Service Dogs in Science Labs:
Barriers to Inclusion

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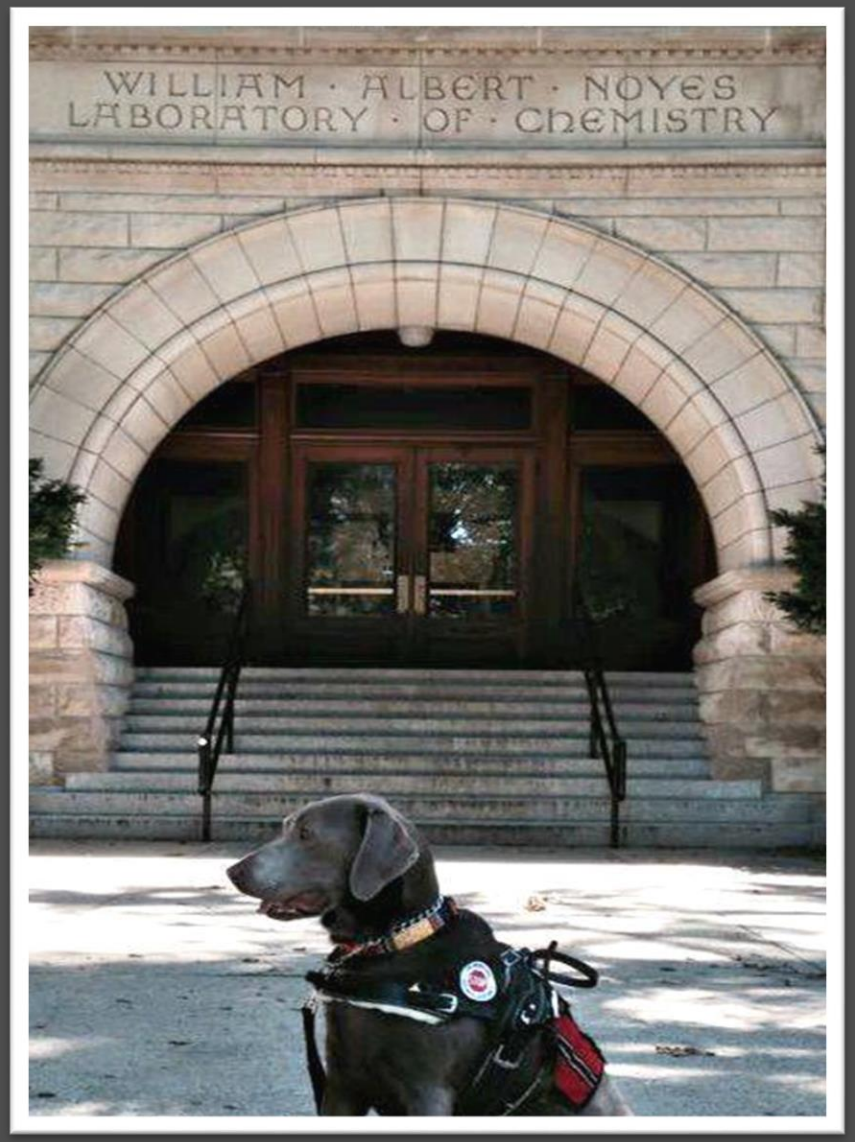


Barriers for people with disabilities in science and STEM exist

- Research has shown that science (STEM) is:
  - Least flexible
  - Most resistant

Photo courtesy of: Empower Ability Consulting https://empowerabilityconsulting.com/

Understanding the Legal Foundations

People with Disabilities in STEM

Service Dogs

Policies and Procedures

Case Study

Risk Assessment

Solutions

Understanding the Legal Foundations

“Intelligence is the ability to adapt to change”

–Stephen Hawking

Understanding the Legal Foundations

Many students hide their disability out of a real "fear of judgment, bias, and skewed perception of ability.
”

People with Disabilities in STEM

Students with disabilities in STEM fields:

- Roughly 25% of postsecondary undergraduate students majoring in STEM fields disclose having a disability.
- Graduate students with disabilities make up less than half that at ~ 11%.
- Ph.D. recipients with disabilities in STEM fields is only 6.9%.

National Science Foundation's National Center for Science and Engineering Statistics (NCSES), Women, Minorities, and Persons with Disabilities in Science and Engineering https://ncses.nsf.gov/pubs/nsf19304/data

People with Disabilities in STEM

Lack of STEM role models

- Students with disabilities feel unsupported by STEM faculty and administrators
- Support staff, play a key role in determining the climate or culture of their departments

Service Dogs

There has been a steady increase in the use of Service Dogs nationwide.

