

OIE Collaborating Centres Reports Activities

Activities in 2017

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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>Its Impact Factor is 3.560 and its Five-year impact Factor is 3.313.</p> <p>https://academic.oup.com/ilarjournal</p>
Roundtable on Science and Welfare in Laboratory Animal Use	<p>The Roundtable on Science and Welfare in Laboratory Animal Use was established by the National Academies of Science, Engineering, and Medicine, under its Institute for Laboratory Animal Research, to provide a forum to stimulate open dialogue, exchange of information, and collaboration among entities interested in promoting the development and awareness of such knowledge, and its translation into more effective, efficient, and humane use of animals in research, testing, and education.</p> <p>Now in its fifth year of operations, the Roundtable strives to to improve the practice of and returns gained from animal-based research by examining: new evidence of the impact of factors such as gender and welfare on the reproducibility and reliability of animal-based results; increasing awareness of the limitations of current models for testing new therapeutics and for understanding disease in situ, and development of new, more relevant animal models for specific systems or diseases—and accompanying ethical, welfare and public perception concerns.</p> <p>The Roundtable's areas of engagement include Biomedical Sciences, One Health and Conservation through the lens of Animal Welfare, Ethics and Rigorous and Reproducible Science.</p> <p>http://nas-sites.org/ilar-roundtable/</p>

<p>Advancing Disease Modeling in Animal-Based Research in Support of Precision Medicine</p>	<p>Under the auspices of the Roundtable, a public workshop was held in October 2017 in Washington, DC to explore the potential of ongoing and future research in animal models with implications for precision medicine. This workshop brought together experts on the use of state-of-the-art technologies and technological advances to explore:</p> <ul style="list-style-type: none"> • How the design, creation, and analysis of current and next-generation animal models can inform the practice of precision medicine; • Reproducibility concepts to improve the clinical relevance of animal-based validation experiments and pre-and co-clinical trials in the context of precision medicine; • Welfare and regulatory considerations of current and especially next-generation animal models that would inform the design of targeted, personalized therapies. <p>The presentations, PPTs and videos are all online: http://nas-sites.org/ilar-roundtable/roundtable-activities/precision-medicine-workshop/</p> <p>The proceedings, co-authored by the CC director, will be published in May 2018</p>
<p>Animal Models for Microbiome Research: Advancing Basic and Translational Science</p>	<p>Under the auspices of the Roundtable, a public workshop held in December 2016 in Washington, DC examined animal models of microbiome research. Invited speakers (i) explored how to improve the depth and breadth of analysis of microbial communities using various model organisms; (ii) addressed the challenges of standardization and biological variability that are inherent in gnotobiotic animal-based research; (iii) examined the predictability and translatability of preclinical studies to humans; and (iv) discussed strategies for expanding the infrastructure and tools for conducting studies in these types of models. They will address gaps, challenges and opportunities in this rapidly expanding field with particular attention to the care, use, and welfare of the gnotobiotic animals.</p> <p>The presentations, PPTs and videos are all online: http://nas-sites.org/ilar-roundtable/roundtable-activities/microbiome/webcast-microbiome/</p> <p>The proceedings, co-authored by the CC director, will be published in April 2018.</p>

<p>Transportation of Laboratory Animals</p>	<p>A public workshop to examine critical issues relating to the transportation of research animals was held in 2015. Invited speakers addressed the challenges of transporting laboratory animals humanely and safely to ensure adequate supply for biomedical research in the face of increasing societal opposition to the domestic and international movement of these animals.</p> <p>The summary of this meeting, co-authored by the CC director, was published in September 2017 and is freely available to read and download from: https://www.nap.edu/catalog/21734/transportation-of-laboratory-animals-proceedings-of-a-workshop</p> <p>In addition, a fillable checklist for the transportation of live animals for research has been created by compiling various points made by speakers and attendees of the Workshop on Transportation</p> <p>of Laboratory Animals. It can be accessed here: http://nas-sites.org/ilar-roundtable/files/2014/03/Checklist-FINAL-form.pdf</p>
<p>Animal welfare</p>	
<p>Title of activity</p>	<p>Scope</p>
<p>ILAR Journal 57(3): International Laws, Regulations, and Guidelines for Animal Research</p>	<p>This issue contains a collection of papers describing the state of animal laws, regulations, and standards in countries worldwide, grouped by geographic regions (i.e., North America, South America, Pacific Rim, Africa, and the Middle East). Conclusions from the issue include the following: first, international efforts at harmonization will continue, and seek to keep pace with the globalization of science. Second, nations that have not yet developed robust legal systems applicable to laboratory animal welfare will seek out the expertise of those nations that have well established regimes. Third, for countries with mature animal protection systems, animal use in research will continue to be of societal concern, and efforts to change existing laws will not abate.</p>
<p>ILAR Journal 57(2): Technology, the Three Rs, and Pharmaceutical Development</p>	<p>This issue examined how technology in the area of preclinical development, especially in the private sector, enables and drives further the creative adoption of the 3Rs.</p>

