GET TO KNOW YOUR PALS!

PATHOLOGY AND LABORATORY SERVICES
AT THE UNIVERSITY OF MICHIGAN

WELCOME TO THE ULAM ANIMAL DIAGNOSTIC LABORATORY!

By Kay-Ann Schuck
Certified Medical Technologist, ULAM

The ULAM Animal Diagnostic Laboratory (ADL) provides a variety of animal specimen testing and result analysis to both veterinarians and biomedical researchers. Kay-Ann Schuck, a certified medical technologist, and Anna Colvig, a research assistant, staff the ADL. F.Claire Hankenson, DVM, MS, board certified in lab animal medicine, provides veterinary oversight for the activities of the lab.

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inside...

More PALS Locales!
2003 Jody C. Ungerleider Memorial Awardee Announced!
NEWSFLASH: Mouse Parvovirus Outbreak!
...Continued from front cover

A typical day in the lab involves performing maintenance on instruments, running quality control specimens, then preparing and running patient samples. The ADL performed over 4,000 diagnostic tests last year and sent out 5,000 serology samples as part of ULAM’s Rodent Health Surveillance program. The tests run in the ADL include the following:

**HEMATOLOGY**

A complete blood count (CBC) is a commonly ordered test used to help distinguish normal and pathological characteristics of blood. Anticoagulated specimens are run through our CDC HemaVet analyzer, which counts white and red blood cells and platelets, and measures RBC indices. The CBC is a helpful diagnostic tool. Variation in the leukocyte count can indicate infection, malignancy, or immunosuppression. Abnormal hemoglobin and hematocrit values may indicate if anemia or dehydration is present. Platelets are an important factor in clotting ability. The instrument automatically measures a five-part white blood cell differential. A manual differential may also be performed on a stained blood smear.

**CHEMISTRY**

Serum chemistry tests are often performed as a baseline functional analysis of a patient or to support a particular clinical diagnosis. Serum samples are tested on our IDEXX VetTest instrument for components in the blood such as glucose, blood urea nitrogen, and creatinine, and the various enzymes, which are indicators of cell and organ damage. The IDEXX VetLyte instrument measures electrolytes.

**SEROLOGY**

Rodent sentinels are placed in the mouse and rat colonies to monitor the health of the animals. Sentinel serum samples are tested for antibodies to viruses that affect the animals’ health and research projects. As part of the rodent health surveillance program, the ADL sorts, dilutes, and ships serology specimens to a reference laboratory for viral antibody assessment. In the near future, a technician will be hired to perform this serology testing within ULAM.

**MICROBIOLOGY**

Diagnostic veterinary microbiology involves the recognition of microorganisms that either cause or are associated with infectious diseases in animals. Samples are first plated to selective agars. Gram stains and spot tests are then used to differentiate types of bacteria. API strip technology is used to identify clinically significant pathogens, and Kirby-Bauer antibiotic susceptibilities assist in the plans for clinical treatment.

**PARASITOLOGY**

Parasites are organisms which require a host for survival, and may range in size from microscopic to over a foot long. Different methodologies are used to find parasites in fecal material, in blood, and on fur. As part of the surveillance program, we check the cecal contents of mice and rats for pinworms, which are rodent parasites that affect certain types of research.

*Continued on page 4...*
SEE! THE NEW NECROPSY FACILITY
HEAR! WHAT PATHOLOGY HAS TO OFFER

WELCOME TO THE NEWLY CONSTRUCTED NECROPSY FACILITY!

By Amanda Pilling
Necropsy Technician, ULAM

As part of the ULAM Comparative Pathology department, the necropsy program functions to provide gross pathology services to research investigators interested in pathological and phenotypic assessment of their animals. Services include complete necropsy and tissue procurement on various species, fixation and perfusion techniques appropriate for specific applications, written and photo documentation of gross findings, and collaboration with the Animal Diagnostic Lab for additional services such as clinical chemistry, microbiology, and serology. We strive to maintain flexibility in our services and to offer an educational environment for the research community.

