Seeds for a successful program:

IACUC training

IACUCs, Institutional Animal Care and Use Committees, are at the center of U.S. animal care and use programs. They monitor, enforce, advise, and work to strike a proper balance between advancing research and ensuring animal welfare. Their function is critical, complex, and conducted in a milieu of frequently changing internal and external regulations and guidelines for animal research.

With such an important and pivotal role to play, one would assume that training for IACUC members is a big priority for most institutions. But it’s only been in recent years that the issue of IACUC training has started to receive widespread attention.

Today there are more resources available than ever before to help prepare IACUC members for their responsibilities. Many more resources are currently in development by a number of organizations. Even so, members of AAALAC’s Council on Accreditation continue to identify a number of programs with deficiencies rooted in the inadequate training of IACUC members.

Training troubles

Proper IACUC training is often overlooked because the committee does not include itself as part of the semiannual program review. (See this issue’s cover story for more information on the semiannual review.) IACUC training should be viewed as an integral part of the overall animal care and use program, and as such, should be monitored and evaluated for its effectiveness.

“If I see an institution that is not reviewing protocols as intensely as it should, or if there are procedures that aren’t being properly followed, it’s typically a sign that IACUC members might not know what they are looking for or what to do,” says David DeLong, D.V.M., M.S., chief of the Veterinary Medical Unit at the VAMC in Minneapolis, Minn., and a member of AAALAC’s Council on Accreditation.

DeLong suggests making IACUC training a “line item” in the semiannual review checklist. “This automatically puts the issue of IACUC training on the table,” he says.

Another possible reason that IACUC training is sometimes overlooked may be that the Guide for the Care and Use of Laboratory Animals, NRC 1996, (the Guide) addresses the subject in a general manner. There is a fair amount of detail on training for animal care and use staff, but on IACUC training the Guide simply says, “It is the institution’s responsibility to provide suitable orientation, background materials, access to appropriate resources, and, if necessary, specific training to assist IACUC members in understanding and evaluating issues brought before the committee.”

Because there is not a lot of emphasis on IACUC training in the Guide or the regulations, it’s up to the Institutional Official, laboratory animal scientists, veterinarians, technical staff and the IACUC itself to take the initiative in developing an effective training system.

Sell the benefits

Committee members are typically very busy people. Adding “training” to their already long list of IACUC responsibilities can be perceived as an extra burden. The key is to get members to acknowledge the need for training—and its potential benefits.

“To get members to participate in any type of training, you need to help them understand that training will eventually save them time,” DeLong says. He adds that a deeper understanding of the requirements and their own responsibilities—topics addressed through training—helps committees move through the process more smoothly and communicate more effectively, which can result in significant time savings.

Joseph Thulin, D.V.M, M.S., fellow Council member and director of the Division of Animal Resources at the University of Illinois at Urbana-Champaign, agrees.

“The best IACUC training systems I’ve seen are ones that result from the committee recognizing the need for it, then driving the effort to do it,” Thulin says.

Make it convenient

But acknowledging the benefits of training doesn’t always mean that members will automatically clear their schedules to make time.

“It’s a real challenge to get people to participate,” DeLong says. “We need to recognize their demands and make training as convenient as possible.”

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Training needs will vary from institution to institution, depending on the size of the program and the types of research being conducted. It’s up to each institution to find the right “mix” of training options that cover necessary topics yet give members choices that accommodate their schedules.

**What to include**

There are essentially three major content areas to address through IACUC training. The first is helping members understand IACUC procedures—how the IACUC is set up, how the process works, overall responsibilities, what constitutes an animal care and use program, administrative aspects, and so on. These tend to be things that are common to every IACUC.

Second, members need to understand the guidelines and regulations and how to use them efficiently. How that is accomplished is up to the institution.