Photo courtesy of: Paws Giving Independencehttps://givingindependence.org

Service Dogs

As of 2024:

- ~500,000 to 750,000 service dogs are assisting people with disabilities nationwide.

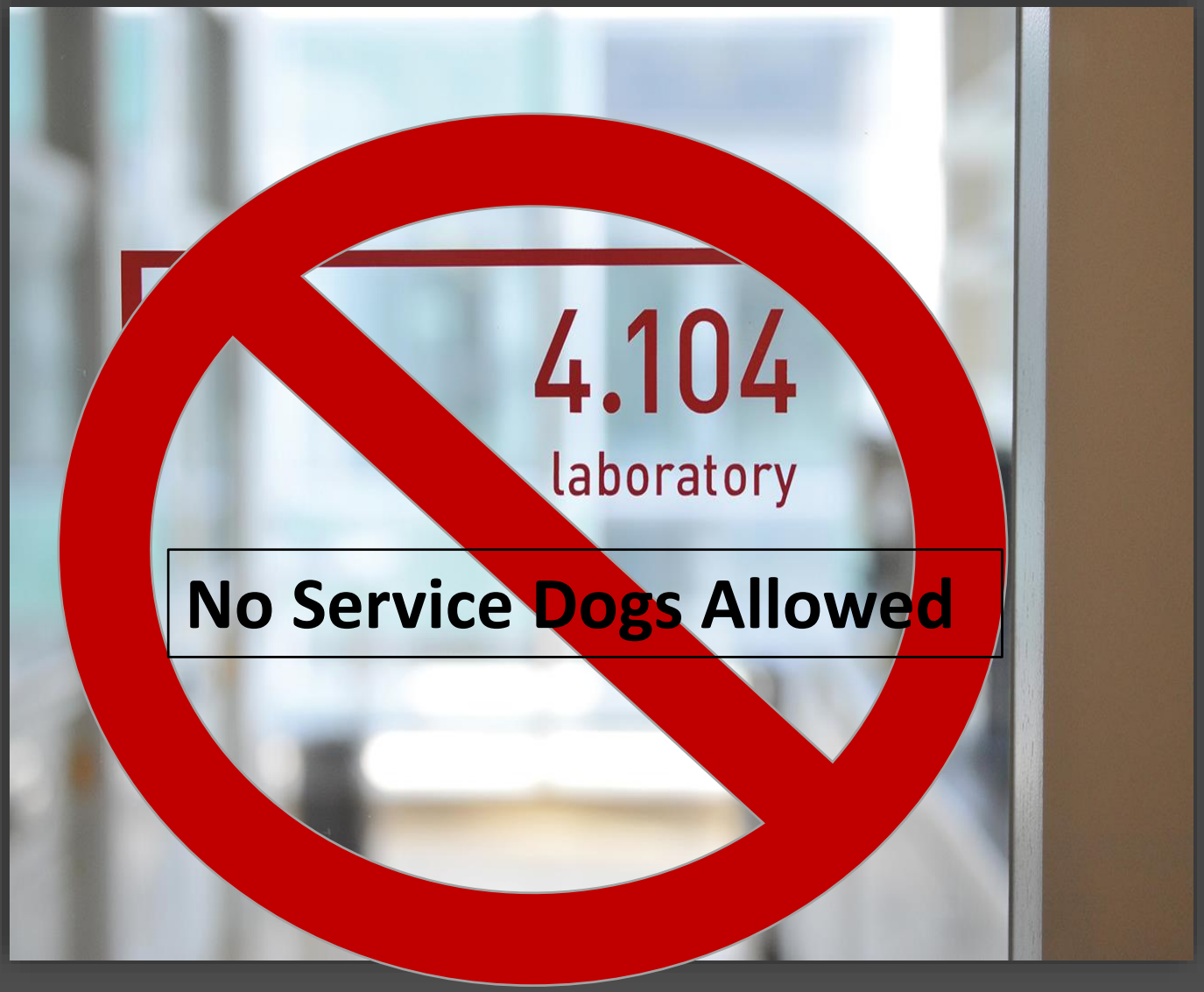
Photo courtesy of: Empower Ability Consulting https://empowerabilityconsulting.com/

Service Dogs

The Americans with Disabilities Act (ADA) set forth standards for service dogs as medical equipment for individuals with disabilities.

ADA Title III Regulation 28 CFR Part 36.104

Why this topic is important!



https://www.mifflin-schmid.com/en/index.cfm/design-work/novartis-campus-basel/alvaro-siza-novartis/laboratory-building-signage/

Policies and Procedures

Every educational institution and research facility should have an informed, accurate and inclusive service dog policy.