The newly constructed necropsy facility is comprised of a full-length downdraft dissecting table and an elevating grossing station. The adjoining histology lab enables efficient specimen handling and fast turn-around time. Stop by and see the new facilities, now located on the third floor in the Animal Research Facility (ARF), down the hallway from the UCUCA office, across from the elevator. Hours of operation are Monday-Friday, 7:00 am-4:00 pm. For additional information contact Amanda Pilling by phone at 936-1709 or by email at pilling@umich.edu.

WELCOME TO THE ULAM DEPARTMENT OF PATHOLOGY!

By Paula Arrowsmith
Histotechnologist, ULAM

The ULAM Department of Pathology consists of a newly constructed, state-of-the-art necropsy room, histology room, and office suite. Doctors Erby Wilkinson and Kathryn Eaton head up the department and offer pathological interpretation of tissue slides. Amanda Pilling (necropsy technician) offers animal necropsy and tissue trimming services, and Paula Arrowsmith (histotechnologist) offers the following services: tissue processing and embedding, cutting of blocks to create slides, basic hematoxylin and eosin stain, histochemistry stains (special stains), and immunohistochemistry (IHC) stains.

Our hours of operation are Monday-Friday, 7:30 am-4:00 pm. We are located on the third floor in the Animal Research Facility (ARF), down the hallway from the UCUCA office, near the elevator. You may also find us on the ULAM website listed under Veterinary Services, where you will find a billing form for our services and prices. If you have any questions or would like to contact us, you may do so by emailing us at pilling@umich.edu or sdarrow@umich.edu, or drop by to see our new state-of-the-art facilities and to catch us in person.
Dear Colleagues at the University of Michigan,

We regret to inform you that there has been a multi-room outbreak in our rodent facilities with **Mouse Parvovirus (MPV) infection** over the summer months. Notifications are posted on the affected animal room doors about this contamination. MPV is among the most prevalent infectious pathogens in contemporary research institutions (Besselsen *et al.*, 2000).

MPV **typically causes no clinical symptoms** in infected immunocompetent animals. The concern for investigators with respect to MPV infection is the **impact that infection may have on experimental endpoints**. In general, MPV replicates in mitotically active tissues. MPV infections can alter immune function. CD8+ and CD4+ cell function may be inhibited. Lymphocytes from the spleen and popliteal lymph nodes showed inhibited function in one study (Nicklas *et al.*, 1999). We do not have specific information on how this virus may or may not affect your particular area of study.

This non-enveloped virus is environmentally stable, which increases the risks of environmental persistence and perpetuates spread within and between animal facilities. Important routes of transmission include direct contact with contaminated bedding, food, clothing, or other fomites. Adult, weanling, and neonatal mice are highly susceptible to infection; however, the ability to mount a detectable immune response depends on age of the exposed animal, animal background strain, and viral dose.

MPV has been detected primarily in sentinel mice. In addition, individual mice have been tested as “representatives” from each mouse box that contributed to the positive sentinels’ bedding. ELISA and IFA testing was sent to Charles River Laboratory and many of the individual results were reported to be negative for MPV. However, evidence at other institutions suggests that not all of the animals within a cage will be virus-positive at the same time. Therefore, even though some “representative” animal testing shows only negative test results, there may still be virus-positive animals in the colonies. **Consequently, all mice contributing to the bedding of positive sentinels should be suspected of infection and handled accordingly.**

*Continued on next page...*
NEWSFLASH!
MOUSE PARVOVIRUS OUTBREAK

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CONTROL MEASURES THROUGH ULAM

1. Mouse boxes from MPV-positive rooms will be handled separately from other boxes. **Clidox (chlorine dioxide) is now being used for hood disinfection within the rooms.** Unfortunately, autoclaving every mouse cage is impossible because of the size of our rodent population, the potential affect on per diem rates, and the availability of equipment.

2. If possible, please do not remove mouse cages from SPF-contaminated and all conventional animal rooms. If the animals have to leave the room, they must be transferred to a clean box and the original mouse box must be left in the room (covered with an MI top and on the floor) so that it can be handled appropriately (see #1 above). If you must bring the animals back into the facility, please return the cage to the same space on the rack from which it was taken.

