



In this Issue...

[Message from
IACUC Chair](#)

[System Upgrade](#)

[Training and
Certifications](#)

[Researcher
Spotlight](#)

[Message from
Attending
Veterinarian](#)

[Featured Core](#)

[New Faces of CMR](#)

[Upcoming Events](#)

[Games Corner](#)

[Contact Us](#)

Dear Faculty and Animal Care Staff,

We are very excited to introduce Animal Care's first newsletter as a way of communication and disseminating important departmental information to our research community. This platform will be used to not only inform on what is happening within Animal Care units but also provide new and current faculty highlights with their animal model and research focus. In the newsletter, we also aim to feature our core facilities, what they have to offer, provide updates on IACUC policies, inform the community of upcoming events/training and finally keep you well-informed on veterinary and husbandry happenings.

If you would like to contribute to this newsletter or have feedback, we would love to hear from you. Please reach out to us at: ruac@ored.rutgers.edu

Dr. Jeetendra Eswaraka
Associate Vice President
Rutgers University Animal Care

Message from IACUC Chair

Dear Colleagues,

The IACUC Policy Handbook has been completely revised over the past year by a committee of IACUC veterinarians and A major goal of this revision was to harmonize policies for animal use across

Therefore, this committee was carefully selected in order to represent all of the Rutgers units using animals in research. As a result, new policies were created and substantial changes made to existing policies. We believe that this has produced an improved and more "user friendly" policy handbook that will be a valuable reference for writing animal protocols as well as for understanding university guidelines. Some of the substantial changes and new policies of broad interest are summarized below. However, it is strongly recommended that all animal users read the specific policies which pertain to procedures in their protocols.



scientists.

Rutgers.

Important changes to the policy handbook include:

- A section of "Rutgers Standards" which define the investigators' responsibility with respect to the Policy Handbook
- Substantial changes to Photography and Videography of Laboratory Animals at Rutgers
- Changes to policy by which IACUC reviews protocols
- Defining new category of Veterinary Verification and Consultation" (VVC) and how amendments are processed.
- Addition of new policy, pain categories, to aid PIs in accurately assign pain categories in their protocols.

IACUC policy handbook is available on [eIACUC](#).

Vanessa H. Routh, Ph.D.

Professor

Chair, Newark Institutional Animal Care & Use Committee (IACUC)

System Upgrades

The eIACUC system will be upgraded in February 2020! One of the main goals is to enhance the PI and research team experience.

New features include:

- A left-sided navigation menu to view all protocol sections at once.
- No more pop-up windows. These will be replaced with slide-in windows which expand and collapse within the browser. This will eliminate work lost due to unsaved or hidden pop-up windows.
- Reviewer notes will be located within the protocol page, next to the question/concern.
- The navigation menu will also depict the sections with reviewer notes, including the number of reviewer notes. All reviewer notes will be threaded discussions, in the event there are follow-up questions/concerns.
- Printing capabilities will be updated.

Additional communications will be provided closer to the upgrade.

Kelly Albanese,

Training and Compliance Administrator

IACUC Office

Training and Certifications



Course Registration System (CRS)

You can now register for hands-on training and lectures on the new [Course Registration System](#).

Simply log onto the [eIACUC](#), and click on Course Registration System Newark campus, on left and register for a course. Course currently available

include: Rodent Anesthesia & Analgesia, Rodent Aseptic Technique, Introduction to Mice & Rats, Basic Procedures for Mice and Rat, and Euthanasia.

Some courses are available upon request, please email cmrtraining@rutgers.edu or Tracy Davis at davista@ored.rutgers.edu for any inquiries.

Course	Description	Frequency
Advanced Procedures	Tail vein injections and blood collection	Available upon request
Euthanasia Training: hands on	Humane methods to euthanize with carbon dioxide and how to confirm euthanasia. Physical methods	Monthly
Euthanasia Training: Lecture	Covers euthanasia concepts, regulations and the AVMA guidelines	Monthly
Intro to Mice	How to work with mice. Census sheets, cage cards, and transporting of animals on campus and discussion of our rodent health monitoring program. Demonstrations of sexing, handling and restraint of live mice.	Available upon request
Basic Procedures	Injections (IP, SQ), blood collection (retro orbital; submandibular, terminal cardiac) and gavage.	Available upon request

IACUC Mandated Rodent Survival Surgery Training and Certification

Do You Want to Improve Your Surgical Skills & Minimize Post-operative Complications?

The IACUC has mandated a new training program on the Newark campus in hopes of improving the standards of care and reducing non-compliance in animal users performing survival surgeries in mice and rats. This mandate was in response to a recent triennial AAALAC (Association for the Assessment and Accreditation of Laboratory Animal Care) inspection in regards to implementing a more robust training program specifically targeting rodent users.

Where can I find the 4 AALAS courses to complete?

