Recognizing 25 Years of Improving Animal Welfare, Advancing Science

October 25 - 26, 2010
Bethesda North Marriott Hotel and Convention Center
Bethesda, MD
Funding for this conference was made possible in part by the National Institutes of Health (NIH), Office of Laboratory Animal Welfare (OLAW) and the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Animal Care.

The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the U.S. Government; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.
WELCOME

Individuals engaged in biomedical research continually strive toward a common goal—improving human and animal health. Occasionally, it is important to come together to consider milestones in that progress. We are here today to recognize 25 years of improving animal welfare and advancing biomedical research. *Animal Welfare and Scientific Research: 1985 to 2010* acknowledges *Animal Welfare and Scientific Research*, a symposium held by NIH in 1984 [see NIH Record, page 6]. Subsequent to that historic symposium, a number of important events occurred in 1985:

- The U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training (U.S. Government Principles) were developed and promulgated by the Interagency Research Animal Committee (IRAC). All U.S. government agencies that use animals in research adopted the principles and conduct their animal activities in compliance with their guidance. [see U.S. Government Principles, page 10]

- The Health Research Extension Act of 1985 (HREA), “Public Law 99-158 Animals in Research” was passed. This law provides the statutory mandate for the implementation of the Public Health Service Policy on Humane Care and Use of Laboratory Animals (PHS Policy). Included in the HREA is the requirement for Institutional Animal Care and Use Committees (IACUC) to provide local oversight for PHS supported animal research activities.

- Amendments to the Animal Welfare Act were passed by Congress requiring the local review and oversight of animal research by IACUCs.

A symposium to acknowledge laws and policies does not sound like it would be very interesting. Yet an exciting and important story is woven into the fabric of the policies, guidelines, and regulations that guide oversight of the welfare of animals used in federally-funded research. It is the story of the critical contribution of research animal models to the acceleration of biomedical discovery and to the improvement of human and animal health.

Fulfilling animal welfare protections according to the requirements of the PHS Policy, the U.S. Government Principles, and the Animal Welfare Act and Regulations is now, and has been for the last 25 years, a shared effort between the NIH, USDA, federally supported scientific investigators, and research institutions. These have been years of growth and learning [see Timeline, page 8]. OLAW, Animal Care, and IACUC 101 have joined together, in concert with support from federal agencies, NIH Institutes and Centers, and our non-profit and business colleagues to reflect on this milestone and consider the future.

TABLE OF CONTENTS

Animal Welfare and Scientific Research

1984 Symposium ........................................... 6 - 7

The History of Animal Welfare Policy, Regulation, and Guidance

Timeline .................................................. 8 - 9

U.S. Government Principles .................................. 10

Pre Conference Events

IACUC 101 .................................................. 11

AWiC Workshop ............................................. 11

Animal Welfare and Scientific Research: 1985 to 2010

Animal Welfare Program | October 25 ................. 12 - 13

Keynote Address & Panel Discussion ......................... 14

Next Generation Travel Awards ................................ 15

Scientific Research Program | October 26 ................. 16 - 17

Speaker List ............................................... 18 - 19

Thank You to Our Supporters ................................. 20

Helpful Links ............................................... 21

General Information ....................................... 22 - 25
The NIH Record

Researchers, Animal Specialists, Activists Join NIH Symposium on Proper Use of Animals

By Jim Doherty

Some 450 biomedical researchers, laboratory animal specialists, ethicists, public officials and animal protection activists took part in a 2-day Symposium on Animal Welfare and Scientific Research in Washington, D.C., April 11-12.

The symposium was the opening event in a wide-ranging education program on research animal welfare sponsored by the National Institutes of Health. Goal of NIH’s continuing education program is to combine both scientific and humane considerations in animal research.

NIH’s Office of Protection for Research Risks planned the symposium and will direct the ongoing education program.

Symposium speakers at opening session: (I to r) Dr. Donald F. Freidrickson, former NIH Director who served as keynote; Dr. James B. Wyngaarden, current NIH Director; Dr. Edward N. Brandt Jr., Assistant Secretary for Health; and Dr. Charles McCarthy, director of the Office of Protection from Research Risks, who served as symposium chairman.

ANIMALS (extracted from Page 1)

NIH has developed a new set of procedures to ensure that all Public Health Service award recipients who use animals in their research must meet new requirements of NIH policies on the humane care and use of animals.