3. **ULAM will pay for the cost of testing individual animals** that are to be moved out of a contaminated MPV-positive room. Animals will be tested if they are moving to another animal room or if they are being transferred to another investigator. We will test all animals to be moved, regardless of whether the animals come from the rack that tested positive or from another rack in the room that tested negative.

4. Animals that are from MPV-positive rooms that need to be transferred to another institution will be tested individually for MPV prior to shipment. The serological test involves the collection of 150 microliters of blood for submission to Charles River Laboratories. The blood samples can be drawn and submitted by your lab staff or by ULAM veterinary technicians. **ULAM will assume the cost of testing animals** that must be shipped to other institutions, with the presumption that any test-positive animals will be culled from our facility or handled as positive by the receiving institution.

5. When possible, newly-arriving animals will be placed into temporary housing according to campus area. In some overcrowded areas, new animals may be placed into known-contaminated rooms. Breeding animals from contaminated rooms will have litters weaned into other MPV-contaminated rooms if space becomes limited or overcrowded in the initial MPV-positive room. Please contact the area supervisor with further questions.

6. One of the most effective means to prevent the spread of MPV and other rodent viruses is **strict adherence to microisolator techniques.** Research personnel should reevaluate microisolator techniques being practiced by all laboratory members. **Please arrange to have the entire lab group that works with rodents be retrained on microisolator techniques.** Classes are offered through ULAM and can be arranged by contacting Julie Giordano at 5-4491 (Specify “microisolator retraining”). Microisolator techniques retraining classes have been modified to 30 minutes to focus on the most important training points.

7. Another critical method to prevent the spread of MPV and other contaminants is to **carefully follow SPF animal-handling procedures within your laboratory space** for animal work outside of the facility room. **ALCOHOL WILL NOT KILL MPV; PLEASE USE A BLEACH-DERIVATIVE TO DISINFECT LABORATORY WORK AREAS.** In addition, traffic flow within the facilities should be followed so that only the clean animal rooms are entered first, followed by the rooms with known contaminations.

8. ULAM faculty and staff completed the series of “Town Hall Meetings” that were held at the Medical School for investigators that use rodents for biomedical research purposes. These presentations were developed to address the questions and concerns that have arisen subsequent to the contamination with MPV in the animal facilities on campus. The sessions were very well attended, with rooms at capacity for each session.

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ULAM CLASSIFICATION GUIDELINE FOR MPV CONTAMINATIONS

We have devised a room classification scheme to guide us through the process:

- **RED ROOM**: Denotes a room that has known MPV-positive animals confirmed by positive sentinel animals; if animals must leave this room, they will be individually tested;
- **YELLOW ROOM**: Denotes a room from which the known MPV-positive animals have been culled or removed, and the room has undergone a complete disinfection of walls, floors, and equipment, along with a full change-out of all rodent boxes; confirmatory surveillance is pending;
- **GREEN ROOM**: Denotes a room from which the known MPV-positive animals have been culled or removed, and the room has undergone a complete disinfection of walls, floors, and equipment, along with a full change-out of all rodent boxes; confirmatory surveillance is negative for MPV. Rooms that have never been positive also fall into this category.

Animal rooms will move from **RED** to **YELLOW** to **GREEN** (or cleared) status as we manage and contain this outbreak.

TESTING & ERADICATION OPTIONS

The recommended method for elimination of MPV is to test mice in the colony and eliminate animals that test positive. Testing for parvovirus relies heavily on serologic detection of antiviral antibodies in the host. Using a combination of ELISA and IFA, seropositive animals can be detected, although detection can be affected by age, strain and viral dose given to mice (Besselsen et al., 2000).

1. Our current method of detection is to serologically test individual mice for MPV and cull MPV positive mice. Serum samples are tested by ULAM staff using ELISA plates from Charles River Diagnostics for parvoviral analysis. The blood samples can be drawn and submitted by your staff or by the ULAM veterinary technicians. **Mice that test positive for MPV should be culled from the colony.**
2. A second option is rederivation of your mice through cesarean section or embryo transfer by the Transgenic Core. Arrangements will have to be made by your laboratory directly with the Core facility.
3. A third option is depopulation of suspected positive animals (if individual testing is not performed) and replacement with clean mice into the colony. This option is typically NOT employed, nor is it recommended by ULAM, unless the infected population involves very small numbers of animals.