Barriers for Service Dogs in Science Laboratories

A. The lack of information regarding a service dog's function and training.

B. A lack of understanding on service dog law.

C. The absence of safety guidelines and informed policies established for accommodating a service dog handler.

https://answersafrica.com/wp-content/uploads/2014/06/questions1.jpg

Policies and Procedures

2019 - USciences

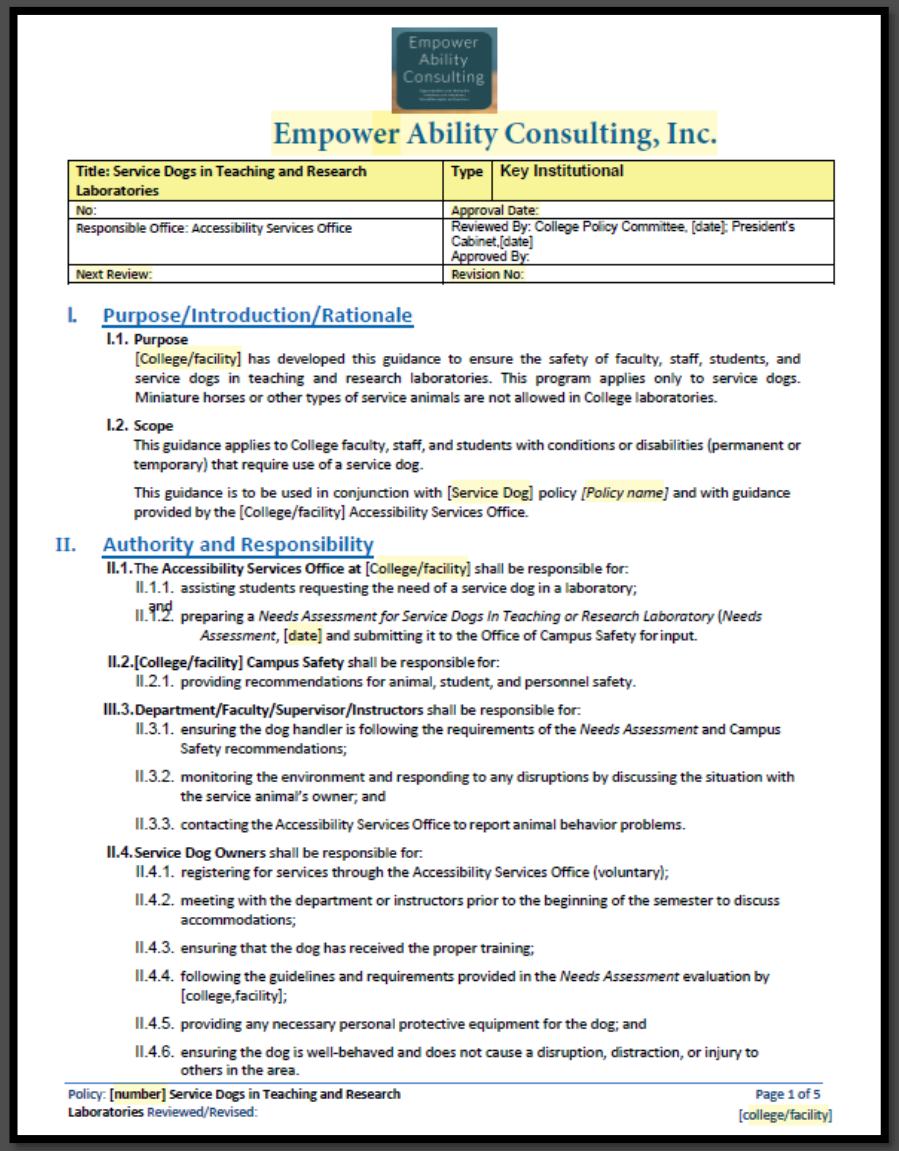
(St. Josephs University)

2020 - American Chemical Society

2021 - American Society of Microbiology

2021 – Office of Laboratory Animal Welfare

Policies and Procedures



Empower Ability Consulting, Inc.

Title: Service Dogs in Teaching and Research Laboratories	Type	Key Institutional
No:	Approval Date:	
Responsible Office: Accessibility Services Office	Reviewed By: College Policy Committee, [date]; President's Cabinet,[date] Approved By:	
Next Review:	Revision No:	

I. Purpose/Introduction/Rationale

I.1. Purpose

[College/facility] has developed this guidance to ensure the safety of faculty, staff, students, and service dogs in teaching and research laboratories. This program applies only to service dogs. Miniature horses or other types of service animals are not allowed in College laboratories.

I.2. Scope

This guidance applies to College faculty, staff, and students with conditions or disabilities (permanent or temporary) that require use of a service dog.

This guidance is to be used in conjunction with [Service Dog] policy *[Policy name]* and with guidance provided by the [College/facility] Accessibility Services Office.