The Animal Welfare Act’s opening session, Dr. James B. Wyngaarden, NIH Director, outlined procedures for approving NIH proposals and applications for projects involving animals and described current efforts to bring all NIH animal research programs into compliance with the updated policies. The NIH’s Animal Care and Use Committee has developed guidelines covering all aspects of animal care and use involving NIH-supported research.

“The Federal Government cannot, on its own, adequately deal with the mounting problems on this issue,” he said. “It is the responsibility of the institutions and investigators to consider the ethical implications of their work and to respond to questions about the need for animal research and appropriate safeguards.”

Dr. Edward N. Brandt Jr., Assistant Secretary for Health, echoed Dr. Wyngaarden’s opening remarks. “There is no question that NIH is fully committed to the moral and ethical aspects of animal research,” he said.

To make public policy decisions on use of research animals, Dr. Freidrickson said, society needs to be familiar with scientific methods and objectives. Scientists need to be able to explain their work to the public in terms that the public can understand.

Dr. Robert R. Raub, NIH Deputy Director, said the symposium is a continuation of NIH’s commitment to set a high standard in the use of animals in research.

The second session of the symposium opened with a discussion of persistent changes in the NIH policy on animal welfare by Dr. William F. Hargis, NIH Deputy Director for Management. Dr. Hargis emphasized the need for the development of an alternative research methodology to the use of animals. He noted that the NIH’s new policies have been developed with the assistance of the National Association of State Biomedical Research Directors and the American Association for Accreditation of Laboratory Animal Care, Inc.

Scientists are in the best position to promote good animal care practices, Dr. Raub said. “The symposium is an opportunity to consider the large and persistent list of recommendations that have been made to the NIH by its own animal care committees and by outside groups,” he said.

The symposium will cover the following topics:

- Animal welfare and use of research animals
- New NIH policies on animal welfare
- Use of alternative research methodologies
- Use of non-human primates
- Use of cloned animals
- Use of genetically modified animals

The symposium will be held at the NIH in Bethesda, Maryland, from April 11-12. The symposium is open to the public and is free of charge. For more information, please contact the NIH Public Information Office at (301) 496-4000.
The History of Animal Welfare Policy, Regulation, and Guidance

