Research Facilities Improvement Program (RFIP) Workshop

National Center for Research Resources

Scientific and Technical Review Board (STRB) Review

Melvin B. Dennis Jr., DVM, DACLAM
Department of Comparative Medicine
School of Medicine
University of Washington
Seattle, WA

NCRR Facilities Infrastructure Support

- C06 Research Facilities Improvement Program
 - All NIH Supported Research Infrastructure Qualifies
 - New Construction and/or Renovation
 - No movable Equipment Purchase Allowed
- G20 Developing & Improving Animal Resources
 - Limited to Renovation of Existing Animal Facilities
 - No New Construction
 - Movable Equipment purchase allowed
 - Won't support teaching equipment or housing nonresearch animals

STRB Review: Overview

- Reviewers:
 - Builders Architects
 - Users Scientists
 - Managers Veterinarians
- Proposals must pass scrutiny of these varying interests
- Review both C06 and G20 applications

STRE Review of C06 Applications: Types of Facilities

- 1. Not supporting animal studies
- 2. Supporting animal based research
- 3. Construction/renovation of animal facilities

STRB Review of C06 Applications: No Animal Studies in Facilities

- Details of animal program not required if:
 - No animals involved in studies
 - No animals in adjacent areas
 - State Clearly & Explicitly
- Animal program data required if:
 - Potential interactions with animal related research
 - Facilities adjacent to animal labs
 - Ingress/egress from animal use areas
- Significance: Occupational Health & Safety

STRB Review of C06 Applications: Facilities Supporting Animal Studies

- Labs benefiting from proposal will use animals
- Full details of animal care & use program required
- Lack of detail here is common administrative oversight
- Attending Veterinarian and IACUC should be involved in writing
- Review criteria for G20 for help program description for C06 is very general due to wider applicant pool

STRB Review of C06 Applications: Animal Facility Construction/Renovation

- Full details of animal care & use program required
- Attending Veterinarian and IACUC should be involved in writing
- Review criteria for G20 for help program description for C06 is very general due to wider applicant pool
- Document facility deficiencies to be corrected
- Document benefits to sponsored research

STRB Review of G20 Applications: Animal Facility Construction/Renovation

- Full details of animal care & use program required
- Attending Veterinarian and IACUC should be involved in writing
- Document facility deficiencies to be corrected
- Document benefits to sponsored research

Review of C06 & G20 Applications Benefits to Research

- Institutions with at least one NIH funded project eligible
 - Does not require large amounts of sponsored research
 - Show how project will facilitate program growth
 - Avoid "Build it and they will come" approach
- Demonstrate benefits to sponsored research that will accrue from proposed construction/renovation
 - Numbers of PHS funded investigators benefiting
 - Identify species used in the studies benefiting
 - \$ value of studies benefiting
 - Expiration dates of research benefiting
- Collaborate with administration to write this section

ANIMAL PROGRAM DESCRIPTION

- Program Oversight
- IACUC Composition & Function
- Attending Veterinarian/Veterinary Care
- Accreditation Status
- Existing and Proposed Facilities
- Animal Care Procedures
- Staff & Training
- Hazard Containment
- Occupational Health
- Security

<u>C06 & G20 Animal Program Description</u> Program Oversight

- Animal Program Management
 - Centralized or decentralized
 - Mgmt of new/renovated facility
- Organizational chart with lines of responsibility
- How compliance is assured

COS & G20 Animal Program Description LACUC Function

- Outline procedures clearly
- Composition list members & categories
- Semiannual facilities inspection & program evaluation
- Review and approval of protocols & changes
- Methods for documenting training
- Methods for assuring compliance
- Methods for investigating concerns

C06 & G20 Animal Program Description Attending Veterinarian

- Full- or Part-Time or Consultant
 - Expertise in species used
 - If part-time, written veterinary care plan required
 - Input required for studies involving pain
- Describe Veterinary Care Program
 - Daily observation
 - Methods to prevent, control, & treat diseases
 - System for evaluation & treatment of sick animals
 - Equipment and facilities

COS & G20 Animal Program Description ALAC Accreditation Status

Accredited Programs:

- Discuss last site visit can append letter
- Describe deficiencies and specific plans to address them
- Document how proposal will correct deficiencies
- Address correction of administrative and programatic deficiencies that won't be corrected by this proposal

Non-accredited Programs:

- Describe specific plans to attain accreditation
- Document how proposal will enable accreditation
- Document how problems not corrected by proposal will be addressed
- AAALAC Program Description use as a guide to writing, do not submit in entirety (Reviewers not obligated to read all appendices)

C06 & G20 Animal Program Descriptions Facilities

- Document problems to be solved by construction
 - Discuss solution for problems not solved
- Document benefits to sponsored research
 - Deficient in vivarium-focused submittals
- Provide clear drawings
 - Labels showing room use
 - Entry/egress for personnel
 - Animal transport routes
 - Clean/dirty cage transport routes
 - Equipment location
- Plan for operations during construction

C05 & G20 Animal Program Descriptions Facilities — Equipment

- Provide Vendor quotes
- Controversial
 - Air showers
 - Robotics
- Ventilated rodent racks connected to building exhaust are considered fixed equipment

C06 & G20 Animal Program Descriptions Animal Care

- Numbers and qualifications of staff
- Provide animal census
 - Correlate increasing population trends with research funding
- Describe animal ordering & quarantine procedures
- Feed, water, bedding
- Environmental enrichment program
- Sanitization procedures & frequency

C06 & G20 Animal Program Descriptions Training

- Programs to train:
 - Veterinarians & veterinary care personnel
 - Research technicians
 - Surgeons
 - Animal care staff
 - Small programs may require additional expertise
- How IACUC ensures adequate training

C06 & G20 Animal Program Descriptions Hazardous Agents

- Review & approval process
 - Protection of personnel and animals
 - Agent containment
- BSL 2,3, & 4:
 - HVAC must be well described
 - Describe SOPs for decon, PPE, etc.
 - Ensure adequate space for operations
 - Describe movement of personnel, animals, agents
 - Limit access
- Ensure proper cabinets & hoods
- Hazardous material storage & disposal

COS & G20 Animal Program Descriptions Occupational Health

- Risk Assessment
- Who is included in program
- Immunizations & medical surveillance
- Zoonosis education & protection
- Lab animal allergy risk reduction plan
- Nonhuman primate exposure
 - Personal protective equipment
 - Bite / scratch protocol

C06 & G20 Animal Program Descriptions Security

- Emergency preparedness plan
- Entry to facilities
 - Card/key access points
 - Who authorizes entry
- Select agent plan

Review of C06 & G20 Applications Summary

- Document benefits to PHS funded research
- Document facility deficiencies to be corrected
- Consult with specialists in writing application
 - Administration regarding benefits to research
 - IACUC staff regarding procedures
 - Attending Veterinarian or outside consultant for facility plan & program description
 - Architect for plans, cost estimates, and drawings