II. Authority and Responsibility

II.1. The Accessibility Services Office at [College/facility] shall be responsible for:

II.1.1. assisting students requesting the need of a service dog in a laboratory;

and

II.1.2. preparing a *Needs Assessment for Service Dogs In Teaching or Research Laboratory* (*Needs Assessment*, [date] and submitting it to the Office of Campus Safety for input.

II.2. [College/facility] Campus Safety shall be responsible for:

II.2.1. providing recommendations for animal, student, and personnel safety.

III.3. Department/Faculty/Supervisor/Instructors shall be responsible for:

II.3.1. ensuring the dog handler is following the requirements of the *Needs Assessment* and Campus Safety recommendations;

II.3.2. monitoring the environment and responding to any disruptions by discussing the situation with the service animal's owner; and

II.3.3. contacting the Accessibility Services Office to report animal behavior problems.

II.4. Service Dog Owners shall be responsible for:

II.4.1. registering for services through the Accessibility Services Office (voluntary);

II.4.2. meeting with the department or instructors prior to the beginning of the semester to discuss accommodations;

II.4.3. ensuring that the dog has received the proper training;

II.4.4. following the guidelines and requirements provided in the *Needs Assessment* evaluation by [college,facility];

II.4.5. providing any necessary personal protective equipment for the dog; and

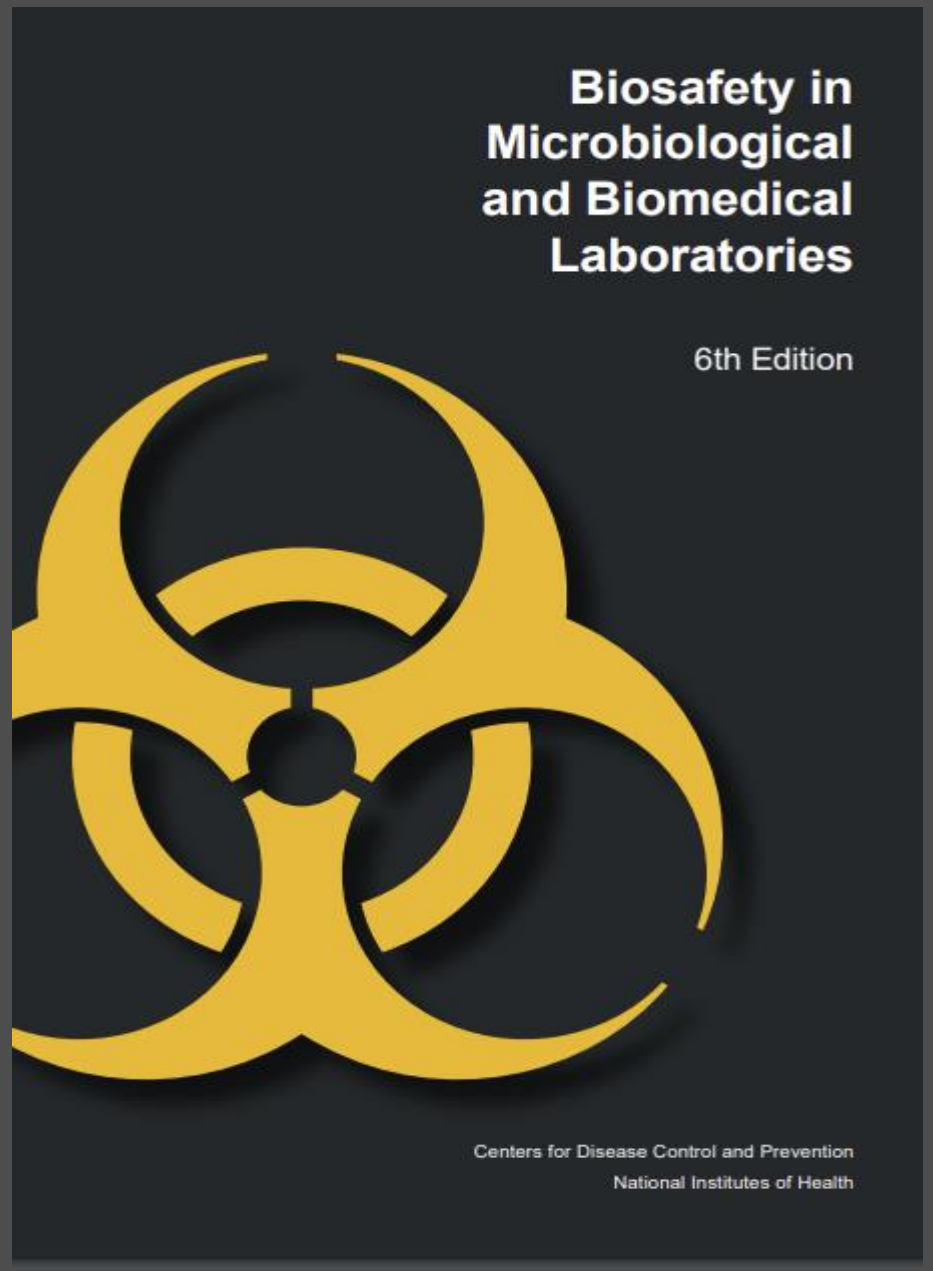
II.4.6. ensuring the dog is well-behaved and does not cause a disruption, distraction, or injury to others in the area.

