



# Celebrating **10** YEARS of Biomedical Research Awareness Day!

## Scavenger Hunt

Explore the websites of our BRAD 2025 sponsors to find answers to the questions below. Each question relates to important topics in animal research, biomedical advancements, and animal welfare. Visit [bradglobal.org/sponsors-partners](http://bradglobal.org/sponsors-partners) to see all of our sponsors and learn more about their role in animal research. Good luck, and enjoy the hunt!

1.		How has research involving animals helped advance treatments for psychiatric disorders?
		Answer:
2.		Why is proper airflow management important in animal research facilities?
		Answer:
3.		How does innovative cage design contribute to animal well-being in research settings?
		Answer:
4.		What are the key components of a proper environmental enrichment program for research animals?
		Answer:
5.		How has animal research contributed to the development of vaccines for livestock diseases?
		Answer:
6.		What are some critical regulatory requirements for ethical animal research?
		Answer:
7.		How has animal research contributed to the advancement of surgical implants for animals and/or humans?
		Answer:
8.		What are five different types of vaccines that have been studied in animals?
		Answer:
9.		Why is proper bedding selection important for the health and comfort of laboratory animals?
		Answer:



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10. 	How does genetic testing of research animals improve the accuracy of biomedical studies?
	Answer:
11. 	What are the “Three Rs” of humane animal research, and why are they important?
	Answer:
12. 	What specialized training do laboratory animal veterinarians receive to care for research animals?
	Answer:
13. 	How does ventilated caging improve animal welfare in research environments?
	Answer:
14. 	What are 3 examples of non-edible and/or edible enrichment used for rodents?
	Answer:
15. 	What types of enrichment are beneficial for nonhuman primates in research settings?
	Answer:
16. 	What are three normal behaviors for pigs and three types/characteristics of enrichment that support these behaviors?
	Answer:
17. 	What key discoveries in medicine have been made possible through animal research?
	Answer:
18. 	What are three advantages of noninvasive blood pressure monitoring in rodents?
	Answer:
19. 	Which species can be restrained using a Panepinto sling?
	Answer:
20. 	What is one of the first diseases that ferrets served as a model for in vaccine development?
	Answer:
21. 	What are the identification requirements for animals bred for research under a class A license?
	Answer:
22. 	How do hydration supplements support the well-being of research animals?
	Answer:
23. 	What are four non-dietary factors that influence the stability of laboratory animal food?
	Answer:



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24. 	Why is titration of chemicals used in cleaning of animal housing environments critical? Answer:
25. 	What is one stage in the drug development process? Answer:
26. 	What are three types of environmental stimuli in a research facility that can be monitored for animals? Answer:
27. 	What stain is typically used when performing histopathology on zebrafish? Answer:
28. 	How quickly can most micro-dissecting instruments be decontaminated using a glass bead sterilizer? Answer:
29. 	What is the name of the water purification process that removes up to 99% of feed water contaminants through the use of a semipermeable membrane? Answer:
30. 	In addition to advancing knowledge and skills of lab animal professionals and improving standards for lab animal care and research, what is another goal of national animal research organizations? Answer:
31. 	What is a transgenic animal? Answer:
32. 	What is the coat color of a Hartley guinea pig? Answer:
33. 	What chemical may be used for sterilization of items when high temperatures are not appropriate? Answer:
34. 	How can technology help ensure compliance in animal research? Answer:



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### Scavenger Hunt - Answer Key

1.	Animal research has provided critical insights into brain function, neurotransmitter activity, and drug effects, leading to treatments for depression, anxiety, schizophrenia, and other psychiatric conditions.
2.	Proper airflow management ensures that airborne contaminants, allergens, and pathogens are controlled, reducing stress and disease transmission in research animals.
3.	Tecniplast's advanced cage designs optimize ventilation, minimize stress, and provide enrichment opportunities, leading to better welfare for research animals.
4.	Environmental enrichment programs include social housing, nesting materials, varied diets, exercise structures, and cognitive stimulation to enhance animal well-being.
5.	Animal research has been essential for developing vaccines that protect livestock from diseases like foot-and-mouth disease, rabies, and avian influenza.
6.	Ethical animal research follows guidelines such as the 3Rs (Replacement, Reduction, Refinement), IACUC oversight, and AAALAC accreditation to ensure humane treatment.
7.	Animal studies have been crucial in testing biocompatibility and functionality of medical implants such as pacemakers and prosthetic joints.
8.	Live attenuated vaccines, inactivated vaccines, recombinant protein vaccines, polysaccharide-based vaccines, messenger RNA vaccines
9.	Bedding materials affect hygiene, stress levels, and respiratory health, making proper selection essential for animal welfare.
10	Genetic testing ensures consistency in study populations, reducing variability and improving reproducibility in biomedical research.
11.	The Three Rs—Replacement, Reduction, and Refinement—help minimize animal use while ensuring ethical and effective research practices.
12.	Laboratory animal veterinarians receive special training focused on clinical medicine involving laboratory animal species, animal resource management, and technician/investigator teaching and training.
13.	Ventilated caging systems control the environment, improve air quality, and reduce the risk of disease transmission among research animals.
14.	Nestlets, huts, chews, tubes, chew sticks, diet gel, trail mix, and powders.
15.	Social housing, edible enrichment, puzzle feeders, foraging devices, and expanded cage spaces are beneficial.
16.	Pigs are social animals who like to root, sniff, explore, chew, and scratch their backs. Enrichment should offer opportunities for play, noise-making, and rooting, chewing and scratching.



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17.	Animal research has led to critical medical breakthroughs such as vaccines, cancer treatments, and therapies for genetic disorders.
18.	Noninvasive monitoring requires no surgery, is significantly less expensive than other mouse blood pressure equipment, allows for the ability to screen for systolic and diastolic BP changes over time in large numbers of animals, and allows the researcher to obtain accurate and consistent rat and mouse blood pressure measurements over time in long-term studies.
19.	Panepinto slings are used with micro/mini pigs, dogs, goats, lambs and other small to medium sized animals.
20.	Ferrets were an early model of canine distemper virus.
21.	All animals must be properly identified with both an individual ID and a facility ID where they were born.
22.	Hydration supplements help maintain hydration and electrolyte balance, especially during and after surgery, supporting faster recovery.
23.	Non-dietary factors include, but are not limited to, lighting, oxygen, temperature and moisture.
24.	Using too little could allow pathogens to spread, endangering the health and safety of animals and husbandry staff. Using too much is a drain on your budget and can cause residue buildup, which can become a growth niche for pathogens.
25.	Discovery, IND, clinical manufacturing, and NDA.
26.	Animals are exposed to some level of noise, ultrasonic noise, and vibration in all research animal facilities and laboratories.
27.	The H&E stain is commonly used
28.	It can take as little as 15 seconds.
29.	This process is reverse osmosis (RO).
30.	A common goal is to provide a forum for the exchange and dissemination of knowledge regarding animal care and research.
31.	A transgenic animal has had foreign DNA deliberately inserted (usually at random) into its genome.
32.	Hartley guinea pigs are albino.
33.	Hydrogen peroxide or chlorine dioxide may be used.
34.	Technology can help you ensure compliance by easing administrative overhead, maintaining engagement among your staff, and enhancing communication, both within your committees and with the research community.