Neera: Hello. Today is Thursday June 13, 2019. I am Neera Gopee, Director of the Division of Policy and Education at OLAW, and today it is my pleasure to welcome our speaker, Dr. Lara Helwig, to the OLAW Online Seminars to present: The 4th R: Rehoming, Retirement and Release.

Dr. Lara Helwig currently serves as the Director of Animal Care and Attending Veterinarian at Brown University. She received her veterinary degree from the Cummings School of Veterinary Medicine at Tufts University and started her career in laboratory animal medicine at Charles River Laboratories. Prior to coming to Brown, Lara served as the Associate Director of the Division of Teaching and Research Resources at Tufts Cummings School of Veterinary Medicine for over nine years where she was actively involved in planning and teaching in the Laboratory Animal Medicine master’s degree program. Lara maintains an adjunct Associate Professor position in the Department of Environmental and Population Health, and serves as a fellow in the Center for Animals and Public Policy at Tufts. Lara is a diplomate of the American College of Laboratory Animal Medicine and her professional interests include animal model development and refinement of animal research methods with an emphasis on analgesia and humane endpoints.

It is my pleasure to welcome you to the OLAW Online Seminar and now to hand the microphone over to Dr. Helwig.

Lara: Thank you. I’d like to start by thanking OLAW for inviting me to talk today on this very important and timely subject. This is a slightly abbreviated version of a talk of the same title that I gave at the AVMA Conference last year in Denver. There is a lot of material to cover so I'll dive right in.
I’ll start out today’s talk with a little bit of background information on current events and provide some history, as adoption and retirement are not necessarily new ideas. From there I’ll address rehoming, also known as adoption; retirement, referring almost exclusively to nonhuman primates; and release, which is typically associated with field studies or other studies involving wild animals. I’ve included references at the end of this PowerPoint presentation and I’ve also included my contact information in the event that you have additional questions.

In terms of current events, many of you may be aware that several states now have mandatory adoption laws in place. There are about 10 in total. There are also, about 10 states where mandatory adoption bills are currently under consideration.

The map on the next slide, courtesy of the National Association for Biomedical Research (NABR), shows the states where legislation has passed in red or is pending in yellow. Some of you may be more familiar with these bills by their other name “Beagle Freedom” bills which the Beagle Freedom Project has been instrumental in sponsoring. It is important to note that these laws and bills do vary significantly in terms of what types of facilities they apply to, which species are impacted, and who is ultimately responsible for determining whether an animal is suitable for adoption. It is well beyond the scope of this talk to focus on these bills and I would direct anyone wanting more information on this topic to NABR.

It is important to note that there are several organizations that promote the adoption or rehoming of research animals. Beagle Rescue League and Homes for Animal Heroes, whose websites are shown here, are just two examples.

Another very recent development is the announcement from the AVMA that they now have an approved policy on the adoption of research cats and dogs. This document should prove to be an excellent resource for institutions looking to develop their own policies on adoption.

On this slide and the next I have paraphrased the policy, highlighting those areas where the term “must” appears. The policy starts with the premise that an institution must take into consideration all applicable federal, state, and local laws regarding the transfer of animal ownership. It further states that the Attending Veterinarian must be involved with the development and oversight of the program and that involvement of the Institutional Animal Care and Use Committee is also encouraged.
Each adoption must require approval of the Attending Veterinarian or designee and this individual must have the discretion and authority to deny adoption requests. The policy also highlights the need for expert veterinary guidance and that the animal’s suitability for adoption should be based on the species, health status, and behavior of that animal.

Slide 8 (AVMA Policy on Adoption of Research Dogs and Cats)
On the next slide I’ve taken some further points from the policy. It further states that when appropriate for the health and welfare of the animal, the institutions should vaccinate and spay or neuter animals prior to adoption. Adopters should be educated about the animal’s health status and should be provided with a record of the animal’s health history upon transfer. It also emphasizes that the adopters should be willing to accept legal and financial responsibility, in writing, for the lifelong care of the animal, including veterinary care.

The last bullet point is an interesting one and touches on an issue that also comes up with respect to retirement sanctuaries. It states that for those institutions utilizing third parties, for example, shelters, they should consider whether the third party’s adoption program is consistent with the institution’s mission and values. I personally have not used a third party in adoptions but would agree that an institution should thoroughly vet any organization that they plan to work with in advance.

Slide 9 (US Government rethinks how to retire research chimps)
In addition to dogs and cats, this issue has been getting a lot of press with respect to non-human primates. There have been recent articles on the retirement of chimpanzees from federal research facilities and the logistics of moving them to sanctuaries, which is still an ongoing challenge.

Slide 10 (History)
The really interesting part for me, when I was putting this talk together was the history of adoption and retirement. It is noteworthy because none of these concepts are new. When I did a literature search on these topics, the earliest reference to adoption I could find was 1996. However, I was able to find another article where an individual from Johns Hopkins noted that they had records of animals being adopted from their research facility dating back to 1983. That’s about 36 years ago, and I think that it’s really important to recognize that this has probably been going on much longer than some people are aware. When I speak to people who have been doing this longer than I have, I have heard stories of them having times when they have either adopted either mice or rats or dogs from facilities that they were at. So, I think based on those anecdotes, this practice actually predates 1983 by quite a bit.

In terms of retiring laboratory primates, the earliest reference I was able find again dated to 1996. On the next slide which shows data from the Jungle Friends sanctuary, you can see that in the 1970s through the 1990s, primate sanctuaries were largely accepting
primates that were owned as pets, involved in the exotic animal trade, or were from small zoos, circuses, or backyard exhibitors.

Slide 11 (Jungle Friends Primate Sanctuary Started Accepting Monkeys from Research in 2004)
When you look at the 2000s, that’s when you started to see increasing numbers of primates coming to the sanctuary from the laboratory animal facilities. Again, this data comes from the Jungle Friends Primate Sanctuary and they show in red the number of animals they were getting as pets and in blue the number from labs. You can see in the early 2000s pets outnumbered the lab animals and in 2014 and 2015 you really start to see an uptick in the number of animals they were getting from labs as opposed to pets. I suspect there are two issues behind this data. The first being that people started to realize that monkeys did not make good pets and the second is that there was an increased interest in retiring laboratory primates following their use on research protocols.

Slide 12 (Guiding Principle – Institutional Support (It Takes A Village...))
So, if you want to implement an adoption program or a retirement program at your facility, how do you get started? As this slide shows, it really does take a village to make the program work successfully. This slide includes a list of all the people and departments at Brown University involved, starting with our Institutional Animal Care and Use Committee, the Office of General Counsel, communications and public relations. It is critically important that you include your PR folk even if you have no intention of doing a press release on your adoption program.