Having policies and procedures in place provides guidelines and removes the mystery and ambiguity.

Policies and Procedures

Include service dog handlers, who are scientists, in the development of laboratory policies to ensure a process of collaboration and joint deliberation.

Policies and Procedures



Forward: “We wish to emphasize that the sixth edition of BMBL remains an advisory document recommending best practices for the safe conduct of work in biomedical and clinical laboratories from a biosafety perspective. The BMBL is not intended to be a regulatory document although we recognize that some may use it in that way.”

Dr. Brandon Hatcher, Director, Office of Laboratory Safety, “*the BMBL is a guidance document, not a regulation…….*An institution's risk assessment should drive the decision to let service animals into a laboratory…. any feedback from the community is considered for future editions or updates.” ”

“Animals and plants not associated with the work being performed are not permitted in the laboratory; service dogs may be an exception based on an individualized risk assessment,”

Policies and Procedures

Animal Facilities and Service Dogs

Animal Research Laboratories and Vivarium's

Animal Facilities and Service Dogs

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Institutional Animal Care and Use Committee

114 Observatory Building, MC-193
901 South Mathews Avenue
Urbana, IL 61801

Justin Rhodes, Ph.D.
Associate Professor
3315 Beckman Institute

December 7, 2017

Dear Professor Rhodes:

At its December meeting, the IACUC reviewed Animal Use Protocol 17275: *Impact of a service dog on physiology and behavior of mice*. During the discussion, concerns were raised about the scientific merits of the proposed studies. The committee voted to withhold approval of this protocol due to insufficient justification for the use of live vertebrate animals (mice).

Sincerely,

Josh Gulley, Chair
Institutional Animal Care and Use Committee
University of Illinois at Urbana-Champaign

Case Study

Akst 2018

IACUC Responsibilities Regarding Service Animals

OLAW Webinar
June 10, 2021

Axel Wolff, DVM, MS, NIH/OLAW

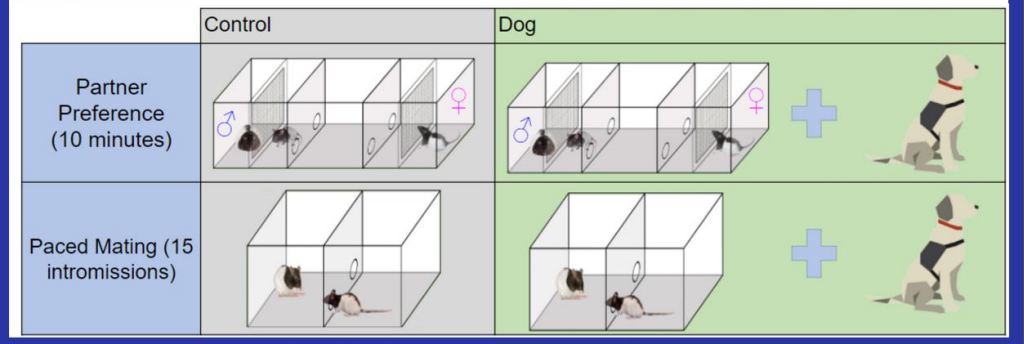
Ron Banks, DVM, University of Oklahoma HSC