“Yes, it would be great if committee members would actually read, digest, and become truly familiar with these documents. But I realize that this rarely happens, and I have seen problems in programs that simply dole out the regulations as their training program,” Thulin says. “The committee must implement a way to engender a working knowledge of the Guide and regulations, with or without the members actually studying the documents directly. This is where one-on-one or whole-committee training comes in.”

Mary Lou James, a St. Louis-based regulatory compliance consultant for research animal welfare and AAALAC ad hoc Consultant, concurs.

“I don’t believe that putting a huge pile of documents in front of a new IACUC member works,” James says. She believes in finding more personal ways to educate members (some of which are discussed later in this article).

The third content area to include is specific issues members will need to consider in reviewing the program and protocols. These issues include topics such as endpoint criteria, animal pain and distress, and research issues specific to their institution.

DeLong notes that the head veterinarian should take an active role in making sure IACUC members are aware of important issues specific to their institution’s program.

“The issues will vary from institution to institution depending on its size and the kind of research they do,” DeLong says. “You need to find the right methods of training that prepare IACUC members for your program.”

**Find a format that fits**

Ideally, you want to find a combination of training venues that can accommodate members while still covering what they need to know. Some format options to consider include:

- **Orientation sessions**

Most people with IACUC training experience agree on the need for some type of formal orientation for new members. This process can take many forms, but it should be well thought out and address the needs of new members and the institution.

James believes one-on-one training is the foundation for a good orientation. “It’s really important to have a ‘primary trainer,’ someone who really knows how the IACUC works and can explain the process and what’s expected of committee members,” she says. “Simply giving them a bunch a regulations and saying ‘you have to remember this’ doesn’t work.”

“All new members should meet with a knowledgeable IACUC member or affiliate—usually the attending veterinarian, IACUC chair, or the IACUC coordinator—to discuss the committee’s roles and responsibilities,” James says. “New members should then be actively encouraged to contact these individuals if they have any questions or concerns.”

Cindy Pekow, D.V.M., chief of the Veterinary Medical Unit for the Veterans Affairs Puget Sound Health Care System in Seattle, Wash., agrees with the personal approach.

“Ideally you want to find time for someone to mentor a new member and explain the regulations and guidelines,” Pekow says. “This will speed up their learning curve and can also help give new members the confidence to speak up and ask questions.”

Part of the new-member orientation might also include a formal program. At the University of California at San Diego, Animal Subjects Program Director, Marky Pitts, combines a one-on-one meeting with a formal hour-and-a-half orientation on using animals in research. Although this session is designed for all new staff involved in the care and use of animals, it serves as a comprehensive overview for IACUC members.

**What should training cover?**

- Help members understand IACUC procedures.
- Help members understand the guidelines and regulations and how to use them efficiently.
- Help members understand specific issues they will need to consider in reviewing the program and protocols.
No matter what format is adopted, an important objective of the orientation is ensuring new members have (or have access to) key documents and training materials. James calls these “core materials,” and suggests including items such as:

- U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training

- *Guide for the Care and Use of Laboratory Animals*, NRC 1996

- The Health Research Extension Act of 1985 (Public Law 99-158)

- Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals

- PHS Policy on Humane Care and Use of Laboratory Animals—online tutorial from the Office of Laboratory Animal Welfare

- Institutional Animal Care and Use Committee Guidebook (OPRR/ARENA), NIH Publication No. 92-3415

- 2000 Report of the AVMA Panel on Euthanasia

- The Animal Welfare Act (as amended)

- Animal Welfare Regulations, Title 9 Code of Federal Regulations

- USDA Animal and Plant Health Inspection Service Animal Care Policies

- *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*, FASS 1999

- A medical dictionary and other reference materials (e.g., AWIC bibliographies for community members) may be provided to non-scientist members and community members as needed

“I also make a big push for institutions to develop their own IACUC handbook,” James says. She says this gives committee members a primary source of information in simplified language, and details their institution’s own policies and regulations.

“A customized handbook also helps keep the committee consistent in the decisions it makes,” James adds. For example, a controversial protocol might be converted into a position statement that’s kept in the institution’s guidebook. If a similar protocol comes up for review in the future, the committee can weigh the situation against what was done in the past.