Here at Brown we do not regularly promote our work in this area but as I will discuss a little later on, sometimes things don’t go as planned and having your public relations and communications people aware of your adoption or retirement programs can really help when things don’t go as expected. The research administration is also involved, as well as animal caretakers, veterinarians, veterinary technicians, facility managers, and even environmental health and safety can be involved in helping us to get these animals out the door and to their forever homes.

Slide 13 (Guiding Principle – Have a Plan)
The first step in the process is to have a plan. Here at Brown we do have a formal written policy approved by the IACUC and also approved by our General Counsel. You want to have a screening process in place. In the case of rehoming you want to have some way of screening prospective adoptive families or a way to screen retirement sanctuaries in the case of primates. You want to make sure you have properly vetted the families that are taking these animals or the institutions that are accepting these animals and that you, as the Attending Veterinarian and as an institution, feel comfortable turning the animals over to the care of these people and/or places.
Slide 14 (Adoption – Animal Criteria)
On this next slide I talk a little bit about the adoption criteria for the animals. The criteria for which animals are suitable for adoption should be spelled out to the extent possible in your policy and it should be a concept that the IACUC agrees upon, so that it’s not just the veterinarian making these decisions, and I’ll talk about that a little bit more as I touch on these bullet points.

The animal must be in good health and of acceptable behavior. This may seem like an obvious statement, but acceptable behavior can be open to interpretation especially when it comes to primates. We certainly see primates that may have stereotypic behaviors in a laboratory setting, and yet when they have been released into a sanctuary where they have more space, get to go outside, and maybe even have a pair housing situation, those behaviors often disappear. So, I think for acceptable behavior you want to make sure you have an understanding of what is meant by that and especially have veterinary input on that definition.

The animal must not have been administered any drugs other than FDA approved human or veterinary drugs, food supplements, or pharmaceutically compounded veterinary drugs. If any FDA approved drugs have been administered to the animal, this information should be disclosed to the potential adopter. We want to make sure the health history for the animal is clear.

Obviously, animals which have been exposed to infectious agents are not eligible for adoption as this would pose a risk not just to other animals but also potentially to people as well.

Slide 15 (Adoption – Animal Criteria (Continued))
Some additional animal criteria: transgenic or immunocompromised or immunosuppressed animals are not candidates for adoption. Animals must be adopted as personal or family pets only and may not be sold. Animals must not be used for food, and that includes human or animal consumption. Occasionally we have adopted out pigs here at Brown and at other institutions where I have worked, so I think it’s really important that the adoption agreement, which is actually part of our policy at Brown, states this, so people know what to expect when they are adopting the animal. We also state clearly that the adopter is responsible for any future care and medical support as may be required and we require the individual adopting the animal to acknowledge this with a signature.

Slide 16 (Species Considerations)
In terms of species considerations, for companion animals you’ll want to look at compatibility – what other pets might be in that household? Are there children in the household? My experience in adopting out the teaching dogs when I was at a veterinary school was that beagles were generally family-friendly pets, but it’s always important to recognize there can be individual variation, and most of these dogs have not necessarily seen children on any kind of a regular basis.
If you are planning to set up adoptions, finding some way to expose the animals to children prior to the adoption process is a really good idea. I know some facilities actually have mock living rooms set up and they invite staff to come in with their families to regularly socialize the dogs. You want to make sure that long term care is also outlined, and inform adopters of what they’ll need in terms of veterinary care and preventive medicine, such as vaccinations and deworming.

Slide 17 (Species Considerations)
If you’re adopting out agricultural animals, make sure you understand the potential adopter’s intended purpose for the animal. I have a picture of Gottingen pigs here and they present a unique situation because when you purchase these pigs from Marshall Farms, which is the only approved U.S. supplier of Gottingen pigs, they actually have a clause in the purchase agreement that you will not transfer or sell them to any other institutions except for research purposes.

I actually had to reach out to Marshall Farms to get clarification on this point. Obviously one of their primary concerns is people starting unapproved breeding programs with these pigs, but our institutional policy requires spaying or neutering, so this negated any concerns about reproducing outside of a research setting. Marshall Farms was ultimately fine with that use and was quite supportive of our attempts to adopt these pigs out to a family setting.

When dealing with livestock you want to make sure that you understand local zoning ordinances. It’s not uncommon for urban and suburban areas to have zoning ordinances on livestock species, so it’s really important to understand that if you are going to be adopting out any agricultural animals. You want to make sure folks are aware of what long term maintenance is. Lots of people are familiar with pigs and how smart they are, but they may not realize that they may require sedation or anesthesia for tusk and/or hoof trimming, so it is important that they understand what they’re getting into and they have a veterinary care plan. In some areas, finding a vet that is familiar with pigs may be a challenge.

Slide 18 (Photos of mouse, anole, rat, ferret, cat, rabbit, dog, small pig, large pig, hamster)
This next slide shows just some of the species that I have adopted out over the course of my career. Of course, cats and dogs are among the more commonly adopted species, but I’ve adopted mice, rats, hamsters, rabbits, ferrets, pigs of all sizes, and even anoles. In this case, the anoles went home with the graduate student at the end of a non-invasive study.

Slide 19 (Adoption – Applicant Screening)
In terms of screening the applicants, once you have identified the animal [or animals that are ready to be adopted], you’ll want to be sure you have a process for screening individuals that have expressed interest in adopting those animals. That process can
involve gauging their interest level and experience with the species, as well as understanding what type of residence they’re in. Obviously if somebody is renting you want to make sure that they provide the landlord’s name and you should confirm that the landlord is comfortable with the adoption. This is a phone call I typically make myself as I don’t want to put the individual at risk or the animal at risk.

You also want to make sure that if a livestock species will be housed in a barn it is acclimated to that temperature. In New England I would not adopt out a pig that has been at 70 plus or minus two degrees Fahrenheit to an unheated barn in the middle of January. That would not be acceptable for the animal, so you want to take those kinds of things into consideration.

You do want to also make sure you understand what the person is going to do with the animal during the day if they are working, in the case of companion animals that might be inside a home. You also want to understand what other pets are in the house and what their plans are for veterinary care. We do actually include a survey for prospective adopters as part of our screening process.

Slide 20 (Adoption – Animal Preparation)
On this slide we talk a little bit more about finding the right home for the animal, and how to prepare the animal for rehoming. We do make spaying and neutering a condition for our adoptions for cats and dogs and any of the larger companion animals going out. We don’t always make that a condition for rats and mice and other smaller animals unless someone is adopting animals of both genders and wants to keep them together, in which case we would absolutely spay and/or neuter the animals.