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NEWSFLASH!
MOUSE PARVOVIRUS OUTBREAK

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LONG-TERM GOALS

Over the next few years, our hope is to reduce animal traffic flow into and out of the barrier housing areas (Buhl, MSRB I/Annex, CCGCB, KAF and the facilities under construction). Once animals leave our facility, it is extremely difficult to monitor and control the potential spread of rodent pathogens (including MPV, MHV, EDIM, and pinworm).

To diminish “traffic problems,” lab groups that can do procedures within the animal housing room will be allowed to keep the necessary equipment in the room. Groups will be expected to sign up for available time in the flow hood to perform procedures. In the future, we hope to create more procedure rooms to allow animal research procedures to be done entirely within the animal facilities.

We appreciate your patience as we work to control the current contaminations in our facilities. As an institution, UM is not alone in dealing with these sporadic and seemingly “random” MPV outbreaks. This pathogen continues to be a subject of much discussion nationally in our field, in an attempt to determine the significance of MPV on research outcomes and animal health. Please feel free to consult with ULAM veterinary and husbandry staff with any questions you have regarding this contamination. Questions regarding sample submission should be directed to our Serology Laboratory at 6-1709. To schedule blood drawing with a veterinary technician, please call 6-1037. For information on new arrivals and relevant housing arrangements/procedures, please contact the facility area supervisors.

Sincerest regards,
ULAM Clinical Faculty (Drs. Colby, Dysko, Hankenson, & Rush)
Veterinary Residents (Drs. Kempa & Taylor)

REFERENCES

AN INFORMATIVE INTRODUCTION TO THE ULAM VET TECHS’ OFFICE

By Lori Roberts
Veterinary Technician, ULAM

Hello from the ULAM Veterinary Technicians’ Office!

Have you ever wondered who put that green acetate on your animal cage card? That would be the friendly veterinary technician for your area. Our main function is to assist the Unit in providing the best possible medical attention for all laboratory animal species. There are six of us, each with specified areas of responsibility. Our “areas” are divided both by job description and geographic location. Presently, they are broken down as follows:

- Tim Buck—Medical Science Buildings I and II; Large Animal Receiving, Dock 2A
- Cherie Chang—MSRB SPF Rodent Barrier Facility
- Patty McPhail—Kresge/KAF Complex
- Missi Rogers—Nude Mouse Facility; SPF Rabbits; Cancer/Geriatrics Center
- Amy Saski—Outer Buildings (North Ingalls Building, College of Pharmacy, East Hall, Dental School, School of Public Health, Kellogg, and Chemistry Building)
- Lori Roberts—Veterinary Technician Supervisor

Anyone can report an animal related issue to us and we will assist him or her in providing the best appropriate care for the animals. To report an animal health or medical issue, you can do one of the following:

- Write an Animal Treatment Report (ATR) and give it to the husbandry technician or supervisor. ATRs are normally kept in the husbandry supply box in the animal room.
- Inform your husbandry technician and he or she will make the report to us.
- Call our office at 936-1037 and we will establish an ATR.

After observing the reported animal, the vet tech will determine if a veterinarian should be involved in the case. If it is decided that further action or treatment is needed, the vet staff will contact the research lab to discuss the best course of action. So, when you see the green acetate you will know that the vet tech for your area is monitoring your valuable research animal, and will contact you if conditions warrant it.

In addition to medical assistance, we offer a wide range of technical assistance. Our fee for technical assistance is $38.50 per hour, which can be broken down into 15-minute increments (i.e., if a job takes 15 minutes, the cost to the investigator would be $9.62).

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AN INFORMATIVE INTRODUCTION
TO THE ULAM VET TECHS’ OFFICE

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Some of the common procedures we perform include the following:

- Rodent bleeding — saphenous and retro-orbital sinus techniques
- Various injection techniques for all lab animal species
- Rabbit immunization, bleeding, and exsanguination
- Rodent ear tagging
- Rodent tumor scoring
- Surgical support
- Monitoring of anesthesia and post-operative care
- Euthanasia
- Radiography
- Treatment of existing medical conditions
- Weekend and holiday medical care

We also maintain and lease rodent anesthesia machines which come fully supplied and ready for use for $37.14 per hour. If you would like to schedule some technical assistance or rent a machine, just call the office or stop in. We prefer a few days notice to ensure that we can accommodate you.