1. Log on to eIACUC and click "Animal Orientation"
2. This will direct you to AALAS learning library
3. Click on "libraries" then "animal care and use"
4. Click on "anesthesia, analgesia and surgery" tab to see the modules
5. Complete the 4 courses and save your certificates

There are a series of requirements that must be met by ALL labs performing survival surgeries in mice and rats on the Newark campus. We strongly encourage everyone to complete all the steps as soon as possible to improve competency for your research staff in rodent survival surgeries.

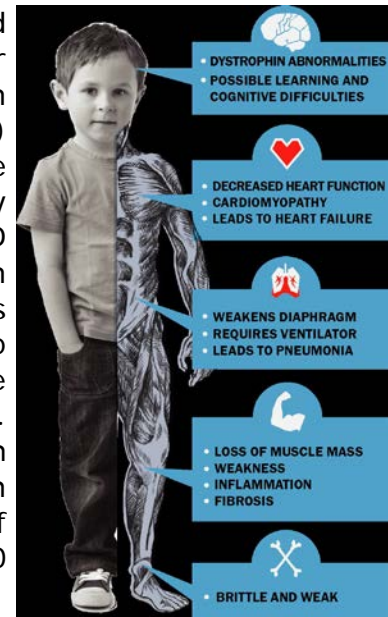
1. Complete 4 online courses in the AALAS Learning Library through [eIACUC](#).
 - a. Pain management in Laboratory Animals
 - b. Aseptic Technique for Rodent Surgery
 - c. Inhalation Anesthesia Systems for Rodents
 - d. Post Procedure Care of mice and Rats: Minimizing Pain
2. Register on [ORED Course Registration System](#) for two in-person lectures
 - a. Anesthesia and Analgesia in Rodents
 - b. Aseptic Technique & Suture competency
3. Once the above requirements are met, complete a veterinary observation with Dr. LaTisha Moody or Dr. Peter Condobery to observe a surgery or multiple common surgeries being conducted in your lab and they will provide any needed advice or training to improve competency & certify your lab.

Tracy Davis
Training Coordinator

Researchers SPOTLIGHT

An interview with Dr. Cristi Galindo on the Study of Duchene Muscular Dystrophy

Dr. Galindo is a new principle investigator who recently joined the Rutgers University Newark family this year after transferring from Vanderbilt University. Dr. Galindo grew up in the town of Lubbock, Texas (the hometown of Buddy Holly) and attended the University of Texas Arlington Honors College where she received her Bachelor of Science degree in Biology and a Minor Degree in Chemistry. She later received her PhD in microbiology & immunology at the University of Texas in Galveston. She did her first post-doc at the University of Texas Southwestern in the computational biology laboratory of Skipp Garner and did her second post-doc at Vanderbilt in the cardiovascular department as a research assistant professor. It was her interest in the area of cardiovascular research which lead her to relocating to New Jersey to work more closely with Dr. Stephen Vatner, who is an expert in the field of cardiovascular physiology and has written over 400 publications in the field.



Dr. Cristi Galindo's recent project includes the study of Duchenne Muscular dystrophy, the study of heart protective biomarkers and possible treatments using brain derived neurotrophic (BDN) treatments in the drinking water of highly sensitive strains of mice. Duchenne muscular dystrophy is a recessive x-linked genetic disorder cause by the alterations of dystrophin protein which affects 1 out of 3,500-5,000 males resulting in muscle weakness eventually leaving 90% of affected patients in wheelchairs by the age of 15. In hopes of supplementing endogenous proteins to slow the progression of the disease, she hopes to better understand the mechanisms behind Duchenne related heart failure which have not been investigated thoroughly. Dr. Galindo will be presenting a poster on her research at the next American Heart Association (AHA) Conference in Philadelphia in mid-November.

LaTisha Moody, DVM
Clinical Veterinarian
Comparative Medicine Resources

Image: <https://www.cureduchenne.org/duchenne-imapct-image/>

Message from Attending Veterinarian



New Euthanasia Cards:

Purple euthanasia cards will be made available to labs after 11/11/19.

This will enable CMR to better track animals labeled

CMR requests all animal users to:

- Leave the cages to be euthanized in their original location on the rack but MUST identify them with completed euthanasia card including initial and date in front of the original cage card/s
- The animals should be in their home cage and cannot be consolidated into a euthanasia cage to prevent overcrowding and fighting

These measures will ensure the animals have adequate access to food and water until they are humanely euthanized by CMR staff and provides critical information such as PI name and room # for proper identification.

Please reach out to facility supervisors to request euthanasia cards if you need them. These cards will be made available inside animal holding rooms.

Dr. Sumanth Kumar Putta BVSc, MS, PhD, DACLAM, CPIA
Director of Veterinary Services, Comparative Medicine Resources (CMR)



New Rodent Traffic Flow coming soon to a Vivarium Near You

Rooms of a similar pathogen status will be grouped in zones for entry room order. New signage will be color coded & posted on each room designating the appropriate order of entry to ensure everyone enters cleanest rooms first. This will be implemented by the end of 2019 in all vivariums in MSB, Cancer Center & Aidekman. Please contact the supervisor for any additional questions.



What Happened to the Nestlets?