We want to make sure on our end that all vaccinations are appropriate and current, we ensure that deworming is appropriate and current, and we fill out any required paperwork. We are in a very small state, so it is not uncommon to have employees who work in Rhode Island but live in one of the adjoining New England states. So, again, we need to make sure that we are complying with any applicable state transport regulations. We also want to make sure that individuals have a transport plan in place before they show up to pick up the animal.

For our pigs, they are small enough to fit into a typical dog crate or dog carrier, but you want to make sure the person is not picking them up and putting them in the back of an open truck. Things like that are things that you should work through with prospective adopters before you actually have them pick the animal up. Obviously in the case of cats, you’ll want to make sure the person brings a carrier with them; and dogs, they should have a leash and collar ready to go.

Slide 21 (Adoption – Failure)
So, sometimes failure happens, and you want to make sure that you have a plan in place in advance for when things don’t go right. If you do these often enough you will
occasionally encounter situations where it just doesn’t work out. It’s important to know in advance how you are going to handle this. I have personally been fortunate to be in a situation where I am able to say we will take the animal back. I have had very few failures in the course of my career, but they have happened.

In these cases, it’s important to get as much information from the adopter as possible. Was it a failure on the part of the animal in terms of being housebroken? You want to be sure you set the stage correctly. It can be a challenge to housebreak an adult animal that has lived in a kennel all its life. If you inadvertently made the person think that this dog is going to be housebroken within two weeks, then that’s not a failure on the part of the dog. That’s a failure on your part to educate the prospective owner. Make sure you are being realistic when you send these animals out the door.

I would also note that you shouldn’t be afraid to try again, and I think that’s really important. As long as you have a good handle on what went wrong, I think it’s fine to make another attempt. I would exercise a great deal of caution, though, if there are issues of aggression that could pose a risk to prospective owners or to other people that might come in contact with the animal. I personally have not encountered this situation, but I would be hesitant to try again in this situation due to the risk.

Again, making sure you set realistic expectations is very important. You as a veterinarian should meet with prospective owners and make sure they have a realistic understanding of what to expect with respect to housetraining, with respect to other pets, and household items.

This may sound funny, but I was at a veterinary school for nearly a decade and adopted out in excess of 40 beagles, and occasionally a few large hounds. The feedback that we got was that large screen TVs were quite terrifying for some of these dogs. A high definition, large screen TV with surround sound is not something these dogs had ever seen before and I had no way of exposing them to this in advance. Carpeting was also quite a challenge. They’d never seen it before. At one point I actually got large carpet remnants for them to try to become accustomed to.

I personally have adopted two beagles, and my first beagle had no idea of what a trash can was for the first several years in my household. He eventually did discover what the trash was, and his life and mine were never quite the same afterwards. So, you do want to make sure that people understand that these dogs really do have limited knowledge of the real world, for lack of a better word, and so they will take some time to acclimate.

Slide 22 (AVMA Policy Quote)
This next quote comes directly from the new AVMA policy that I referenced earlier, and it states: “The AVMA supports the adoption of healthy, post-study, research and teaching animals into long-term, private homes as companion animals through the use of adoption programs developed and managed by research institutions.”
Slide 23 (ACLAM Position Statement Quote)
On the next slide, I have a quote from the American College of Laboratory Animal Medicine’s position statement on the adoption of research animals, which starts with this line: “The American College of Laboratory Animal Medicine (ACLAM) fully supports the concept of adoption of healthy, post-study, research animals into long-term, caring private homes or farms that can provide appropriate and humane living conditions for these animals as pets.”

Slide 24 (Adoption – Regulatory Perspective)
On the next slide, I cover what is currently available from a regulatory perspective regarding adoption. And this was taken directly from the Office of Laboratory Animal Welfare’s frequently asked questions website. This is FAQ F.11., and it states: “… The 9 CFR recordkeeping regulations and official policies offer institutions the option of developing and implementing an adoption policy. OLAW is supportive of the concept of adoption but reminds institutions that NIH grant funds may not be used to support the cost of the program. The PHS will not assume legal or financial responsibility for any adoption program or any results of adoption. The institution should ensure that its policy meets pertinent state and local regulations for transfer of animal ownership and is encouraged to coordinate with local animal shelters.”

Slide 25 (Photo of Lara’s adopted dogs)
And I thought I would close out this section with a picture of my two beagles. Unfortunately, Mr. Sniffs passed this last January at the ripe old age of 15, but I do think he enjoyed his 10 years as a “couch potato” at my house, and he was an excellent companion to my children during that time. Aries has joined our household about a year and a half ago and she is carrying on Mr. Sniffs’ legacy of exploring the trash every chance that she gets. And, it’s been a really positive experience for me having these dogs and being able to sort of share their story when I have them out on the soccer field or when we’re walking around town. It can be a really great – they can be really great ambassadors for research and teaching.

Slide 26 (Retirement)
Switching gears a little bit, I’m going to talk now about retirement. This is not how we send out our primates, but the process might in fact be easier if they could transport themselves in a private plane. But I suspect the FAA might have some concerns with this approach.

Slide 27 (Brown’s Retirement Data)
Looking at Brown’s retirement data, this slide shows some of our data and we looked at from 2005 to 2011. We retired about eight nonhuman primates from two researchers’ labs. At the time our colony size was around 26 rhesus macaques. We didn’t have the specific sanctuary data available for all of those, but the general trend was retirement to PI preferred sanctuaries – and PI is principal investigator. More recently from 2015 to
2017, we looked and had 12 nonhuman primates that have been retired across researcher labs and the average colony size was closer to 38 rhesus macaques. We currently have two additional nonhuman primates that are scheduled to retire this fall and I’ve just learned of another two that may be retiring in the winter. So, this is definitely an ongoing practice here at Brown.

I do want to point out that Brown is by no means the only institution retiring primates. Johns Hopkins is currently building their own retirement sanctuary which I had the opportunity to tour at last year’s Association of Primate Veterinarians meeting. I think that this is a really innovative approach to the issue of retirement and while it may not be feasible for every institution, it is a wonderful demonstration of that institution’s commitment to the retirement process.

Slide 28 (Brown’s Retirement Practices)
There has been a longstanding commitment to the retirement of primates here at Brown which pre-dates my arrival here seven years ago. However, despite the history of the program, when I arrived, there were no formal policies or procedures in place. Essentially it was researcher driven, and the researcher was the one who handled the funding and most of the paperwork.

The Director or Attending Veterinarian’s role was essentially to review the documents, prepare the animal in terms of performing any spaying or neutering that needed to be done, and making sure that the animal was up to date on its vaccinations. The Attending Veterinarian was authorizing the retirement and signing any documents or paperwork that was needed to transport the animal to the sanctuary.