On-the-job training

Many institutions find ways to ease new IACUC members into the process through on-the-job training. This approach might include:

- Inviting new members to observe a meeting or two before they officially begin their terms of service.

- Ensuring that new members are teamed with veteran members when they conduct their first semiannual review.

- Having new members serve as secondary reviewers on protocols until they become familiar with the process and know what must be addressed.

“Don’t discount the fact that just working on the committee is itself a form of training,” Thulin says. “Reviewing protocols and the semiannual review are wonderful opportunities for on-the-job learning.”

Formal classes

Some institutions have gone beyond orientations and on-the-job training to develop formal classes or seminars to help educate IACUC members.

Pekow’s institution, the Veterans Affairs Puget Sound Health Care System, collaborates with the Washington Association for Biomedical Research to conduct a one-day, comprehensive course for IACUC members. The course covers everything from regulations and responsibilities to protocol review, justification of animal numbers and health and safety issues.

“The course provides a solid foundation for new people and a problem-solving forum for more experienced members,” Pekow says.

Third-party seminars

There are also many excellent courses offered by outside organizations. Some of the most notable include:

- Public Responsibility in Medicine and Research (PRIM&R) and Applied Research Ethics National Association (ARENA)’s annual IACUC meeting.

- “IACUC 101” (sponsored by the Office of Laboratory Animal Welfare, ARENA and in conjunction with other partners) is billed as a “full day didactic and interactive course” offered in various locations across the country.

- In addition to IACUC 101, the Office of Laboratory Animal Welfare (OLAW) also co-sponsors regional seminars of interest to IACUC members.

- The Scientists Center for Animal Welfare (SCAW) offers a variety of conferences that focus on IACUC responsibilities.

continued next page ...
Seeds for a successful program: IACUC Training

- Branch and National meetings of the American Association for Laboratory Animal Science (AALAS) often include presentations of value to IACUC members.

- Courses offered by state biomedical research associations. (Contact your state association to find out what it offers.)

“We’ve found that IACUC members understand the regulations and guidelines better if they practice applying them by working through scenarios with other people.”

James notes that the biggest benefits of attending courses may come from interaction with colleagues, as well as the meeting’s content. “We’ve found that IACUC members understand the regulations and guidelines better if they practice applying them by working through scenarios with other people,” James says. This is a big part of the IACUC 101 course (which James helps to coordinate). Participants are also given contact information for all fellow attendees so they leave the conference with a list of people outside of their own institution they can call on for ideas and advice.

Pekow agrees that networking is important. “It lets people know that they are not alone and that it’s all right—and productive—to share and discuss challenges regarding IACUC development.”

**Online courses**

Not every institution can afford to send its IACUC members to third-party training courses. In these instances, the Web offers some interactive opportunities which can be used in lieu of, or in addition to, live seminar training.

- A relatively new site, “ResearchTraining.org” (www.researchtraining.org), developed by the Medical Research Service in the Veterans Affairs (VA) Headquarters Office for Research and Development, is designed to help VA Medical Centers and other institutions meet training mandates for staff who use laboratory animals in biomedical research, testing or teaching. The site recently launched a course, “Essentials for IACUC Members,” which typically takes someone new to IACUC issues between two to four hours to complete. Courses are free and open to any institution.

- OLAW (the Office of Laboratory Animal Welfare), features many excellent resources for IACUC members on its Web site (http://grants.nih.gov/grants/olaw/olaw.htm) including a comprehensive “IACUC Guidebook” and an online tutorial on the Public Health Service Policy on Humane Care and Use of Laboratory Animals.

- AALAS offers a range of online courses through its “AALAS Campus” (www.aalas.org), including “Why an IACUC?” The course familiarizes participants with the federal mandates that define the regulatory environment for animal research and helps them understand the responsibilities of the IACUC in overseeing an animal care and use program.

