Center for Comparative Medicine (CCM)
A Historical Look

• What is ‘comparative medicine’?
  – “is a distinct discipline of experimental medicine that uses animal models of human and animal disease in translational and biomedical research.”
• At its most basic level, it is the study of animals to learn more about humankind
• First chair of comparative medicine was appointed in 1862 in France
• AAALAC, International (Association for Assessment and Accreditation of Laboratory Animal Care) accredited since 1985
• PHS Assurance- receive federal funding
• USDA registration- use USDA covered species in biomedical research
CCM’S Mission

- The service and teaching unit supporting all animal use in research, testing, and education at Northwestern University

- Animals are housed either in centralized facilities or decentralized facilities where CCM provides primary care or in Satellites where primary care and oversight is done by the PI.
Types of Animal Facilities

- **Centralized** - CCM “assigned” and managed space

- **Decentralized** - Typically department “assigned” space but CCM manages animal care

- **Satellite** - Department or PI “assigned” space where PI manages all animal care. Requires IACUC review and approval. PI must justify why use of a satellite is necessary versus animals housed in a CCM managed space. A satellite is defined when rats and mice are kept in the space for greater than 24 hrs and USDA covered species are kept in the space for greater than 12 hrs.
CCM – Units Basic Functions

• Issue monthly bills for animal orders, per diem charges, and any incurred special service charges

• Train research personnel in animal care & experimental procedures

• Provide for the welfare, veterinary and husbandry care of all research animals
  – *Provide access to animal housing areas*

• Work with the IACUC to review and approve Animal Study Protocols (ASPs)
Partnership with the IACUC

• IACUC and CCM veterinarians work together to:
  – Review, approve, and provide assistance with ASPs
  – Perform semi-annual inspections
  – Generate/modify policies
  – Generate/modify training

• New research personnel work with both the IACUC and CCM
How is CCM Organized?

- Veterinary
- Husbandry
- Procurement, Receiving, Census
- Business
- Quality & Training
Veterinary Staff

• Attending veterinarian is a mandatory member of the IACUC committee and all CCM veterinarians review ASPs and provide guidance to researchers

• Provide training on and assistance during study-related procedures

• Manage surgical suites and other facility resources

• Organize quarantine and rodent sentinel programs

• Organize enrichment program for all research animals
  – Implement certain enrichment for USDA-covered species

• Treat animal health problems
Husbandry Staff

- Comprised of Animal Care Technicians (ACTs), Cage Wash Technicians, and their supervisors
- Perform daily checks on every animal housed in CCM facilities
- Report animal health problems to the Veterinary Staff
- Clean, stock, and otherwise maintain CCM facilities
- Work with the Procurement, Receiving, & Census (PRC) Office to capture weekly census of all research animals
PRC Staff

- **Procurement**: Place orders and provide updates on the availability of new research animals

- **Receiving**: Initially receive shipments of animals

- **Census**: Maintain a database tracking all animal housing activities.
  - Per Diem (by the day) charge for every cage, pen and tank housed in facilities.
  - Census is taken on Friday’s with the assistance of Husbandry ACTs

![Barcode Image]

Room: LSB AHR - 359
Sub Room:

- Site: Chicago
- Floor: Lurie SubBasement
- Floor: LSB Corr 4 - 355
Business Staff

• Uses information collected by PRC to bill laboratories on a monthly basis

• Bills are comprised of the following:
  – Research animal procurement costs
  – Per diem costs
  – Fees
  – Special service charges
Quality & Training Staff

- Provide orientation sessions for new research personnel
- Provide training on:
  - Specific pieces of equipment
  - Technical procedures
  - Work in specific areas within the animal facility
- Train new and existing CCM staff members
- Setup security access for anyone entering the vivarium
- Coordinate TB testing for anyone accessing areas with non-human primates
Welcome

The Center for Comparative Medicine (CCM) is the centrally administered animal resource that acts as the service and teaching unit supporting all animal use in research, testing, and education at Northwestern University. Animals used in biomedical research at Northwestern University are housed either in CCM facilities or in facilities administered by academic departments for which CCM provides the primary care and oversight. CCM has been AAALAC (Association for Assessment and Accreditation of Laboratory Animal Care, International) Accredited since 1965 and a member of AALAS (American Association for Laboratory Animal Science) since 1962.

The Spring 2015 issue of CCM Speaks

- Update - RFID Application for Animal Census
- New Features in Chicago’s Containment Suites
- Blood Collection in Mice: Cardiac Puncture
- Pain Management: Buprenorphine HCL vs. Buprenorphine Sustained Release (SR)
- Monthly Satellite Visits
- Chronic Quarantine - Frequently Asked Questions
- The Cost of Caring: Human Emotions in the care of Laboratory Animals
- Did You Know? Biometric Wildcards
- IACUC Policy Release - Working with Human Derived Materials in Rodents
- CCM Office Renovations
- Previous Issues

CCM Business Office News and Announcements

CCM periodically contacts Principal Investigators and their staff with important announcements via email. If you would like to receive these messages, please contact acuc@northwestern.edu.

Archived Announcements are available to those currently listed on an active protocol as well as CCM and IACUC staff.

FY15 Per Diem Rates and Service Charges

Guide to CCM Cage Cards

In our efforts to continually improve communications between the Center for Comparative Medicine (CCM) and laboratory personnel, CCM has developed a “Guide to CCM Cage Cards.” This document prints best on 11 x 14 paper. Poster size versions of this document are also hanging in the Lurie and Pancue animal facilities after July 12, 2012.

Form for Animal Procurement

Remember to send the completed Animal...
Online Resources

• Online training provides easy access to important information
  – Can be viewed as often as one wishes, in a quick but secure fashion
  – Especially convenient for research personnel on the Evanston Campus

• Animal User Manual provides a comprehensive source of information on many different CCM operations
  – Great resource for new PIs and their staff
Online Resources (continued)

• CCM Speaks is a semiannual online newsletter packed with an assortment of useful articles

• Information on and access to CCM’s Rodent Technical Service Unit (RTSU) is also available on the website. The following services are offered currently:
  – Drug Dosing Studies/Compound Administration (Oral, Topical, IV, SC and IP)
  – Blood Collection (Submandibular, Retro-Orbital and Tail Vein)
  – Animal Identification (Ear Tag, Ear Punch or Tail Tattoo)
  – Tail Biopsy
  – Administration of Special Feed or Fluid
  – Weighing of Animals
Questions?