While I still sign those documents on behalf of the University, I now pass all the paperwork through the Office of General Counsel and the Dean for Biology. I look at this strictly from an ownership perspective; this is not my monkey and technically it is not the researcher’s monkey. This is an animal that has been purchased with University and/or federal research funds in most cases.

One of the things that I thought was interesting when I got here was that I needed two or three layers of signatures to give away or sell surplus equipment, such as old filing cabinets that we no longer were using. But, no one else was signing these retirement documents until I brought them to the attention of the Office of General Counsel. I feel like this is an extra layer of protection for the University, so that it’s not an individual sending primates on their way to a new home.

I wanted to make sure that it was clear to everyone in the research administration that this was happening. And so, again, this is why I why I send things through the Office of General Counsel and the Dean, so that it’s not simply Lara Helwig, Attending Veterinarian, sending an animal offsite, but that the University is in agreement with this and comfortable with the practice.
Again, we didn’t originally have a policy on that, but we now do have a policy that has been reviewed and approved by our IACUC. And I’ll talk a little bit about transportation a little later in the presentation.

Slide 29 (General Philosophy)
This next slide just contains a quote from one of our researchers here at Brown which just states: “We have confirmed our commitment to make retirement and placement at sanctuaries a viable option for nonhuman primates at Brown University.”

Slide 30 (Requires Input from All Stakeholders)
Just as with the adoption process, it does require input from all the stakeholders. Again, the laboratory and research team works closely with the veterinarian and Animal Care, the Office of General Counsel, the IACUC, and the sanctuary. And, the process does take quite a bit of time.

Slide 31 (Flow Chart for Retirement)
This next slide sort of shows you how the process works, and you can see that a lot of this actually happens in parallel. Multiple things are happening at the same time, but it still does take about six months to coordinate. It is important to realize that and to allow time in order to make these retirements happen.

Slide 32 (Preplanning: Costs)
One of the biggest questions that I get is, what does it cost? And, that can depend significantly on how many animals are involved and where you are sending them to. On this slide, I list out all the costs that I am familiar with. Typically, we have to get shipping crates made, which costs around $250. Transport can be anywhere from $250 to $1000 dollars if you are just using ground transportation to get to an airport and then spending more money on air transport; or if you’re sending an animal by ground transport halfway across the country, that can run you up to $10,000 or more. So that’s a pretty hefty fee right there. Most sanctuaries typically do expect a donation to help provide for the lifetime care of the animal; and that can run anywhere between $8,000 to $10,000 per primate, and that can vary significantly from sanctuary to sanctuary.

In some cases, the sanctuary may also request funding to build an enclosure if they don’t have one available for the primate you are sending. Sometimes if you’re able to send paired primates, they may actually have you build just one enclosure, knowing that the animals are already compatible. And again, that can cost several additional thousands of dollars.

Vaccinations and deworming medication are typically on hand and so we don’t usually charge anything extra for that. Lab diagnostics like CBCs and chemistry screens are included in the costs and run are about $150.
Typically the veterinarians here are happy enough to have these animals moving out to a sanctuary and we typically do not charge back for our time in doing spays or neuters. Those are surgeries we don’t get to do a lot in research so I will often count this as keeping up on our surgical skills and frankly I think we’re all happy to do this. So, we don’t really charge back for that time. Obviously, that might vary from institution to institution. In the end, you’re looking at somewhere between $10,000 and $25,000 to send a primate to a sanctuary.

Slide 33 (Funding Sources)
Where can this funding come from? As we learned on the earlier slide it’s not supposed to be coming from your NIH budgets. So again, some areas for funding include a project budget that an investigator might have, institutional funds that might be available for this, personal or private donations, and I’ve even seen some institutions take a fund-raising approach to this. That’s not something that we’ve done at Brown, but I have seen that done.

Slide 34 (Pre-planning: Sanctuary)
Once you have decided you are heading in this direction, you want to make sure you are talking to the sanctuary and you need to make sure that they have availability for the primate that you’re planning to send. Timing is definitely critical. These are animals that have spent their lives at 70 plus or minus two degrees and now we’re moving them to a sanctuary where they are going to be outdoors. Most of the sanctuaries are located in warmer climates and that typically means we send them either in the spring so they can get acclimated to being outdoors before the hot summer weather comes, or in the fall so they can acclimate before cooler winter weather comes. This means that we have only two times out of the year that we can send these animals out.

And of course, if you’re using air transportation, you can’t fly them if the weather is below 45 or above 85. And because New England is known for its fabulous weather, I’ve actually run into both of these scenarios at both times of the year. So, it can take a lot of logistics in terms of making sure you hit these weather patterns correctly and get these animals out at the right time of year.

In terms of looking at sanctuaries, I spend a lot of time looking at the paperwork for the sanctuary, their management structure, and their oversight plans. You want to understand what that looks like in terms of the board of directors and trustees. You also really need to make sure you understand their finances. You don’t want to send an animal that may have 10 or 15 years of life left to a facility that may not have 10 or 15 years of financial stability.

You want to understand how they allocate their resources and how they are staffing their facility. I also like to look at their disaster and emergency planning documents. I want to understand how they are going to care for that animal once it arrives at their facility, how they will acclimate the animal, what their enrichment plans look like, and how often they
are monitoring these animals. And of course, what their veterinary care plans entail. I do like to make sure I speak to their veterinarians before we send the animals, one in case they have any questions about the animals, but also so I can share my insight with them on what their needs might be. If they are accredited or have any regulatory oversight, I do look at inspection documents.

I check to see if there is a position statement on animals in research. Not every sanctuary has one, and some have statements that are less than favorable with respect to the use of animals in research, and that has definitely been a tough call for me. I don’t particularly like the idea of sending animals to a place that is overtly anti-research, but I also do recognize that these sanctuaries are dependent on donations to run and operate, and thus they may be in a position where they need to write their statements in a way that allows them to maximize donations.

I also look for references, especially from veterinarians that have sent animals to the facility. I have not personally visited these sanctuaries but several researchers on staff here at Brown have had the opportunity to visit the sanctuaries that we have used. I have relied on their firsthand accounts and I’ve also contacted veterinarians that have visited these places and asked for their opinions.

In terms of required paperwork, most of these sanctuaries will have transfer paperwork or nondisclosure agreements that they will have you complete. Your own home institution may also have additional paperwork that you want the sanctuary to complete as well. And while a visit is not always possible, I always think it is worth doing if you can make that happen.

