

OIE Collaborating Centres Reports Activities

Activities in 2018

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| Name of writer: | Dr. Lida Anestidou |

ToR: To provide services to the OIE, in particular within the region, in the designated specialty, in support of the implementation of OIE policies and, where required, seek for collaboration with OIE Reference Laboratories

ToR: To identify and maintain existing expertise, in particular within its region

1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by the OIE

| Training, capacity building | |
|-----------------------------|--|
| Title of activity | Scope |
| ILAR Journal | <p>The ILAR Journal is the peer-reviewed, theme-oriented publication of the Institute for Laboratory Animal Research (ILAR), which provides timely information for all who study, use, care for, and oversee the use of animals in research. The journal publishes original articles that review research on animals either as direct subjects or as surrogates for humans.</p> <p>In 2018 in the category Veterinary Sciences, the ILAR Journal was ranked #7 with an Impact Factor of 2.619. The ILAR Journal's ranking coupled with a 5year Impact Factor of 3.867 reflects the continued integrity and excellence in the quality of published review papers and the timeliness and relevance of the issue topics.</p> <p>The ILAR Journal's thematic issues serve as educational tools and are in fact part of the required reading material for the board certification exams of the American College of Laboratory Animal Medicine.</p> <p>https://academic.oup.com/ilarjournal</p> |

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| <p>Roundtable on Science and Welfare in Laboratory Animal Use</p> | <p>Established by the US National Academies of Sciences, Engineering, and Medicine under the Institute for Laboratory Animal Research, the Roundtable on Science and Welfare in Laboratory Animal Use provides a neutral forum to stimulate dialogue, catalyze movement around an issue, and collaborate among those interested in promoting more effective, efficient, and humane use of animals in research, testing, and education.</p> <p>Workshops, public meetings, and webinars constitute the main body of activities of the Roundtable. These activities result in a range of multimedia products, including peer-reviewed workshop summaries; archived webcasts of public workshops, meetings, and webinars; commissioned papers; videos and infographics; and public outreach, education, and engagement through social media and printed materials (brochures, newsletters, etc.)</p> <p>The workshops of the Roundtable (along with the available videos, PPTs and published proceedings) impact the scientific and veterinary communities by providing exposure to cutting edge topics (e.g., Precision Medicine), or themes of importance to the US biomedical research enterprise (e.g., laboratory animal laws).</p> <p>http://nas-sites.org/ilar-roundtable/</p> |
| Wildlife | |
| Title of activity | Scope |
| <p>ILAR Journal issue 58(3) Insights Gained from Wildlife Research in the Context of Global Anthropogenic Change.</p> | <p>This special issue of the ILAR Journal, "Zoonotic Disease Ecology: Effects on Humans, Domestic Animals and Wildlife," explores the complex interactions of emerging infectious diseases across taxa linked to many of these anthropogenic and environmental drivers.</p> |
| Animal welfare | |
| Title of activity | Scope |
| <p>ILAR Journal issue 60(1)</p> | <p>Responsible Science and the Use of Laboratory Animals</p> |
| <p>ILAR Journal issue 60(2)</p> | <p>Bioethics in Translational Research</p> |
| <p>Roundtable on Science and Welfare in Laboratory Animal Use activities on "Future Directions for Laboratory Animal Law in the United States: Pre-Workshop Webcast and Workshop"</p> <p>http://nas-sites.org/ilar-roundtable/roundtable-activities/future-of-animal-law/</p> | <p>In the United States, two major federal laws apply to vertebrate animals used in laboratory research. The first of these two statutes, the Animal Welfare Act (AWA, under the US Department of Agriculture), celebrated its fiftieth anniversary in 2016. The second statute, the Health Research Extension Act of 1985 (also referred to as the Public Health Services Act, or PHS Act), which is similar to the AWA, applies specifically to work funded by the US Public Health Service (i.e., agencies under the Department of Health and Human Services). Understanding laboratory animal law is necessary and fundamental for all researchers relying on results from animal research, laboratory animal veterinarians, institutional officials, Institutional Animal Care and Use Committee (IACUC) members and veterinarians in training. They require familiarity with both the scope and particulars of these laws. Different parties interested in or impacted by laboratory animal laws can have significantly different perspectives about the scope or efficiency of the regulations or their implementation.</p> <p>The Roundtable on Science and Welfare in Laboratory Animal Use of the Institute for Laboratory Animal Research, the Animal Law and Policy Program and the Petrie-Flom Center for Health Law Policy, Biotechnology and Bioethics of the Harvard Law School convened a pre-workshop webcast and a workshop to discuss the future of federal laboratory animal law in the United States in January 2018.</p> |

