Over the next several years UCSF will be working toward becoming AAALAC (Association for Assessment and Accreditation of Laboratory Animal Care International) accredited. Many of the people involved with animal research are not fully aware of the organization and its function. Here are some excerpts from an article published in the AWIC newsletter, Vol 2, No. 3/4, 1991.

In the last 50 years, our society has witnessed the emergence of new fields in science and countless advances in technology and medicine never before imagined. Every major medical breakthrough credits research involving animals. It is therefore difficult to envision a time when there were no uniform standards or accepted guidelines in animal research. In the past, environmental conditions varied, and the overall health of laboratory animals was poor.

The outcome of the rapid explosion of the use of animals in research after World War II was the birth of laboratory animal medicine. Already under pressure from antivivisectionist groups, the call for federal regulations was growing. However, it was 1963 before the first comprehensive guidelines, the Guide for the Care and Use of Laboratory Animals (Guide) were published. Federal regulations were not enacted until 1966, after the Animal Welfare Act was passed. These two activities were indicators of the increasing awareness and concern of scientists, and the public, for standardizing the care and use of animals in research, teaching, and testing.

At about the same time, the Professional Standards Committee of the Animal Care Panel (renamed American Association for Laboratory Animal Science) recommended the formation of an independent organization to accredit laboratory animal programs. In conceptualizing the organization, it was proposed that participation in the accreditation program be voluntary.

Accreditation would provide extensive self-evaluation, and site visits would be conducted by peers experienced in the field of laboratory animal medicine. The vision of the accreditation program was to provide a voluntary program that would enhance activities in research, teaching, and testing by fostering standards of animal care and use.

This has been the focus of the AAALAC since its formation in 1965. AAALAC’s mission is to promote high standards for animal care, use, and well-being through the accreditation process and enhance life sciences research and education. An animal program is defined as one which includes all aspects of support for animal care and use, from facility and housing for animals to all programmatic issues concerning animals including management, care, and use. Animal well-being is vital to life sciences research, teaching, and testing, and is the primary concern and focus of AAALAC. Traditional laboratory animal species, including rats and mice, exotic species, and farm animals, are included under AAALAC’s rules of accreditation.

AAALAC is nonregulatory, participation in the accreditation process is voluntary. Rather, the program demonstrates conformance with accepted practices, guidelines and Federal, State, and local regulations.

The accreditation process is dynamic. It is meant to be educational, and is based on an extensive self-evaluation of the animal program. The members of the AAALAC Council on Accreditation conduct site visits and are accompanied by an ad hoc consultant.

(Continued on Pg 2, See AAALAC)
Council members and consultants are specialists in laboratory animal medicine and animal research. Those with specialties relevant to the animal program’s research emphasis are selected for the site visit, which is informative and interactive, and not adversarial. Site visitors take time to assess the overall animal care and use program and evaluate institutional implementation for humane care and use and for the animals’ well-being. An exit briefing is held by the site visitors to discuss preliminary observations and to answer questions raised during the visit. This step has been viewed as instructive for both the program staff and the site visitors. Site visitors prepare a report for review by the Council.

AAALAC employs the Guide as its primary resource for evaluating animal programs. It was designed to be a source of recommended guidelines for animal care and use. Appropriately, these guidelines were established and accepted by the biomedical community prior to the enactment of the Animal Welfare Act. AAALAC accredited programs not only conform with the intent of the Guide, but comply with Government regulations as well. The Guide provides the Council on Accreditation with a baseline for evaluating animal programs and applying professional judgment on specific issues. AAALAC is a testimonial to the value of incorporating professional judgment with Guide recommendations.

AAALAC’s mission is to promote high standards for animal care, use, and well-being through the accreditation process and enhance life sciences research and education

AAALAC relies on the Guide as a source of recommended criteria for evaluating results rather than a source for engineering rigid standards. The use of professional judgment and performance standards speak to the ability of the accreditation process to adapt to a changing environment.

The foremost rationale for animal programs to voluntarily participate in the accreditation program is to demonstrate intent of excellence in providing the highest standards. AAALAC accreditation provides organizations that award grants with assurance that the accredited animal program conforms to all policies and regulations and is sustaining an acceptable humane animal care and use program. The life sciences community has learned the necessity of accountability in addressing issues, especially where the public is concerned.

AAALAC accreditation provides organizations that award grants with assurance that the accredited animal program conforms to all policies and regulations.

The animal user community has the opportunity to demonstrate beyond a reasonable doubt that they can be held accountable for the humane care and use of animals, and have established effective mechanisms to monitor their activities. Attainment of accreditation attests to the fact that a program has considered essential elements of animal care and use and abides by them. Those programs accredited by AAALAC take pride in their achievement.

Today, more than 600 organizations worldwide are accredited by AAALAC International, including The Johns Hopkins University, Sloan-Kettering Cancer Center, St. Jude Children’s Research Hospital, The American Red Cross, Rhone-Poulenc Rorer, and the National Institutes of Health. A full directory of the accredited programs can be found at http://www.aaalac.org/html.directory.html

**Occupational Health Allergies in Animal Handlers**

by Nina Hahn

Animal related allergy is one of the most important health hazards encountered by people working with laboratory animals. Some estimates are that up to one third of people working with animals will develop allergies within 3 years.