Slide 35 (Side Note: Sanctuaries)
A side note on sanctuaries, and this is beyond the scope of today’s talk, but there are many different accrediting organizations for sanctuaries. That can get to be a little bit confusing as well when you start looking into this. The other thing is that I originally was under the assumption that most sanctuaries would be USDA licensed, when in fact most are not. If they are not exhibiting the animals, they do not need to have a USDA exhibiter license. And so, I have found that most tend not to have these licenses. Thus, there is no USDA inspection paperwork to look at. Most are, however, 501(c)3 non-profits and that means that they are required to file 990 forms with the IRS. This is where you’re going to get most of the financial data on the sanctuaries.

There is also a term “pseudo-sanctuary” out there, and this comes from the Seelig and Truitt paper that I’ve listed in the reference section. [Seelig D and Truitt A. 1999. Postresearch Retirement of Monkeys and Other Nonhuman Primates. Laboratory Primate Newsletter. 38(2):1-7.] These can closely resemble legitimate sanctuaries but one of the tipoffs is if they don’t require you to spay, neuter, or sterilize your animals before sending them. To me this is kind of a major tipoff. I’ve not personally encountered this – most of the sanctuaries that I’ve dealt with are pretty clear about what they want in terms of
sterilizing the animals before they are sent, but you need to be aware of that. And then the other tipoff can be that the "pseudo-sanctuaries" are often for-profit entities.

Slide 36 (Pre-planning: Animal)
In terms of preplanning for the animal, you’ll want to make sure that you fully understand what this animal’s pre-existing or chronic health conditions are. It is not uncommon for a ten to fifteen-year-old macaque to have some kind of chronic health condition. I think it’s very important to weigh this against the level of care and monitoring that the sanctuary is able to provide and the level of risk to the animal if the animal is not being monitored as closely as it would be in a lab animal setting.

You also want to take into account psychological wellbeing. How is this animal going to handle being transferred out of the facility that it has known for what may be its entire life? This is a very important thing to consider. As discussed before, you will need to plan to remove any implants the animal has and you will need to castrate, vasectomize, or spay the animals or provide some sort of birth control option. As I mentioned, I have only ever dealt with male macaques, so we’ve always typically been doing castrations or vasectomies. Different sanctuaries feel differently about which one they want you to perform, but obviously if there’s a medical indication for one versus the other, we would certainly follow that instead.

In addition, you’ll want to make sure that the animal is up to date on all its vaccinations including tetanus, rabies, and measles. I usually want to make sure that I also do another round of deworming since I know that these animals will be going to an outdoor setting. We usually run an additional complete blood chemistry and chemistry to make sure that they are doing fine. We also will run a urinalysis if it’s warranted. And we also perform serology to confirm that the animal is Herpes B negative. Most sanctuaries are going to want to see that serology as well. And then lastly, we do a TB test. Typically, this is required within 10 days of the shipment date, so that is one of the very last things that we do to prepare the animal.

Slide 37 (Pre-planning: Paperwork)
As the next slide indicates, there is a lot of paperwork involved. Again typically, the sanctuaries are requesting health records that include the history and blood work. And, I do try to make sure that we prepare as much of that in advance so we can send it along and see if they have any questions. We do also make sure we send that with the animal in transit. There is also the transfer agreement and the nondisclosure agreement that gets completed and signed. And again, I run these past our Office of General Counsel. And then, of course there is the typical USDA 7020 form for when you are transporting USDA covered species. You’ll want to make sure you have all that paperwork in order and know what you need to do before the big day.
Slide 38 (Shipping Crates)
On the next slide I talk a little bit about transport requirements and shipping crates. If you are flying, you want to make sure that you check the crate dimensions with the airline, and I’ll talk a little bit about that in a minute. As of today, I’m actually only aware of one airline in the United States that is willing to take animals from a research facility to a sanctuary, and that is American Airlines. And the only reason they take our animals on a flight is because they are going to a sanctuary and not to another research facility. As I mentioned you are definitely going to want to make sure you check the crate dimensions with the airline in advance.

We had a situation one time when we were flying animals from Boston to Oklahoma with a connection in Dallas, and while the crate fit on the plane from Boston to Dallas, a smaller plane was used from Dallas to Oklahoma City, and that smaller aircraft could not accept the crate. We were very fortunate in that situation that the sanctuary was able to drive to Dallas and pick up the crate, but you want to make sure you check that in advance. And I have found it can take up to three weeks to have a crate manufactured, so again, as soon as you get a sense that you might be sending an animal, it’s not a bad idea to start that process of contacting a crate manufacturer and getting things made in advance.

And then, last note on the crate, is that you want to make sure it meets the USDA regulations and, of course, if you are flying the animal, it needs to meet the International Air Transport Association requirements as well.

Slide 39 (Transportation Options)
And as you can see, there are two very different two types of options here for transport: ground versus air. We’ve had situations where we’ve been unable to fly the animal, so we’ve had to make arrangements for ground transportation. Obviously, that’s less than ideal because it takes a lot more time and presents a major stress on the animal. I always try to reconcile that with the idea that this animal is going to a sanctuary where he will be able to live out his days and feel sunshine on his back, but make no mistake, if you have traveled recently you know it’s stressful. And, of course, you know what to expect with travel, but these monkeys have no idea what is coming when they are loaded on to an airplane. As you can also see, there is a huge cost difference between ground and air transportation.

And of course, the other tricky piece with air transport is that these animals are booked as cargo, and the airline will only confirm that you are good to go about five days prior to the estimated departure. So, you can think that everything is set and then get bumped at the last minute and have to reschedule. And of course, there’s also the weather to consider as well.

The bottom line is this is pretty much how things work and you can see it’s much less expensive to do air transport and of course much less duration of time, which is much less stressful for the animal. So, I try to fly them whenever I have the opportunity to do so.
Once they get to the sanctuary, we usually like to get a phone call. Typically, we get that phone call from the sanctuary as soon as the animal has arrived at the airport and we love to get pictures of the animals. We like to see pictures right away or soon after. For us this is the first time we are seeing the animals outside, which is really wonderful. These are pictures of actual animals that we’ve sent and it’s wonderful to see them outside with the sunshine on their face and space to move around. They will often be set up in pairs. That typically happens after they’ve undergone a 30-day quarantine. Once paired we often get to see them with their new roommate, and that makes it all worth it in the end.

On this next slide, I have a picture of Dawkins with the title that sometimes things don’t go as planned. Some of you may actually remember this news story. Dawkins was going to a sanctuary last year in May and he managed to break out of his crate at the San Antonio airport en route to his retirement sanctuary.