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| <p>Roundtable on Science and Welfare in Laboratory Animal Use workshop on the "Care, Use and Welfare of Marmosets as Animal Models for Gene Editing-based Biomedical Research"</p> <p>http://nas-sites.org/ilar-roundtable/roundtable-activities/care-use-and-welfare-of-marmosets-as-animal-models-for-gene-editing-based-biomedical-research/</p> | <p>The New World primate, the common marmoset (<i>Callithrix jacchus</i>), is a research model of increasing importance for biomedical research in the United States and globally. Marmosets present certain advantages compared to more traditional nonhuman primate species and may be particularly useful for the development of new disease models using genetic engineering (achieved using the CRISPR/Cas9 technology) and assisted reproductive technologies. Germline transmission of a transgene in marmosets was first shown in 2009 while mapping of their genome was published in 2014. Production of transgenic models of disease in marmosets is currently being tested in the United States and in Japan among others. However, a number of concerns have been voiced with respect to the increasing popularity of marmoset animal models based on the advent of genetic engineering/gene editing.</p> <p>Invited experts and speakers from academia, industry, non-profit organizations and government agencies convened to:</p> <ol style="list-style-type: none"> 1- Examine the availability of marmosets in the United States and abroad; 2- Discuss animal welfare and ethical considerations stemming from the use of wildtype and genetically modified marmosets; 3- Discuss standards of housing and care, dietary needs and feeding requirements for wildtype as well as genetically modified marmosets in captivity. |
| <p>Assessment of the Care and Use of Dogs in Biomedical Research Funded by or Conducted at the U.S. Department of Veterans Affairs</p> | <p>In response to a request from the U.S. Department of Veterans Affairs (VA), the National Academies of Sciences, Engineering, and Medicine will appoint an ad hoc committee to review the care and use of dogs in biomedical research funded by the VA or carried out in VA facilities regardless of funding source, for the purpose of advancing science and the understanding of how diseases affect the health of veterans.</p> <p>The study began in September 2018 and is expected to complete in 21 months.</p> <p>http://nas-sites.org/dels/studies/dog-study/</p> |

Diagnosis, biotechnology and laboratory

| Title of activity | Scope |
|---|--|
| <p>ILAR Journal issue 59(3)</p> <p>Pathology for Translational Research</p> | <p>In translational research, animal models are an important tool to aid in decision-making when taking potential therapies into human clinical trials. The use of optimal design and planning of tissue collection, incorporation of pathology methods into written protocols, conduct of pathology procedures using accepted best practices, and the use of optimal pathology analysis and reporting methods enhance the quality of the data acquired from many types of preclinical animal models and studies. Some of this experience can be adopted by the wider community of preclinical investigators to increase the reproducibility of animal study data.</p> |

Other (Name the category)

| Title of activity | Scope |
|---------------------------|--|
| <p>ILAR Journal 59(1)</p> | <p>Immune Relevant Models in Translational Science</p> |
| <p>ILAR Journal 59(2)</p> | <p>Safety in Animal Research Settings</p> |

ToR : To propose or develop methods and procedures that facilitate harmonisation of international standards and guidelines applicable to the designated specialty

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the surveillance and control of animal diseases, food safety or animal welfare

| Proposal title | Scope/Content | Applicable area |
|----------------|---------------|--|
| <p>n/a</p> | <p>n/a</p> | <p><input type="checkbox"/> Surveillance and control of animal diseases</p> <p><input type="checkbox"/> Food safety</p> <p><input type="checkbox"/> Animal welfare</p> |

ToR: To establish and maintain a network with other OIE Collaborating Centres designated for the same specialty, and should the need arise, with Collaborating Centres in other disciplines

ToR: To carry out and/or coordinate scientific and technical studies in collaboration with other centres, laboratories or organisations

3. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?

