in case of an emergency.

In conclusion, the Americans with Disabilities Act gives individuals with disabilities the right to bring their service dog with them into public areas, with reasonable accommodations made. However, as discussed above, the laboratory environment exposes both the dog and others in the laboratory to potential hazards. To identify and mitigate these hazards, safety personnel should assess the specific conditions of the work or academic environment, in consultation with the dog's partner, the laboratory supervisor, and the institutional representatives charged with the responsibility for meeting the needs of individuals with disabilities. Discussion topics should include: (a) the services that the dog provides to its partner; (b) the partner's need for the dog's services during the work period and acceptable alternative ways of providing those

services; (c) the physical layout of the laboratory, to identify safe and potentially hazardous areas for the dog; (d) potential hazards due to the chemicals used and the operations conducted in the laboratory; (e) emergency procedures for both the partner and the dog; (f) appropriate protective clothing and/or equipment for the dog; (g) the way the dog alerts a partner in a case where the dog is needed for a hearing loss or seizure warning; and (h) necessary steps to minimize or prevent negative impact on others in the laboratory. These discussions will allow an informed decision on the need for the dog in the laboratory or whether it is in the best interests of the dog and the dog's partner to leave it in a protected but accessible location during the laboratory time.

## REFERENCES

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