I’ll give a big shout out to the folks at the San Antonio Zoo who have been trained to respond to loose animals at the San Antonio airport. They were able to quickly recapture him and get him back in a crate. I did have everyone send me some pictures of the crate so that we could understand what had failed. In this particular case, nails, and not screws, were used in some critical areas on the crate, so that was an important lesson in the need to not only make sure you order the crate in plenty of time, but also to thoroughly inspect it when it arrives and see if you need to make any reinforcements to it.

This story did get quite a bit of press coverage and it does illustrate why you want to make sure your communications office knows what is going on. The initial reports were that a monkey from Brown was loose in San Antonio, and we were not yet notified of this by the sanctuary because they were busy helping the team from the San Antonio Zoo with the recapture. It’s very important that the folks that might get the first phone calls from the press know what is going on at your facility. I am pleased to say that this story has a very happy ending. Dawkins is doing quite well and the sanctuary recently posted an updated picture of him grooming his new friend Flo, and that picture is shown on the right.

This next slide just shows pictures of actual animals from Brown that have moved on to sanctuary settings. It’s just really wonderful to see these pictures. Again, it makes all the paperwork worth it in the end.

And then on the next slide, I have a quote from Jackie Rivera Clauder, who is the founder of the Retirement Sanctuary for Laboratory Animals, which says: “We bring our message of research advocacy and animal welfare full circle by showing compassion for those
without a voice, and offering them a continuing life of dignity after research.” I thought that was a nice way to end this section on retirement and move into our section on release.

Slide 44 (Release)
In terms of release, this typically applies to traditional field studies or situations where you bring animals from the wild into your facility for relatively non-invasive studies. A lot of these cases are addressed on an individual, case-by-case basis and thus it is really important that you address this at the time the IACUC protocol is reviewed and that all applicable local, state, and federal laws are being appropriately followed.

Slide 45 (Release – Animal Considerations)
When can you actually do this? You want to think about the impact of any tissue collections performed, the need for anesthesia and how the animal is likely to do if it is released and not fully recovered, or how you will make sure the animal is fully recovered before you release it. Consider if there is a need for any identification to prevent recapture of the same animals. And, you want to make sure you are not impacting this animal’s ability to survive or compete in its natural environment. There would be nothing more tragic than releasing an animal into the wild only to realize that because you manipulated this animal, it’s no longer suitable to live in that environment.

You may also want to consider implications for other animals in that environment. If the animal has been dosed with anesthetic and it is a prey species, if a predator captured it, how would it be impacted?

These are all considerations that have to be taken into account. In situations where the animal has been living in captivity for a period of time, you want to be sure that the animal is still capable of living on its own in the wild. Has the animal become habituated to people? Will this adversely impact its ability to survive in the wild?

Slide 46 (Release – Other Considerations)
Some additional considerations are the impacts on the habitat, ecosystem, and environment. Fish are a great example for this. For example, will this fish be caught downstream by a person who might ingest it? What are the ramifications for human health as well as environmental health? Is there any potential to introduce disease from these animals being manipulated, and what again is the impact on other species and the greater ecosystem?

Slide 47 (Release – Regulatory Implications)
In terms of regulatory implications, you want to make sure you are working with the Fish and Wildlife Service and recognize that there may be additional requirements when working with endangered or protected species. You’ll want to work with the Food and Drug Administration if there is any possibility of human consumption, with the Environmental Protection Agency if there are any concerns regarding impacts on the
larger ecosystem, and the State Department of Environmental Management, as well as the State Veterinarian, in terms of adhering to any applicable state or local ordinances. There can be a large number of agencies involved here, and this is not necessarily an easy task, so you want to make sure you fully understand all the implications as you consider your options for releasing wild animals.

There are several excellent references on field studies, and most include guidelines for the release of animals following their use on studies. I’ve included these in the reference slide at the end of this presentation. [See slide 55 - PDF] I would emphasize that for those institutions that are AAALAC accredited, you should access these documents from the AAALAC website, as they provide additional notes in many of the reference documents which you should be aware of if your institution regularly conducts field studies.

Slide 48 (Quote from the Guidelines to the Use of Wild Birds in Research)
I thought I would end this section with a quote from the Guidelines to the Use of Wild Birds in Research, which is published by the Ornithological Council: “Upon completion of studies, researchers should release field-trapped animals whenever this is practical and allowed under national, state, or local laws and under permit conditions.”

Slide 49 (Staff Feedback)
On this next slide, one of the things I wanted to talk about a little bit was what’s the impact of adoption, retirement, and release programs for the staff? And so, in putting this together I solicited feedback from not just the staff that works for me in the animal care facility, but also from researcher staff. And on the next slide, I have two quotes that were provided.

Slide 50 (Quotes from Staff at Brown)
One person said that “For our lab having the ability to retire them is very important. We become very attached to them. To see them sunning themselves and living the rest of their lives out is very comforting. I do think it helps to mitigate compassion fatigue. I do not think I would be as comfortable doing what we do if the end result was euthanasia as the norm for nonhuman primates. Also being able to see them and get updates is a really great feeling.”

And another individual said that “Being at a facility that adopts and/or retires research animals impacts me very much. I feel proud to work for an establishment that does not look at these amazing animals as “tools” that once “used” are no longer important. These animals are unwillingly giving up most of their lives to help advance science and deserve our extreme thanks and respect for that.”

Slide 51 (Acknowledgements)
And lastly, I’d like to thank the following individuals for their dedication to the animals used in research and for their ongoing support of the retirement and adoption processes: the animal care staff, research staff, faculty, research administration, IACUC members,
and IACUC support staff. I am honored to work with you and am grateful to you for your care of the animals in our facilities.

Slide 52 (Contact Information)
And with that, I’ll turn it back over to Neera. And lastly, I do have my contact information here. [Lara A. Helwig, D.V.M., DACLAM, Director, Animal Care, Brown University, Box G-B 222, Providence, RI 02912. (Ph) 401-863-3223. (Email) Lara_Helwig@brown.edu.]

>>Neera: Thank you, Dr. Helwig. That was terrific. Dr. Helwig has some slides available in your handout references:

Slide 53 (References – Adoption)
For adoption: [See slide 53 - PDF]

Slide 54 (References – Retirement)
For retirement: [See slide 54 - PDF]

Slide 55 (References – Release)
As well as for release: [See slide 55 - PDF]

Slide 56 (Questions?)
So, I’m sure the listeners have a lot of questions. Listeners, please type your questions into the chat box on your webinar screen. OLAW may edit the questions for clarity, duplication, and fidelity to today’s topic.

Slide 57 (Question 1)
We will start with a few questions that we received before the webinar. So, our first question is: What is your opinion on animals that have received CFA, complete Freund’s adjuvant, for antibody production to be made available for adoption after the study ends?