Yes

| Name of OIE CC/RL/other organisation(s) | Location | Region of networking Centre | Purpose |
|--|-------------------|---|---|
| ICLAS, International Council for Laboratory Animal Science | Brussels, Belgium | <input checked="" type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input checked="" type="checkbox"/> Middle East | collaboration on standards and training |

4. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres, Reference laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?

No

ToR: To place expert consultants at the disposal of the OIE.

5. Did your Collaborating Centre place expert consultants at the disposal of the OIE?

No

ToR: To provide, within the designated specialty, scientific and technical training to personnel from OIE Member Countries

6. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by the OIE, to personnel from OIE Member Countries?

Yes

- a) Technical visits: 0
- b) Seminars: 0
- c) Hands-on training courses: 0
- d) Internships (>1 month): 8

| Type of technical training provided (a, b, c or d) | Content | Country of origin of the expert(s) provided with training | No. participants from the corresponding country |
|--|---|---|---|
| d | <p>ILAR, representing the US National Academy of Sciences, in partnership with the Pakistan Academy of Sciences) is supporting a fellowship program to build capacity of early to mid-career Pakistani scientists veterinarians, physicians and public health experts in One Health, and foster collaboration and cooperation in preparedness and response to zoonotic diseases and other shared environmental health risks.</p> <p>In July 2018 8 fellows were chosen for 1-year long fellowships, to be spent between laboratories in Pakistan and Kenya, Singapore and Thailand. This cohort is the 2nd to be trained under this program, which altogether has provided training and education in One Health for 13 researchers from Pakistan.</p> | Pakistan | 8 |

ToR: To organise and participate in scientific meetings and other activities on behalf of the OIE

7. Did your Collaborating Centre organise or participate in the organisation of scientific meetings on behalf of the OIE?

Yes

| National/International | Title of event | Co-organiser | Date (mm/yy) | Location | No. Participants |
|------------------------|---|--------------|--------------|---------------|------------------|
| International | OIE Animal Welfare Global Forum: Supporting Implementation of OIE Standards | OIE | 3/2018 | Paris, France | 50 |

ToR: To collect, process, analyse, publish and disseminate data and information relevant to the designated specialty

8. Publication and dissemination of any information within the remit of the mandate given by the OIE that may be useful to Member Countries of the OIE

a) Articles published in peer-reviewed journals: 23
Advance publication articles from the ILAR Journal issues 59(1), 59(2) and 59(3).

b) International conferences: 1

Care, Use and Welfare of Marmosets as Animal Models for Gene Editing-based Biomedical Research

c) National conferences: 2

1. Future Directions for Laboratory Animal Law in the United States

2. Care, Use and Welfare of Marmosets as Animal Models for Gene Editing-based Biomedical Research

d) Other

(Provide website address or link to appropriate information): 4

1. Publication of the proceedings of the ILAR Roundtable workshop "Animal Models for Microbiome Research";

<https://www.nap.edu/catalog/24858/animal-models-for-microbiome-research-advancing-basic-and-translational-science>

2. Publication of the proceedings of the ILAR Roundtable workshop "Advancing Disease Modeling in Animal-Based Research in Support of Precision Medicine";

<https://www.nap.edu/catalog/25002/advancing-disease-modeling-in-animal-based-research-in-support-of-precision-medicine>

3. IACUCorner

Most issues of the ILAR Journal feature an article devoted to aspects of research of particular interest to IACUC members and staff. The articles address concerns, such as ethical considerations, transparency and reproducibility, special protocol related topics, etc.

<http://dels.nas.edu/global/ilar/iacucorner>

4. For a number of decades, ILAR has hosted and maintained the International Laboratory Code Registry. A laboratory code (also "laboratory registry code" or "lab code") contains one to five letters and identifies the institute, laboratory, or investigator that produced and/or maintains a particular animal strain. A lab code is generated when a new model is created and becomes part of that model's nomenclature. This website is one of the most visited websites of the National Academies.

<http://dels.nas.edu/global/ilar/Lab-Codes>