- While it does not feature structured classes, “IACUC.org” (www.iacuc.org), offers a wealth of information for IACUC members, including an online discussion group. (The site is hosted by AALAS.)

- Listserves can also be helpful. The Scientists Center for Animal Welfare (SCAW) hosts “IACUC Talk,” a list specifically for IACUC members. AALAS hosts “CompMed,” a broader list for people involved in all aspects of animal care and use, as well as “IACUC-Forum,” a relatively young list designed specifically for IACUC members.

**In-meeting and in-between-meeting training**

Dedicating a few minutes at the beginning or end of each committee meeting to training is another excellent way to ensure ongoing learning.

At U.C. San Diego, Pitts provides a meeting packet to members before they convene that contains a few key educational materials, such as the monthly “Protocol Review” column from Lab Animal magazine, and copies of newsletters from organizations such as the National Association for Biomedical Research.

“But you need to be mindful of their saturation level,” Pitts adds, which is why she carefully chooses what’s included in the packet. Occasional e-mails with relevant articles and information may also be helpful.

James notes that in many institutions, there are one or two people who act as “guardians of the IACUC,” in terms of keeping them up to date on important issues. She says that these guardians can be tasked with briefly presenting one new article or news report per meeting—enough to
be educational, but not enough to overwhelm members with too much information. “Try to make it something timely that impacts your institution,” James suggests.

Take an ongoing approach

Laboratory animal science is a dynamic field. New animal models are continually developed, new drugs are introduced and new scientific procedures are implemented. So no matter what form your IACUC training takes, it’s important to develop a long-term strategy for continuing education to help committees stay current with changes in science and regulations.

“When you think about training for IACUC members, look at the entire package of what you are doing and think beyond the orientation,” DeLong advises. “Orientations are important, but you can’t take a one-time approach to training.”

Using a mixture of training vehicles appropriate for your institution and your committee, helps ensure an effective IACUC. James adds that it boils down to this: “The better trained your IACUC, the better your program.”

Consider the needs of community members

Every IACUC is required to have at least one “community member”—someone who is not affiliated with the institution other than as a member of the IACUC. Many community members don’t have a great deal of knowledge about biomedical research or the care and use of animals in science. By providing community members with the extra attention and training they may require, you enable them to become productive contributors in a relatively short amount of time.

“We spend as much one-on-one time with community members as they need,” says Thulin. He notes that this extra education allows them to be effective on subcommittees and as primary reviewers on protocols. “We want to get them to the point where, to the extent possible, we can ask the same of them as we do of any other member.”

Pitts agrees that one-on-one time is important. “Our Institutional Official and I take prospective community members out to lunch to talk with them about the role of the IACUC and the responsibilities they will have as a member,” Pitts says. “Then we give them time to think about what we discussed and decide if they are willing to serve on the IACUC.” Pitts says this extra effort has helped them recruit high-level, productive community members who understand and fulfill their role.

Alternate and overlap member terms

IACUCs can operate more effectively if there is a core of experienced members on the committee at any one time. For this reason, James adds that when you think about IACUC training, consider adjusting the appointment of new members to ensure that at any given time, at least half of the committee’s membership has a minimum of one or two years experience.

James also suggests setting up an overlap period between resigning members and the new members who will take their places. This system can be used as a means of educating new members on the IACUC process before empowering them with the ability to vote.

“Optimally, this period will cover at least one IACUC meeting and preferably one program review and facility inspection,” James says. “During this period, the resigning member can act as a mentor, offering guidance to the new member during the review and approval of animal research proposals, and if possible, during a facility inspection and program review.”

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Effective IACUC training can take many forms and different levels of formality. But the main goal must be to encourage IACUC members to initiate and implement a system that develops appropriate levels of knowledge and expertise that results in a well-functioning committee.

Note to our international readers: we recognize that this article focuses on the needs of U.S. institutions, but hope that some of the suggestions we presented for IACUCs will be applicable to your own processes.