<p>Research Symposium to conclude the 1st round of the One Health Research Fellowship Program in Pakistan</p>	<p>As part of the symposium, held in July 2017 in Bangkok, Thailand, attendees 1) discussed the challenges and opportunities of building and sustaining institutional, local and regional educational, training and research One Health opportunities; 2) leveraging the accomplishments and lessons learned from this fellowship and related programs, brainstormed about whether a global One-Health initiative is a common goal of meeting participants; and 3) identified priorities moving forward.</p> <p>Animal Welfare in the One Health context was one of the identified priorities, whose discussion was led by Dr. Paolo Dalla Villa, Head of Human-Animal Relationship and Animal Welfare Laboratory, in the National Reference Centre for Urban Hygiene and Non-Epidemic Emergencies - IUVENE, Teramo, Italy, an OIE CC.</p>
Other (Name the category)	
Title of activity	Scope
<p>One Health Research Fellowship Program in Pakistan, 2015-2017</p>	<p>Under the first pilot round of the One Health Fellowship, 5 early career scientists from Pakistan worked on research projects both in their home institutions as well as in Kenya (Kenya Medical Research Institute), Thailand (Chulalongkorn University) and Singapore (Duke-NUS):</p> <ul style="list-style-type: none"> • Arboviral Surveillance in Sindh, Pakistan: Animal-Human Interface - Dr. Joveria Farooqi, The Aga Khan University, Karachi • Relationship of Mycotoxin Contaminated Foods with Hepatocellular Carcinoma - Muhammad Kashif Saleemi, University of Agriculture, Faisalabad • Occupational risk and transmission dynamics of multi drug resistant Salmonella at animal-human-environment interface - Dr. Muhammad Imran Arshad, University of Agriculture, Faisalabad • Occurrence of Shiga toxin-producing Escherichia coli (STEC) strains of public health significance from slaughtered animals in Pakistan - Dr. Hamid Irshad, National Agricultural Research Center, Islamabad • Molecular and Serological Surveillance of Crimean Congo Hemorrhagic Fever in Pakistan - Dr. Aneela Javed, National University of Science and Technology, Islamabad

<p>2nd Round of the One Health Research Fellowship Program in Pakistan, 2017-2019</p>	<p>The United States 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 whose research projects follow the 1-H approach, and foster collaboration and cooperation in preparedness and response to zoonotic diseases and other shared environmental health risks. Specifically, the fellowship program is designed to:</p> <ul style="list-style-type: none"> - Create a model for fostering enduring international and national research collaborations that could be adapted and applied in different country settings; - Use this model to build a 1-H research network in Pakistan; - Provide a forum for discussion and debate regarding 1-H issues including: legal/regulatory structures, ethical issues, and pedagogy for teaching 1-H as part of an academic curriculum. <p>Under this second round, 9 fellows will be chosen following a competitive application and interview process to spend 12 months working on research projects of relevance to One Health in the Pakistan context.</p> <p>http://nas-sites.org/dels/one-health-research-fellowships-in-pakistan/</p>
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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>HARRP, the first step of a unified approach by ICLAS to improve animal research reporting standards worldwide</p>	<p>Under the auspices of the International Council for Laboratory Animal Science, with which ILAR collaborates, an effort has been led to harmonize animal research reporting guidelines as a way to encourage improvements in the quality of science where laboratory animals are involved. This is accomplished through a set of simplified and general reporting standard principles that make it easier for both journals and authors to report details of animal experiments.</p>	<p><input type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input checked="" 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	Continued work on the Harmonization of Animal Research Reporting Principles (HARPP) Statement

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?

No

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?

No

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: 50
ILAR Journal

issues that were published either very late in 2016 or in 2017 include:

- 57(3): International Laws, Regulations, and Guidelines for Animal Research - 12 articles, available at:
<https://academic.oup.com/ilarjournal/issue/57/3>

In this issue an article co-authored by the OIE CC director discusses the laws and regulations in the MENA and Africa regions: The Governance of Animal Care and Use for Scientific Purposes in Africa and the Middle East
Bert J Mohr; Francis A Fakoya; Jann Hau; Ouajdi Souilem; Lida Anestidou; <https://doi.org/10.1093/ilar/ilw035>

- 57(2): Technology, the Three Rs, and Pharmaceutical Development - 14 articles, available at:
<https://academic.oup.com/ilarjournal/issue/57/2>

- 58(1): Bridging the Gap between Reproducibility and Translation: Data Resources and Approaches, 11 articles, available at: <https://academic.oup.com/ilarjournal/issue/58/1>

- 58(2): <https://academic.oup.com/ilarjournal/issue/58/2>, 13 articles, available at:
<https://academic.oup.com/ilarjournal/issue/58/2>

b) International conferences: 1

Advancing Disease Modeling in Animal-Based Research in Support of Precision Medicine: A Workshop;
<http://nas-sites.org/ilar-roundtable/roundtable-activities/precision-medicine-workshop/>

c) National conferences: 1

Advancing Disease Modeling in Animal-Based Research in Support of Precision Medicine: A Workshop;
<http://nas-sites.org/ilar-roundtable/roundtable-activities/precision-medicine-workshop/>

d) Other

(Provide website address or link to appropriate information): 0