The range of allergic response to animals and animal product includes contact urticaria, conjunctivitis, rhinitis, asthma and in most severe cases, anaphylaxis. In one survey of 5,641 laboratory animal workers, (Continued on page 3, see Allergies)
23% had allergies. Of those, 82% had nasal or eye complaints, 46% had skin complaints and 33% had asthma.

Sources of allergens include animal dander, fur, urine, feces and saliva. Primary sources of exposure for lab animal workers are the urine of rats, and the urine, saliva and fur of guinea pigs. Other important sources of exposure include rabbit pelts, cat saliva and dander and dog dander. Asthma is most commonly associated with exposure to rats, mice and rabbits.

The following two case reports are from a 1998 NIOSH publication.

Case 1
A 21-year-old female worker at a pharmaceutical company prepared rats for experiments. She had no prior respiratory illness but had a family history of allergies. Three months after she started working, she noted hives on her forearms and hands. Her symptoms worsened until every direct contact with rats produced hives. Wearing gloves alleviated the problem, but she could not perform her work adequately when wearing them.

The worker then began to suffer episodes of sneezing, nasal discharge, watery eyes and chest tightness. She was transferred to another department, where her symptoms ceased. However, they recurred if she entered a room with rats or where rats had been housed. The worker had positive skin tests to animal dander and to rat hair. She also had elevated antibodies to various rat proteins.

Case 2
A 32-year-old physician had been working on a research project involving rabbits. He had an allergy to cats but not to dust mites or other common allergens. The physician developed progressively worsening nasal congestion and eye irritation. During work with a rabbit, he received an accidental needle stick. Within 15 minutes, the physician noted progressive itching, swelling of the face, hives, throat tightness, and inability to speak. He was admitted to the hospital where he received emergency treatment for anaphylactic shock. His symptoms stabilized over a 5-hour period. Blood samples showed increased antibodies (IgE) to cat dander and rabbit epithelium. The antibodies to rabbit epithelium declined over the 6-month period after he left the job that involved rabbit contact.

People handling animals can reduce the risk of developing allergies by minimizing the exposure to animals and animal products:

- Avoid wearing work clothes home
- Reduce skin contact with animal products such as dander, serum, and urine by wearing gloves, and approved particulate respirators
- Always wash hands after handling animals
- Keep cages and animal areas clean
- Handle rodents under a ventilated hood whenever possible

References:

CAR News

The Committee on Animal Research (CAR) is pleased to announce that Dick Morrish, D.V.M. has agreed to serve on the CAR staff as a consultant. Many of you will remember Dick from his past years of service as a veterinarian in the Animal Care Facility (Laboratory Animal Resource Center).

Dr. Morrish’s primary contribution to the committee will be to screen all full committee applications for completeness and accuracy before they are included on the CAR agenda. This screening will occur after the investigator has received LARC veterinary consultation for his or her protocol and the protocol has been received in the CAR office. The goal is to be able to facilitate the CAR review and approval process.

You may be contacted by Dick if he has any questions about your submissions and, likewise, you may contact him at (415) 502-4038. His fax number is 502-1347 and his email address is chrtemp@itsa.ucsf.edu. His office hours are Monday and Tuesday from 8:30 AM until 4:30 PM and Wednesdays until noon. His office is located in the CAR Office on the Laurel Heights campus, Suite 315. His campus mail box number is 0962.
When you have finished reading this newsletter, please pass it along to others in your lab.

# 820
Laboratory Animal Resource Center
Box # 0564

Visit Our Web Site At http://www.larc.ucsf.edu

## Technical Notes

### Anesthetics

As you may be aware, methoxyflurane (Metofane) is no longer being manufactured and is not available for purchase. We are currently communicating with specialists in laboratory animal medicine and research to determine appropriate alternatives. Common inhalant anesthetics, such as halothane and isoflurane, produce a lethal concentration of gas at room vapor pressure, therefore they are precluded from use in the same “drop system” manner.

LARC does have several anesthetic machines that utilize a precision vaporizer system and are appropriate for small laboratory animals. One of these units is available for short-term rental. For more information, please contact Linda Brovarney at LARC.

### Updated Contacts Lists

Please make sure your lab personnel have updated the contact sheets that are posted on the doors of animal rooms. These sheets should show current names and phone numbers of the people responsible for your research animals. These names and numbers are vital in case of emergencies and other unforeseen animal health and welfare issues.

### LARC Web Site

The LARC web site has many sections of interest for researchers including species specific information on: normative values, handling and restraint, animal identification, blood collection, injection sites, appropriate volumes and needles of injected material, analgesia, anesthesia, euthanasia and references.

### Special Services

A wide variety of LARC technical and training services are available to investigators on a recharge basis. Among the services we can provide are: medical treatments, blood collection, arterial and venous cannulation, exsanguination, anesthesia and postoperative recovery. We are also available to train investigators and their staff on aspects of animal care and implementation of their research protocols. During the coming year, we are considering expanding our services and would appreciate your feedback on what services might be useful to you. Please contact Linda Brovarney at 476-6311 for further information.

In This Issue:

- AAALAC Accreditation
- Allergies in Animal Handlers
- CAR News
- Technical Notes
- Special Services