The Vet Techs’ Office is open 365 days a year to supply the researcher and the husbandry staff with medical support and a connection to the veterinary residents and faculty. If you have a general question or concern regarding your animals, you can call 936-1037 or visit us in our new office at 2614B Med Sci. Our new office is located just around the corner from our old office, for those of you who have visited us before. We will be happy to hear your concerns and if we can’t help you, we will direct you to someone who can.

CHRISTMAS HOLIDAY ANIMAL ORDERING SCHEDULE

Due to the Christmas holiday, there will be NO ANIMAL DELIVERIES on Wednesday, December 24, 2003 through Friday, January 2, 2004. The ULAM office will close at 5:00 pm on Wednesday, December 24 and reopen at 8:00 am on Friday, January 2.

It will be necessary for Animal Purchase Requests to be dropped off earlier. Jackson orders scheduled to arrive on Monday, December 22 and Monday, January 5 are due in the ULAM office by 11:00 am on Monday, December 15. All other animal orders scheduled to arrive on Monday, December 22 and Monday, January 5 are due in the ULAM office by 11:00 am on Tuesday, December 16. Animal orders to be delivered December 23, January 6, and January 7 are due in the ULAM office by 11:00 am on Wednesday, December 17.

This deadline has been established in order to meet and ensure all animal order requests. Failure to meet the above deadlines will delay the arrival of your order. All animal orders received after 11:00 am of the deadline day will be placed for the subsequent scheduled delivery date. ULAM will not accept any late orders. Please notify your lab personnel of the above changes. Feel free to contact the ULAM office at 4-0277 if you have any questions.
MOVIN’ ON UP: NEW ASSISTANT MANAGER OF HUSBANDRYY SERVICES, CHRIS KATZ!

By Linda Stegmeyer
Contributing Editor, ULAM

Chris Katz leans back in his chair and stretches his legs out in front of him. Never interviewed for The Backbone before (okay, so it’s not The New York Times), he shows no sign of nervousness or trepidation. On the contrary, he is completely at ease. L.A.’d back, as unflappable and imperturbable as ever. It is a trait he is well known for.

Chris began his career with ULAM in 1996 as an animal technician. In less than a year he became a temporary supervisor, and then a full-time supervisor. Like Carrie Haist, in July of this year he was promoted to Assistant Manager of Animal Husbandry Services. As a pair, they will assist Manager Valerie Hamlin in running the expanding domain that has come under ULAM care. Chris’ main responsibility and challenge in the coming year will be commissioning and then maintaining animal care oversight at the Life Sciences Institute (LSI).

The LSI project will be his second such project, as he was the supervisor in charge of animal care at the Cancer Center Geriatrics Center when it came online several years ago. That project taught him a lot, and it’s knowledge that will help him now; the area he will soon take charge of is three times as big as the Cancer Center vivarium. Another difference between that commissioning and this one is that Chris has been more greatly involved this time around, and at a much earlier stage. As the end user of a new facility, he has been present at meetings between University administration and the construction crew responsible for meeting specs and meeting deadlines. As the Assistant Manager and supervisor for LSI, Chris will also be a member of the user group inhabiting the new building. The idea of a user group, one that will consist of medical researchers, vendors, University administration, and ULAM administration, is an innovation of LSI Director of Operations, Jim Alford. This group will meet to make facility decisions together, a process that should result in greater information sharing and participant buy-in.

The immediate challenge facing Chris is time. The new facility has an October 15 deadline, at which time animals must be moved in. Together with a select group of ULAM animal care technicians, he will be the first to take those initial steps. The stress of such responsibility would wear on most people, but, as I’ve said, Chris Katz is cool under pressure. He has enough experience to know when to be concerned, how to problem-solve, and how to make decisions. When I asked him how he handles stress, he smiles and says, “One day at a time.” His 70-mile commute is ample time to de-stress, he adds, and when he puts the car in park, he’s ready to be with his family. And they’re waiting for him: wife Hannah, and sons Christopher, Matthew, and Adam. Also waiting are the 40 head of beef cattle and 800 acres that he and his uncles farm together. If he isn’t relaxed by the time he’s done with his farm work, he still has the rest of the evening to put his feet up. And then he starts it all again.