>>Lara: So, I actually looked into this a little bit and I personally think, I mean when we think about complete Freund’s adjuvant, if we think about adverse outcomes for the animal it’s usually localized reactions at the injection site and typically those resolve over time. In terms of concerns from a public health perspective, I personally don’t think there are any here. From the animal’s perspective, I would only be worried about making sure that was documented in the event this animal went on to have a significant reaction to, say, a vaccination.

I definitely think that would be something that you would want to make sure prospective adopters were aware of, but to me I don’t think an animal having received complete Freund’s adjuvant in and of itself would be a reason not to adopt the animal. Again, there might be significant individual variation there.
>>Neera: Thank you, Dr. Helwig.

Slide 58 (Question 2)
The second question is – it’s a multipart question so we’ll break it up into pieces:
Have you ever rehomed goats?

>>Lara: I have not rehomed goats, but I am familiar with other institutions that have
rehomed sheep in the past.

>>Neera: And can the ear tag be removed to ensure the animal’s origin is not traceable?

>>Lara: So I think here they’re talking probably about the scrapie tag. I would personally
not be particularly comfortable with removing that as – that does kind of show the – to
my mind – that would show where the animal originated from in terms of the original
vendor, not necessarily the research institution from which it’s coming. I would think that
you would probably want to keep that in, but that’s probably a question for someone from
the USDA or your local USDA inspector.

>>Neera: Would you require goats being spayed before adoption? And if this is not
possible, would this prevent you from rehoming them? If not goats, but a similar species.

>>Lara: Right. So, goats are certainly bigger – they’re certainly not a species that we
regularly spay. And so I can understand the concern with that process. We do say that we
require spaying and neutering, but again, that’s our individual policy. And we did recently
adopt out the pigs and we did make it a point to spay and neuter those. However, in that
situation we had someone on staff who wanted to be able to house them together and
didn’t want to end up with piglets. So we made that decision that these animals had to be
spayed or neutered. I could picture a situation with goats where if you know for a fact
that you’re adopting them to a person who is only ever going to have those goats and
they’re only ever going to have all female goats, I could see where that would be a
reasonable thing to say we’re going to let them go without being spayed because it
doesn’t – I don’t think there’s any – unlike in dogs – there’s not necessarily any strong
reason to do it from a health perspective.

Slide 59 (Questions?)
>>Neera: Okay. So, I have a question for you. I mean, you’ve walked through it. You’ve
said it takes a village to do adoption or retirement.

[Question 3]
If I’m an institution that wants to implement a policy for either adoption, rehoming, or
retiring, how do I start, where do I start? I mean, how do you get buy in from everyone in
terms of funding? You know, how do you get that buy in from everyone?
>>Lara: Right. You know, I think you first start by starting a conversation, right? You know, I think the wrong approach is to bring the policy to the IACUC and just say hey, I brought this for review at the next meeting, I would like to get this approved. You really want the conversation before you have the policy in place. Start asking around. Is there support from this from above, from the research administration folks? Is there support for this from the IACUC members? I think you start with a conversation, and then it might be that you’re at an institution that is fine adopting out cats and dogs but doesn’t want to consider adopting out any other research species. Then you start there. You start where you can start and you have the conversations, and you move forward from there.

I think it’s important to know that – you want to make sure that you have the backing, but you also want to make sure you have your information right. I do think that there’s a number of positive benefits. Like I said, these animals go on and become really great ambassadors for the use of research – the use of animals in research. They become great ambassadors in terms of the research that your institution is doing, and they can also become great ambassadors just in general for your research program at your institution.

I think there are a number of positives. And also as I mentioned, there’s a significant impact for your staff in terms of morale, in terms of hopefully as an antidote to compassion fatigue. There are positive reasons to do this, but I think you really want to make sure that everyone is board with it because what you don’t want it to be is that it’s a vet tech or a veterinarian just slipping animals out the back door. That’s got trouble written all over it. You definitely want to make sure you’re not working in a vacuum.

>>Neera: Okay. We have a couple of live questions here.

[Question 4]
The first question: Concerning drugs administered to animals required to be FDA approved, right? I can understand omission of the use of animals exposed to biohazardous agents, but should this necessarily extend to chemical compounds for which it is possible to make some prediction about metabolism or residual drug risk? Should differentiation be made between adopting a food animal versus a pet animal?

>>Lara: I think you absolutely would want to think about the difference between pet versus food animal for sure. And I think this is an area where you can – as you write your policy for your institution – think about the things that will apply to your institution. I would agree that a biohazard versus a chemical hazard is a very different situation. I would agree that an unknown non-FDA approved pharmaceutical going into a cat is probably a different risk than a non-FDA approved drug going into a pig. There is always in the back of your mind – there could always be the possibility that that pig would end up in the food chain either for people or for other animals. Whereas that’s probably not going to happen with a cat. I do think those things can be considered as you think through what’s the right approach for your facility, but I do think a lot of this really does come down to your facility and your willingness to accept that level of risk.
[Question 5]
>>Neera: Thank you. Next question: What are the typical ages of retirement for animals (or how many years of use) used in teaching institutions for the purpose of learning skills such as venipuncture, bandaging, routine care, and handling? The species in question are rabbits, rats, and cats.

>>Lara: Okay, all right. So, rabbits, rats, and cats. Those all have slightly different time spans. But I can – I’ll walk you through when I was at the vet school and we were running an adoption program with dogs, many of the dogs would come to us from research facilities. So, these were dogs that started their life in research so they came from purpose bred vendors. They were then put on to a study at a pharmaceutical company or bio tech company. They were used for one to two years and then essentially the company did not want to directly adopt, but was willing to have them come to a veterinary school or vet tech school where they would join us and be used typically on our teaching protocols, we kept them for two to three years (or three to four years – somewhere in there), and then we would adopt them out. You’re looking at most of the beagles that went out were around five to six years of age by the end of the study or by the end of their time at the vet school on training programs. I think with a rat, obviously, two years is not going to be the right amount of time.

So, I think you kind of have to play it by ear in terms of what’s your source for rats. Is adopting out a rat at six months of age when you’ve only had it for maybe two or three months in house using it for training, is that something that your program can support? Versus adopting out geriatric rats, that could be, you know, more problematic. For rabbits, if you were able to use a rabbit for two or three years and then adopt that out, that’s an animal that would still have several years left in terms of life span. And cats, again, that’s another one where – I mean cats can certainly live into their 20s depending on the luck of the draw that you have with respect to their health. But I think you would want to think about what you need this animal for in your program and balance that out with when do you want – what is your goal for this animal in terms of being able to get it out? Because it’s certainly probably going to be harder to adopt out a 15-year-old cat than it is going to be to adopt out a five-year-old cat.

