Animal Care and Use Program

Introductions + Brief Update on the new Guide

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INTRODUCTIONS

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TBA
Guide for the Care and Use of Laboratory Animals

- Published by Institute for Laboratory Animal Research (ILAR) of the NAS
- Also called “ILAR Guide” or the “Guide”
- Primary reference and standards document for care/use of research animals
- *Guide* use is required by PHS Policy
the *Guide* –

- first published 1963
- revised 6 times (last in 1996)
- 14-member update committee appointed by ILAR
  - Research scientists; Lab animal vets; Non-scientists
  - written, oral public comments
- 8th ed. published January, 2011
- AAALAC will begin using September, 2011
- Not yet adopted by PHS; still taking public comments at:
(or Google: OLAW comment Guide)
Animal Care and Use Program

Guide for the Care and Use of Laboratory Animals: Eighth Edition
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Key Terms

“Must” – considered imperative and mandatory for humane animal care and use

“Should” – a strong recommendation; circumstances may justify alternative strategy

“May” – a suggestion to be considered

- *Guide* written in general terms
- IACUC is key in interpretation, implementation, oversight, and evaluation
# Animal Care and Use Program

## the Guide

<table>
<thead>
<tr>
<th></th>
<th>OLD</th>
<th>NEW</th>
<th>Δ</th>
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</thead>
<tbody>
<tr>
<td>Total pages</td>
<td>125</td>
<td>220</td>
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</tr>
<tr>
<td>Organization</td>
<td>Intro + 4 chapters</td>
<td>5 chapters</td>
<td>---</td>
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<tr>
<td># “shoulds”</td>
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<td>660</td>
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<td># “musts”</td>
<td>21</td>
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A note about the new musts:
- several in AWAR
- many similar to language in old Guide
Chapters in the new Guide

1. Key Concepts
2. Animal Care and Use Program
3. Environment, Housing, and Management
4. Veterinary Care
5. Physical Plant
Minimum Space for Rodents in Groups (Page 57, Table 3.2)

**What's New?**
mouse + litter requires 51 in$^2$
(adult mouse >25g should have ≥15 in$^2$)

**Impact?**
• monogamous breeding scheme (+ +litter) is fine in small mouse cage
• trio breeding scheme (+ 2 s + 2 litters) requires a larger cage
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the new Guide – a few points of interest…

**Cage Height for Rabbits** (Page 59, Table 3.3)

*What’s New?*
Min cage height 14” → 16”

*Impact?*
~1/3 of OHSU rabbit cages will require modification
the new *Guide* – a few points of interest…

**Space for NHP Housed in Pairs or Groups** (Page 61, Table 3.5)

<table>
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<th>Weight (kg)</th>
<th>Floor area/animal (ft²)</th>
<th>Height (in)</th>
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<td>&lt;1.5</td>
<td>2.1</td>
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<tr>
<td>&lt;3.0</td>
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<tr>
<td>&lt;10</td>
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<td>&lt;30</td>
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<td>46</td>
</tr>
<tr>
<td>&gt;30</td>
<td>≥25</td>
<td>60</td>
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</table>

*Impact?*
Cage heights will need to increase for obese NHPs
Regarding the new space recommendations –
• space needs complex
• consideration only bw and surface area may be inadequate
• other considerations:
  ➢ age, sex
  ➢ cohousing
  ➢ use (production? experimentation?)
  ➢ special needs (e.g., vertical space for arboreal species)
• performance indices should be considered
• (these are) “considered the minimum for animals housed under conditions commonly found in laboratory animal housing facilities.”
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the new Guide – a few points of interest…

Reporting Animal Welfare Concerns

What’s New?
“The institution must develop methods for reporting and investigating animal welfare concerns…” (Chapter 2, page 23)

Impact?
• not a new requirement, but

• there are new aspects of reporting concerns:
  ➢ mechanism in place
  ➢ signage with instructions in facilities
  ➢ multiple points of contact
  ➢ anonymity
  ➢ whistleblower protection
the new Guide – a few points of interest…

Use of Non-Pharmaceutical-Grade Chemicals

What’s New?
“(pharmaceutical-grade chemicals or substances) should be used, when available, for all animal-related procedures.”

“The use of non-pharmaceutical-grade chemicals or substances should be described and justified in the animal use protocol and be approved by the IACUC.”

Impact?
• not really new (USDA; OLAW FAQs)
• according to OLAW/USDA use of non-pharm grade compounds should be based on:
  ➢ scientific necessity;
  ➢ no availability of an acceptable veterinary or human pharmaceutical-grade compound; and
  ➢ specific review and approval by the IACUC
Social Housing

What’s New?
“Social animals should be housed in stable pairs or groups of compatible individuals unless they must be housed alone for experimental reasons or because of social incompatibility…” (Chapter 3, page 51)

Impact?
AAALAC interpretation
- social animals must be housed in stable pairs/groups of compatible individuals
- social housing considered as the default unless justified by scientific necessity, social incompatibility or vet concerns
- need for single housing should be reviewed on regular basis and approved by IACUC and/or veterinarian
What’s New?
- new aquatic section (11 pages)
- 3 “must” statements

“Chlorine and chloramines (in water)…must be removed or neutralized prior to use in aquatic systems…” (Chapter 3, page 78)

“The biofilter must be of sufficient size (i.e., contain a sufficient quantity of bacteria) to be capable of processing the bioload (level of nitrogenous waste) entering the system.” (Chapter 3, page 86)

“…extreme care must be taken to ensure that residual chlorine, chemical, and reactive byproducts are neutralized or removed.” (Chapter 3, page 86)

Impact?
Probably minimal – routine housing/management issues
Animal Housing in Laboratories

What’s New?
“If animals must be maintained in a laboratory to satisfy the scientific aims of a protocol, that space should be appropriate to house and care for the animals and its use limited to the period during which it is required.” (Chapter 5, page 134; similar to old Guide)

Impact?
AAALAC interpretation
- housing conditions should mimic those in the animal facility (i.e., HVAC; temp control; light/dark; security; etc.)
- Multi-use labs can present difficulties (HVAC; Occ Health; etc.)
In conclusion…

• New *Guide* can be accessed at [http://www.nap.edu/](http://www.nap.edu/)

• OHSU Office of Research will draft a comment letter focusing on new space requirements

• Public comment period open until May 24\textsuperscript{th}
Questions/Comments are welcomed

Thank you for attending!