https://youtu.be/o4w2c8kpaX4?si=e-lIFRcn9lUqKZ_S

Case Study

Experiment 1: Anxiety-like Behavior

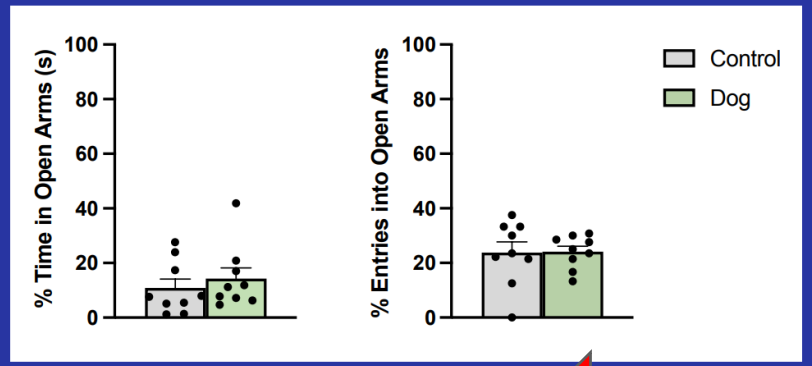
Experiment 2: Social & Sexual Behavior



Partner Preference Measures
Preference for Male
Social Score

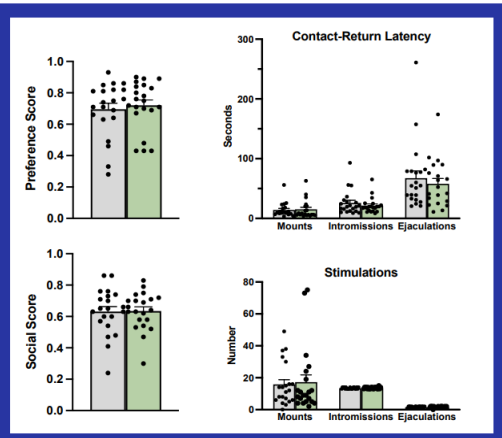
Paced Mating Measures
Contact-Return Latency
Number of Stimulations

Experiment 1: Anxiety-like Behavior

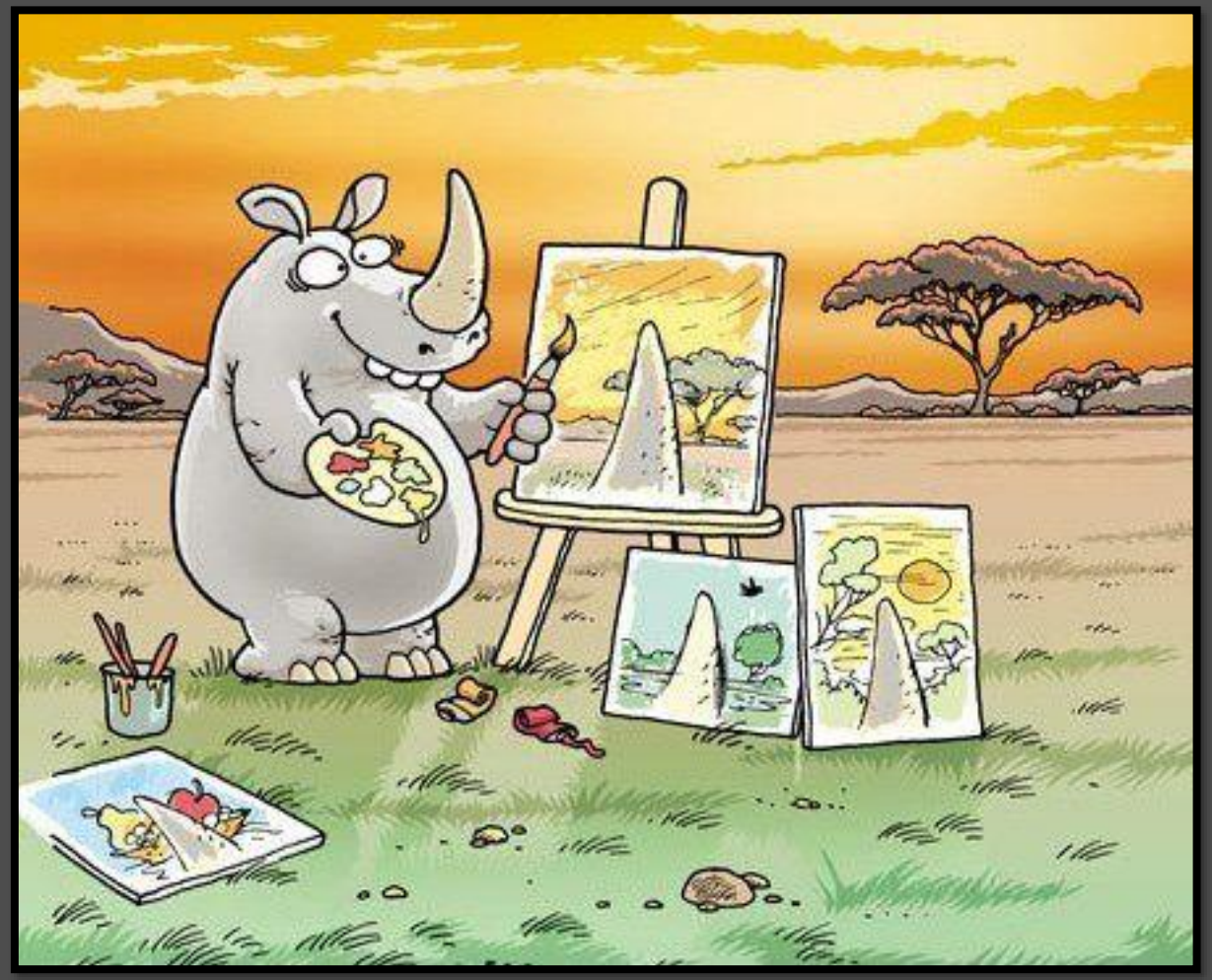


No differences!