[Question 6]
>>Neera: Thank you. Another question: How do you follow up on the legal documents to assure compliance, such as spay and neuter, vet care, not used for food, et cetera?

>>Lara: Yeah. So, the spay and neuter we actually do before they leave. The vet care, I mean, there is to some extent no real way to follow up on some of these things, depending on who you adopt out to. I will say that typically when I’m doing adoption, I’m adopting to either a direct employee or student of the organization that I’m at, or what I call the one away rule, which is essentially I have an employee, their sister, brother, mother, friend, who is interested in an animal. I think that when you start to get further
outside of that circle, it gets a little trickier in terms of feeling confident that those individuals will follow up with what’s in the animal’s best interest.

Some of this we also get at with our questionnaire that we ask people to fill out. You know, it gets into these questions of: who is your veterinarian? If they don’t list anybody, it’s like: well, who is going to be your veterinarian? Most of the time when I’m adopting animals out, these people do already have somebody that they’ve used for their own animals and have some experience. I have often called their veterinarian and just checked to see, is this somebody who does regularly bring in their animal? Obviously, they can’t disclose a lot of information, but they can give you some sense for whether or not the person is conscientious about taking care of their animals.

>> Neera: Thank you. Now we’ve reached the end of our webinar, but Lara if I can keep you back for about five more minutes to answer a couple more questions; that would be greatly appreciated. And participants, for those who can’t stay longer, thank you so much for listening in and participating on this webinar. For those who can stay longer, we have about four more questions and hopefully it should just take about five more minutes of your time. So please keep online if you can.

[Question 7]
Have you ever had issues in being in competition with a local animal shelter as to finding eligible adopters which could have adopted from the shelter?

>> Lara: Oooh, that’s a good question. If I found myself in competition with them, I guess I’m not aware of it. It’s really – that’s an interesting question because with respect to here in the New England area, we actually have a real shortage of dogs available for adoption in our shelters. Most of the dogs that are in New England shelters now are being shipped in or imported in from the southeast or from the islands. It’s kind of interesting that the last couple of times I’ve actually looked at shelter dogs in the area, most of them are pit bull mixes or animals sort of that similar size. And I think if you were in the market for a small dog, there just weren’t as many around. I guess I’m not sure that I was competing directly with the shelters in the sense that I had small dogs and maybe most of them didn’t.

I also think most of the folks that adopted when I was at the veterinary school were students. The good part about being in that environment was I got like essentially 80 new students every year who were interested in adopting. So, I eventually – I had a fairly steady source and I guess I never really felt like I was in competition with the shelter animals – with the shelters in the area.

[Question 8]
>> Neera: Okay. Can you provide some advice on how to make institutional leadership (such as lawyers) comfortable with the thought of adopting out animals?
Lara: Yeah, lawyers can definitely be a challenge. And I say that as somebody who is married to one. [Laughter]. But I will say, I think you start small and you convince them – I mean at this point you’re not going to be the first person to do this. It might be the first time that the lawyer you’re talking to has heard about this, but you can show that there are other institutions that are engaged in this activity and have been involved in doing this.

I think showing them what some of the benefits are to the institution, working with them on release forms. You can also – you can for your own facility – you can write the policy. If your facility’s policy is going to be that you’re only ever going to adopt to somebody who is immediately affiliated with your institution, that does narrow the pool a little bit and does reduce the risk, I think, to some extent of running into an issue down the road.

Slide 60 (Next OLAW Webinar – Topic TBD)
Neera: All righty. Thank you. We’ve come to the end of the questions. The ones that we have not answered, we will respond to them, and it will be included and amended in the transcript. Please stay tune for those responses. These are all interesting questions, for such a hot topic. If listeners think of additional questions in the next week or two as you reflect on this webinar, please send them in to us and we will impose on Lara to answer them, and then we will amend them to the end of the transcript, which we’ll be posting on the OLAW website in a couple of weeks.

Now I would like to thank you, Lara. You have been incredibly generous with your time. I’d like to thank Brown University for loaning you to us, and I want to thank all of you listeners for participating in our webinar, with special thanks to those who sent in questions.

Lara: Thank you.

Neera: The next OLAW Online Seminar is scheduled on September 26, 2019. I wish everyone a fun summer and look forward to having all of you join us for our next webinar in the fall of 2019. Goodbye!

**Additional Submitted Questions Not Addressed During the Webinar**

**Question A**: What do you recommend for ground transportation carrier, and which route to go from RI to TX in two days?
Lara: We use a USDA licensed transporter for this and they ultimately decide the route. Most of these operations will use two drivers for longer road trips which enables them to drive the distance continuously (i.e., stopping, per USDA regulations, every four hours to check the animals and offer feed and water). If you contact me via email, I can provide the names of some USDA registered transporters that I have used in the Northeast.
For those outside of the northeast, I recommend contacting your USDA inspector for names of transporters in your area.

**Question B**: Is Dr. Helwig comfortable sharing some sanctuary names that are research-friendly?

>>Lara: Please contact me directly and I can provide some information on the sanctuaries that I’ve interacted with in the past. [Email: Lara_Helwig@brown.edu]

**Question C**: You said animals must not be used for food. Is this true for all species? I seem to recall hearing about research mice being donated to a shelter or zoo where they were then used as food for other species.

>>Lara: I am familiar with institutions that donate rodent cadavers to zoos or wildlife rehabilitators for use as food for predator species. I did not specifically mention this as I don’t think of this in the context of adoption/retirement but this is absolutely a possibility for research institutions to consider. I would still recommend having a policy on this practice and that policy should, at a minimum, discuss the following: 1) animals should not be transgenic (note: for programs with large mouse breeding colonies, it is critical to keep the cadavers segregated); 2) carcasses should not contain drugs or implants that would be harmful to the predatory species; and 3) appropriate methods of euthanasia should be included (e.g., CO2, cervical dislocation).

**Question D**: Do you receive the NHP crates back for reuse or do they stay at the sanctuary with the animal?

>>Lara: No, we use wooden crates that would be impossible to clean and disinfect so we do not reuse them. I have seen stainless steel shipping crates that could be reused, but I have not looked into using these. The main caveats are to be sure the crate meets the USDA AWR requirements and the International Air Transport Association (IATA) standards (if using air transport).

**Question E**: You mentioned Animal Heroes and Beagle Rescue League. Is there some place I can find a list of all the organizations facilitating the adoption and retirement of lab animals?

>>Lara: I’m not familiar with any one place where all of these are listed at this time.

**Question F**: Are you willing to share your adoption candidate questionnaire or other associated documents?

>>Lara: Please contact me directly and I can share those documents with you. [Email: Lara_Helwig@brown.edu]

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