CMR is switching over to the use of Enviropaks. They are pre-assembled pouches made of a combination of Nest-paks and Enviro Dri which is made from FDA approved crinkle paper for mice to build nests. Unlike traditional nestlets & cotton squares, the Enviropak products are dust free which virtually eliminates ocular irritation, respiratory issues, and limb entanglement which have been previously reported with the use of nestlet material. The Enviropaks are available in natural or white grade and can be irradiated or autoclaved upon request.

Featured Core



Allentown: SPP cage holds up to 48 cages



Allentown SC Biosafety Cabinet Plus

Did You Know We Have a Germ Free Facility in MSB?

What are germ free or axenic mice? They are mice that are free from all foreign life forms apart from itself, including bacteria, viruses, fungi, protozoa and other parasitic life forms. These animals are used to study the host response to the microbiome, which is defined as a collective genome of the host's microorganisms. By colonizing the mice with known microbes (e.g. gnotobiotic animal) one can investigate the host's response and study the immunological response, metabolism and resistance to other pathogens.

Did you know that Rutgers University's very first gnotobiotic facility opened earlier this year in 2019 on the Newark campus?! It is an exciting time for this new core and the Comparative Medicine Resources has been working on building and expanding the program. Traditional germ free work was performed in rigid or flexible-film isolators, however the gnotobiotic core has utilized the latest caging system technology provided by Allentown Sealed Positive Pressure (SPP) cages which act as micro-isolators with double HEPA filtration to maintain the animals in a sterile environment. There was a pilot study performed which proved that germ free mice could be maintained sterile for up to 9 months. There is also a specialized transfer chamber attached to the biosafety cabinet to aseptically remove animals from their cages.

Services Offered in Gnotobiotic Core:

1. Provide germ free B6 strain mice for purchase in 2020
2. Re-derive specific mouse lines into germ free
3. Providing hands on training for handling mice aseptically and other technical procedures (e.g. oral gavage)

For any questions regarding the gnotobiotic facility please contact:

Amanda Bumber at: abumber@ored.rutgers.edu 973-972-9231

Dr. LaTisha Moody at: lvm34@ored.rutgers.edu 973-972-8828

New Allentown NexGen Racks: More Space in the Same Room

MSB - Things are moving forward transitioning caging from numerous cumbersome types to just a single standard type of caging in the MSB vivarium. On October 23rd of this year, twelve NexGen Allentown racks were received at MSB to meet the ever increasing demand for more animal cage space. Processing of the racks and implementation is almost complete in MSB. By 11/11/19, all ACS pie shaped cages will be removed from circulation in MSB. 90% of the ACS 56 cage units will also be replaced by the end of the November. The Allentown rack systems are equipped with automatic water or with optional water bottles (must request). All animals during the new rack system transition will be placed on hydrogels until animals are observed to be drinking from the automatic watering lixit system.

Cancer Center - On November 1st a demo rack from Allentown was delivered to the Cancer Center. The demo rack is their new NexGen Max which holds 192 cages per rack! Even with the increased capacity the cage size allows for the same cage density of our current cage system. This rack will be placed in room I1115 to be evaluated. We encourage CC users to check out the new rack system while we are testing it.

Lisa Antonucci
Facility Manager

New Faces of CMR

Please Welcome...



Lisa Antonucci - Manager of Operations. Lisa comes to us with experience of working in the field of laboratory animal science for over 35 years. Lisa's office will be in the MSB vivarium and she can be reached at antonuli@ored.rutgers.edu.



LaTisha Moody DVM - Clinical Veterinarian. Dr. Moody has over 5 years of laboratory animal experience and recently published her first peer-reviewed scientific paper. Dr. Moody's office is in the MSB A600 level and she can be reached at lvm34@ored.rutgers.edu



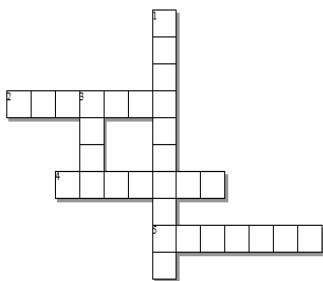
Leslie Anglin - Veterinary Technician. Leslie is a Rutgers University alumni with a Bachelor's of Science in Laboratory Animal Science. Leslie's office is in the MSB vivarium next to Lisa and can be reached at langlin@ored.rutgers.edu.

Upcoming Events

February 2-8, 2020: [2020 International Laboratory Animal Technician Week](#)



Game Corner



Crossword puzzle key:
Across 2 – insulin, 4 – rabbits, 5 – leprosy
Down 1 – chinchilla, 3 – ulna

Across:	Down:
2 - Give this for diabetes	1 - Animal is big in S. America, originates from the Andean mountains
4 - Multiple <i>Oryctolagus cuniculi</i>	3 - A bone
5 - Armadillos are a model for this human disease	

Contact Us!

- Have any exciting research-related news or events you want to share?
- Do you have feedback? We would love to hear from you!



Send us a message at: ruac@ored.rutgers.edu