HAPPY HALLOWEEN FROM THE BACKBOONE!
MOVIN’ ON UP: NEW ASSISTANT MANAGER OF HUSBANDRY SERVICES, CARRIE HAIST!

By Linda Stegmeyer
Contributing Editor, ULAM

Carrie Haist (pronounce it Heist) sits among the empty boxes in her new office and waits for the questions to begin. While the room still bears the chaos of the move-in, Carrie herself is calm, smiling. Recently promoted to Assistant Manager of Animal Husbandry Services (the reason for our interview), she leans forward in anticipation, moving objects out of her way so she can speak to me directly. I’m not surprised: motion is her element, finding paths is her story.

Before coming to ULAM, Carrie found herself in jobs that were promising but that she quickly outgrew. Frustrated by the lack of challenge and potential in her past positions, she came to ULAM in 1997 as an animal technician, not knowing what to expect but hoping for the best. To her surprise, she discovered that the job and the people here created an environment where she could thrive and grow. It wasn’t long before she was promoted to the position of temporary supervisor. With the future before her and a clear path to follow, Carrie was ready to move up the administrative ladder. Then she encountered something she hadn’t expected: injury. Working in the animal rooms had left her with tendonitis, and it was not going to go away if she continued working as an animal technician. This injury could have meant the end of her career in animal science, but instead, it forced Carrie and those around her to look at her other skills to see if there was another place for her on staff. There was. She found herself at the beginning of what is now a smoothly running training program for new animal technicians and medical school staff. When the opening for the Assistant Manager of Animal Husbandry Services came along, Carrie was supervisor of this training team. She hadn’t been looking for another position to move into, but there it was, and it called to her.

In July 2003, both Carrie and fellow ULAM supervisor, Chris Katz, were promoted to Assistant Manager positions. The tremendous growth that the Life Sciences and Basic Sciences buildings promise will require the attention of two assistant managers, and each of them will take on special duties. For Carrie, those duties will rely heavily on her team-building and people skills. Her initial challenge will be in moving from her small, cohesive training team unit, to a position that could involve her with all 70+ members of the husbandry staff. Her role will make her advisor to many, disciplinarian to some, and highly visible to all. She will be responsible for the Medical Science and MSRB complexes, for ARF, Buhl, and CCGC. She will have to remember what it is to be the supervisor of animal technicians, as well as what it takes to keep the facility running, things she hasn’t done since becoming a trainer. Surely Carrie can be forgiven for using the word “mountain” when explaining what she sees in her immediate vision!

However, she also sees reward on the other side of that mountain. That reward looks like a strong, cohesive staff and management team. It resembles animal technicians who find contentment, no matter how long they plan to stay. It looks just like job satisfaction and professional growth for those staff members who plan to stay long. Carrie wants to know that she will make a difference in the lives of those people who spend their lives in the service of animal care. With her gift of empathy and her highly developed listening skills, Carrie will build trust between herself and the staff to whom she now answers.

That’s for now. Of course, there will be more to come. Carrie Haist doesn’t know what’s coming next; she only knows that someday there will be a next. She is, after all, in her element when she is moving. But for now she’s content to be still. She and her husband, Greg, are building a home, which they’ll share with their 90-lb. Shepherd mix, Bo, and outside of what her new position presents her, that is challenge enough.
THERE AND BACK AGAIN: 
THE TALE OF DR. RAIMON DURAN-STRUUCK

By Stephanie Henry  
Contributing Editor, ULAM

The Unit for Laboratory Medicine has attracted an exotic creature. Some of you may have noticed this creature roaming our halls the past few months. And some of you may have already become familiar with him.

A few days ago, I was given the assignment to track this strange creature and become familiar with him. I was able to spend some time with the creature, who calls himself Raimon. He told me a little about himself. I was very fascinated and asked if I might visit him again. He was willing to do so.