Experiment 2: Social & Sexual Behavior



No differences!



FUN FACT!

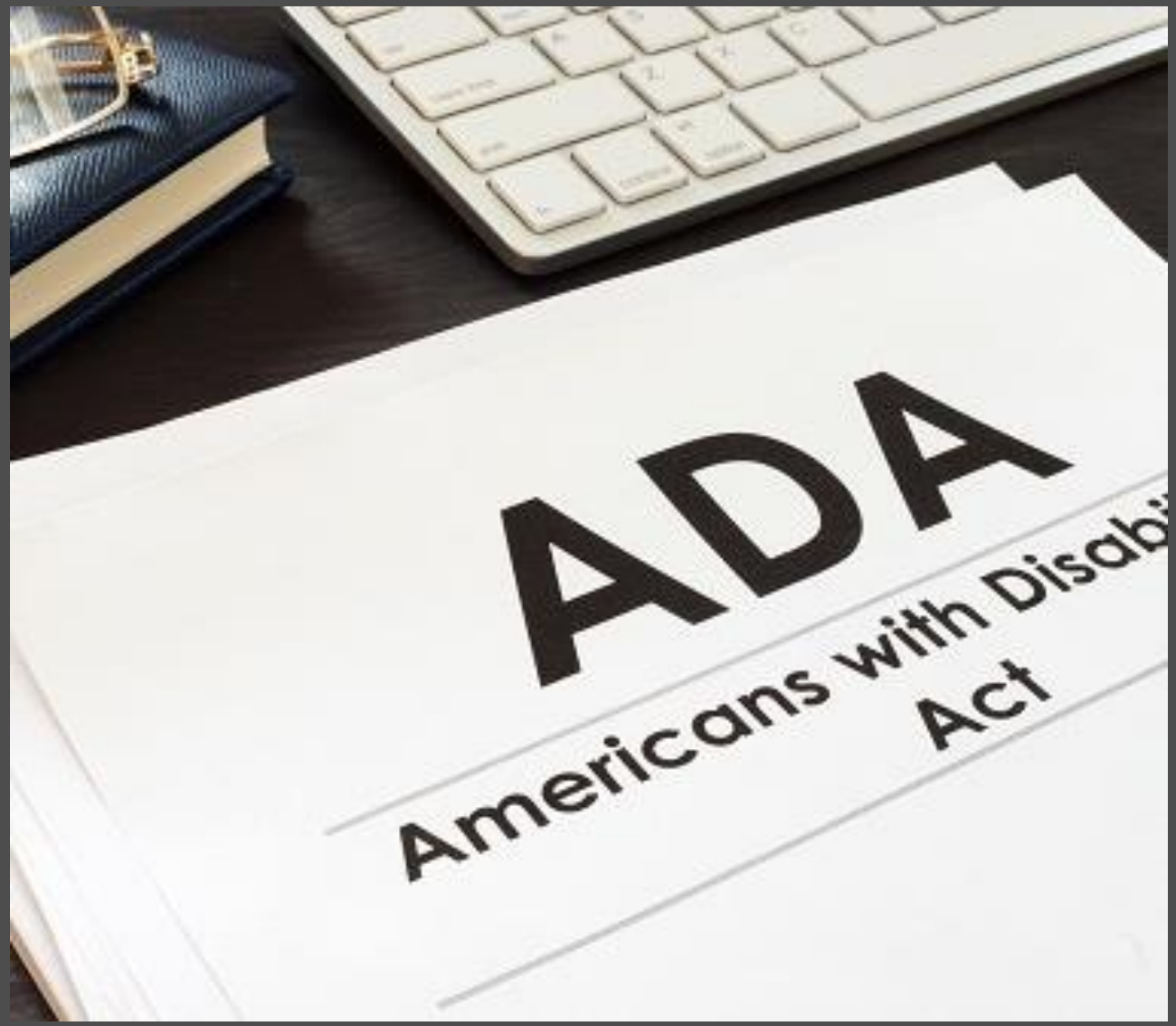
We actually live about 80 milliseconds in the past because that is how long it takes our brain to process information!

https://www.everplans.com/sites/default/files/woman-weighing-options-cheat-sheet.jpg

Risk Assessment

Risk Assessment

The ADA mandates an individualized inquiry or risk assessment to determine a reasonable accommodation.



Risk Assessment

Laboratory settings require accommodations related to laboratory-specific hazards.

Overall setting evaluation based on:

- A risk assessment to understand the biologicals and chemicals present in the lab.
- Hazard identification.
- Mandated Regulations

Barriers

Barriers presented by the system:

- Lack of informed inclusive service dog policies.
- Understanding what a reasonable accommodation in a laboratory looks like.
- Implicit Bias.
- A lack of understanding on service dog training.
- A lack of understanding on disabilities in general.
- Inaccessible laboratories – physical barriers.

Barriers navigated by the handler:

- Understanding how to navigate the system for accommodations.
- Understanding what accommodations are needed.
- Outfitting their service dog with appropriate personal protective equipment
- Ensuring their dog is trained to work in a laboratory setting.

Solutions

Inclusion policy could include a set of skills necessary for an incoming service dog and made available to incoming student or employee service dog handlers.

Solutions

Service dog's placement:

- A bench where the dog will not be tripped over or stepped on.
- A bench near the perimeter of the room.
- Within reach or direct sight of their handler.
- Kept away from very loud equipment unless wearing ear protection.
- Opposite side of room from fume hood.
- On a rubber backed mat.

Solutions

Accommodations can be easily made by:

- Having the service dog wear the required PPE.
- Establishing a safe zone for the service dog to rest within reach or direct line of sight of their handler during laboratory participation.
- Link: https://www.customdogcoats.com/labcoat

Solutions

There should be a minimum of one recessed accessible bench per laboratory room outlined by the ADA.

Solutions

Some equipment or reagents can be easily moved to a bench or station within reach of the handler.

Solutions

Fact: Accommodations are being made for the student, and not for the service dog.

In some cases, a service dog handler may choose not to bring their service dog into the lab space.

This does not negate the need for the service dog!

Solutions

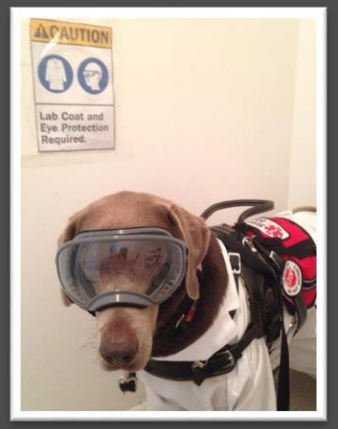
Solutions:

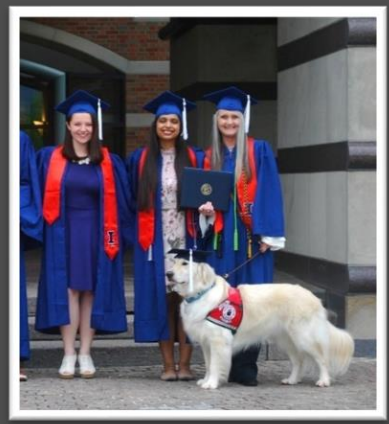
1. Develop inclusive laboratory safety guidelines/policies for service dog handlers.
2. Develop these guidelines with an informed source familiar with service dogs training, disability, and science laboratory hazards and compliance.
3. Minimize personal bias and effectively provide more solid guidelines for objective decision making.
4. Conduct a consistent formatted risk assessment for reasonable accommodations.
5. Develop skills checklist and protocol for service dog handlers entering a laboratory setting.
6. Provide adequate training on disabilities and service dog etiquette to all staff members.

Service Dogs in Science Labs: Barriers to Inclusion

Opportunities, not obstacle. Breakthroughs, not barriers. Solutions, not situations.





Empower Ability Consulting, Inc.

Experienced Disability Access
Personal Consulting

https://empowerabilityconsulting.com

Joey-ramp@empowerabilityconsulting.com

(800) 929-1437

PDF Risk Assessment Tool:
https://empowerabilityconsulting.com

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- 42 U.S.C. § 12182(a); 42 U.S.C. § 12132; 28 C.F.R. § 35.130; 34 C.F.R. §§ 104.42 and 104.43; 45 C.F.R. §§ 84.42 and 84.43; 42 U.S.C. § 12182(b)(1)(DD); 28 C.F.R. § 35.130(b)(3); 34 C.F.R. § 104.4(b)(4); 45 C.F.R § 84.4(b)(4); 28 C.F.R. § 36.302; 28 C.F.R. § 35.130(b)(7); 34 C.F.R. § 104.44(a); 45 C.F.R. § 84.44(a); 28 C.F.R. § 36.208; 28 C.F.R. 35.139;