On our next visit, I brought with me a pen and some paper. This concerned Raimon at first, but I assured him that there was nothing to worry about. Raimon told me that he came from the land of Spain, but was in fact born in New York City while his father worked on his post-doctorate degree. Both of Raimon’s parents are Spanish and they returned to Spain when he was four. He remained in Spain until he was eighteen. Then, his father was offered a job in Boston and shortly thereafter the family joined him. Raimon took this opportunity to attend Tufts University and study biochemistry. He achieved a bachelor’s degree and continued on to veterinary school. Being a bit of an odd creature himself, he has always been fond of animals and taking care of them.

During his summers at college, he worked at the New England Zoo and Biokit, a research facility. Upon completion of veterinary school, he moved to Florida to do his internship in internal medicine and surgery at the Florida Veterinary Specialist and Cancer Treatment Center. There he worked in internal medicine and surgery.

This brings us to the University of Michigan. The University of Michigan has a good reputation and he wanted to be a part of that. Raimon took a tour of our facilities and liked the program. He found that the people were very nice and made him feel comfortable. Raimon started with ULAM in July of this year.

A typical day for Raimon begins between 7:00 am and 8:00 am. He checks his e-mail, participates in seminars, attends to his calls, handles emergencies, and finishes with necropsies. The day ends around 7:00 pm or 8:00 pm when he finishes his reports. It is a very long day, but Raimon likes to serve animals. He wants to make a difference.

Raimon misses his parents and sister, Patricia, who are back in Spain. But he has his half-Vietnamese, half-Swiss girlfriend, Xuan-Mai, and his cat, Pea, to keep him company. Outside of work, he stays busy reading, cooking and engaging in athletic activities. He also enjoys wine and wine tasting.

So, what should you do if you run into this creature? Ask him about his experiences in the Dominican Republic and Africa. Ask why the wildebeest is his favorite animal. Talk with him about sailing. Have him cook you a meal. Or sit down and enjoy a nice glass of wine. Whatever you do, do not let this amazing creature escape your detection!

Let me be the first to say, “Welcome, Raimon!” 🐶
2003 UNGERLEIDER AWARD NEWS
AND THE WINNER IS...SHELLY YAKICH!

By Terry Fracala
Administrator for the Ungerleider Award Committee

Shelly Yakich, Staff Trainer in the Unit for Laboratory Animal Medicine, was selected to receive the 2003 Jody C. Ungerleider Memorial Award. Amongst several highly qualified and well deserving individuals, Shelly was selected for her outstanding contributions to the humane care and use of laboratory animals. Ms. Yakich has been involved in the humane care of animals for 22 years. Shelly works directly with new employees, teaching them how to provide the best care for the research animals and is continuously working to advance and update operating procedures for the care of those animals.

A quote from a letter supporting her nomination best describes Shelly’s contributions to animal welfare: “Shelly not only does a great job training new employees on how to do their jobs, but also instills compassion for the animals as well. Shelly will never compromise on the humane care of animals.”

A similar quote from a colleague and nominator demonstrates her impact on attitudes and standards toward providing humane animal use: “… You could ask anyone who knows Shelly what her number one priority is and they would say, ‘the animals.’”

The Jody C. Ungerleider Memorial Award was established in 1983 after the untimely death of Jody Ungerleider, a Research Assistant for the University of Michigan. Jody believed profoundly that the humane care and welfare of all animals used in research should be one of the highest priorities of those involved in biological experimentation. The purpose of the Ungerleider Award is to recognize individuals within the University of Michigan whose activities and attitudes toward the use of laboratory animals in research are consistent with those high standards. A quote from a nominator ascertains the honor in receiving this distinguished award: “There are certainly many fine technicians vying for this award … I believe that no one deserves this award more than Shelly Yakich. She has won it with her heart and her hands, which she has given to the care of the animals. In all sincerity … consider her the best candidate for this award.”

Shelly will be honored by members of the UM animal research community at an award ceremony on November 21, 2003. She will receive an individual plaque and a cash award of $200. Her name will also be engraved on a “traveling” departmental plaque, which will be put on display in ULAM during the next year.

CONGRATULATIONS, SHELLY!
BONE FRAGMENTS

### UPCOMING ANIMAL CARE & USE TRAINING CLASSES

#### ANIMAL CARE & USE ORIENTATION

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#### INTRODUCTION TO LABORATORY RATS & MICE

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#### LABORATORY MOUSE TECHNIQUES 101

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#### LABORATORY RAT TECHNIQUES 101

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#### TRAINING IN SURVIVAL SURGERY

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#### MICRO-ISOLATION CAGE TECHNIQUES FOR SPF ANIMALS

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### ANIMAL CONCERN HOTLINE: (734) 763-8028

The University of Michigan is strongly committed to the humane care and use of animals in research. The Animal Concern Hotline (763-8028) provides a mechanism for U-M staff members and the public at large to report any matter of concern about humane aspects of laboratory animal care and use. The University Committee on Use and Care of Animals (UCUCA) will promptly investigate any report submitted and will maintain confidentiality, within University guidelines, regarding the source of information it receives.

**IF YOU SEE ANYTHING THAT TROUBLES YOU, PLEASE DO NOT HESITATE TO CALL!**

### PAWS FOR THOUGHT

“A behaviorist is someone who pulls habits out of rats.”
—Anonymous

“Never regard study as a duty, but as the enviable opportunity to learn to know the liberating influence of beauty in the realm of the spirit for your own personal joy and to the profit of the community to which your later work belongs.”
—Albert Einstein

“The most exciting phrase to hear in science, the one that heralds the most discoveries, is not “Eureka!” but “That’s funny…”
—Isaac Asimov

“Organic chemistry is the chemistry of carbon compounds; biochemistry is the study of carbon compounds that crawl.”
—Mike Adams

“Research is the act of going up alleys to see if they are blind.”
—Plutarch
CORRECTION TO PREVIOUS ISSUE OF THE BACKBONE

There is a typo on page 4 of the July 2003 edition of The Backbone, in the “Animal Care Tips: Rodent Anesthesia Recommendations” article, in the third paragraph under “Isoflurane.” The first sentence should read, “For the open-drop technique, 300 μl [NOT 300 ml] of isoflurane is put on a cotton ball, which is then placed in a 500 ml jar.”

UCUCA ON THE WEB

Visit http:\www.ulam.umich.edu\UCUCA, where you can:

✦ Download animal use forms, including application form 8225!
✦ View the training schedule!
✦ Register for training classes!
✦ Read information on animal use regulations!
✦ Find links to other sites of interest!

GOT FEEDBACK?

Do you have questions, comments, corrections, or suggestions about The Backbone? Is there a topic you would like to see covered in a future issue? We want to hear from you! Email us at UCUCA.office@umich.edu or call (734) 763-8028 and tell us about it!

BRING NOTORIETY TO YOUR LAB!! NOMINATE SOMEONE FOR THE UNGERLEIDER AWARD!

Nominate your staff member or student for the 2004 Jody C. Ungerleider Memorial Award who has made an outstanding contribution to the humane care and treatment of animals used in biomedical experimentation!

Nominees should meet one or more of the following criteria:

1. The nominees should demonstrate through their actions concern and compassion for laboratory animals and be advocates for the welfare of animals involved in laboratory research.
2. The nominees should have made specific research contributions that improve the humane use and treatment of laboratory animals.
3. The nominees should have made specific research contributions to the education of students, researchers, animal handlers, and/or the general public with respect to biological research using laboratory animals in particular.

Mark your calendars...February 2004 send your nomination packet to:
The Office of the Vice President for Research
4080 Fleming Building, Box 1340
Please complete and return to the University Committee on Use and Care of Animals (UCUCA).

Name ______________________________

Department ______________________________

Telephone ______________________________ Fax ______________________________ Address ______________________________

Principal Investigator ______________________________

E-mail Address ______________________________

Topics/areas of interest you would like to see explored in future issues: ______________________________

☐ Add my name to your mailing list.

☐ Send me _____ additional copies of The Backbone (Month/Year).

University of Michigan
University Committee on Use and Care of Animals (UCUCA)
3502 ARF 0614
763-8028 (Telephone)  936-3234 (FAX)
ucuca.office@umich.edu (e-mail)