Timeline

The history of animal welfare policy in the United States began well before 1985. The following timeline provides some of the key events that shaped or influenced the Health Research Extension Act of 1985, the Animal Welfare Act Amendments of 1985, and the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training. The resulting authority from these laws and principles for oversight of animal care and use programs is vested in Institutional Animal Care and Use Committees (IACUC) to ensure the humane care and use of animals used in research.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>First meeting of the Animal Care Panel.</td>
</tr>
<tr>
<td>1953</td>
<td>Institute of Animal Resources (IAR) established within the National Research Council</td>
</tr>
<tr>
<td>1956</td>
<td>IAR renamed Institute of Laboratory Animal Resources</td>
</tr>
<tr>
<td>1963</td>
<td>First edition of the Guide for the Care and Use of Laboratory Animals (Guide) developed by the Animal Care Panel</td>
</tr>
<tr>
<td>1965</td>
<td>Incorporation of the American Association for the Accreditation of Laboratory Animal Care (AAALAC)</td>
</tr>
<tr>
<td>1966</td>
<td>Congress passed the Laboratory Animal Welfare Act (PL 89-544) and the USDA was named the responsible agency</td>
</tr>
<tr>
<td>1971</td>
<td>NIH Policy on Humane Care and Use of Laboratory Animals for PHS Supported Institutions issued</td>
</tr>
<tr>
<td>1974</td>
<td>Public Responsibility in Medicine and Research (PRIM&amp;R) established</td>
</tr>
<tr>
<td>1976</td>
<td>Food and Drug Administration proposed Good Laboratory Practices (GLP) regulations</td>
</tr>
<tr>
<td>1979</td>
<td>Food and Drug Administration proposed Good Laboratory Practices (GLP) regulations</td>
</tr>
<tr>
<td>1980</td>
<td>Food and Drug Administration proposed Good Laboratory Practices (GLP) regulations</td>
</tr>
<tr>
<td>1982</td>
<td>First PRIM&amp;R Animal Care and Use meeting held</td>
</tr>
<tr>
<td>1983</td>
<td>Memorandum of Understanding established among USDA, FDA and NIH relating to laboratory animal care and welfare</td>
</tr>
<tr>
<td>1984</td>
<td>Scientists Center for Animal Welfare established and held its first workshop in Baltimore, MD</td>
</tr>
<tr>
<td>1985</td>
<td>U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training promulgated</td>
</tr>
<tr>
<td>1986</td>
<td>Applied Research Ethics National Association (ARENA) established</td>
</tr>
<tr>
<td>1987</td>
<td>FDA issued final rule amending GLP regulations</td>
</tr>
<tr>
<td>1989</td>
<td>USDA promulgated regulations (known as Parts 1 and 2) implementing the 1985 AWA Amendments</td>
</tr>
<tr>
<td>1990</td>
<td>Office for Protection from Research Risks (OPRR) structure was changed to establish a Division of Animal Welfare</td>
</tr>
<tr>
<td>1991</td>
<td>USDA promulgated standards known as Subpart B, Registration and Subpart C, Research Facilities (AWA)</td>
</tr>
<tr>
<td>1992</td>
<td>First Institutional Animal Care and Use Committee Guidebook was developed by a committee under the auspices of the Applied Research Ethics National Association (ARENA) and OPRR</td>
</tr>
<tr>
<td>1995</td>
<td>Memorandum of Understanding updated among USDA, FDA and NIH concerning laboratory animal welfare</td>
</tr>
<tr>
<td>1996</td>
<td>7th Edition of the Guide for the Care and Use of Laboratory Animals revised by an ILAR committee and published by the NRC</td>
</tr>
<tr>
<td>1997</td>
<td>AABB name changed to the Association for Blood Banking Sciences (ABB)</td>
</tr>
<tr>
<td>1998</td>
<td>IACUC 101, in conjunction with ARENA, debuted in Boston</td>
</tr>
<tr>
<td>2000</td>
<td>OPRR Division of Animal Welfare was separated from OPRR and became the Office of Laboratory Animal Welfare (OLAW), NIH</td>
</tr>
<tr>
<td>2001</td>
<td>Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) designated as permanent interagency committee</td>
</tr>
<tr>
<td>2002</td>
<td>ARENA-OLAW Institutional Animal Care and Use Committee Guidebook, Second edition, published</td>
</tr>
<tr>
<td>2006</td>
<td>Animal Welfare Act Amendment modified the definition of animals to exclude rats, mice, and birds bred for use in research</td>
</tr>
<tr>
<td>2007</td>
<td>AVMA Guidelines on Euthanasia updated and renamed</td>
</tr>
<tr>
<td>2010</td>
<td>AVMA Guidelines on Euthanasia updated and renamed</td>
</tr>
</tbody>
</table>
The U.S. Government Principles

The U.S. Government Principles were promulgated in 1985 by the Interagency Research Animal Committee (IRAC) and adopted by U.S. Government agencies that either develop requirements for or sponsor procedures involving the use of vertebrate animals. The Principles were incorporated into the PHS Policy in 1986 and continue to provide a framework for conducting research in accordance with the Policy and are the foundation for humane care and use of laboratory animals in the United States.

U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training

The development of knowledge necessary for the improvement of the health and well-being of humans as well as other animals requires in vivo experimentation with a wide variety of animal species. Whenever U.S. Government agencies develop requirements for testing, research, or training procedures involving the use of vertebrate animals, the following principles shall be considered, and whenever these agencies actually perform or sponsor such procedures, the responsible Institutional Official shall ensure that these principles are adhered to:

I. The transportation, care, and use of animals should be in accordance with the Animal Welfare Act (7 U.S.C. 2131 et. seq.) and other applicable Federal laws, guidelines, and policies.

II. Procedures involving animals should be designed and performed with due consideration of their relevance to human or animal health, the advancement of knowledge, or the good of society.

III. The animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results. Methods such as mathematical models, computer simulation, and in vitro biological systems should be considered.

IV. Proper use of animals, including the avoidance or minimization of discomfort, distress, and pain when consistent with sound scientific practices, is imperative. Unless the contrary is established, investigators should consider that procedures cause pain or distress in human beings may cause pain or distress in other animals.

V. Procedures with animals that may cause more than momentary or slight pain or distress should be performed with appropriate sedation, analgesia, or anesthesia. Surgical or other painful procedures should not be performed on unanesthetized animals paralyzed by chemical agents.

VI. Animals that would otherwise suffer severe or chronic pain or distress that cannot be relieved should be painlessly killed at the end of the procedure or, if appropriate, during the procedure.

VII. The living conditions of animals should be appropriate for their species and contribute to their health and comfort. Normally, the housing, feeding, and care of all animals used for biomedical purposes must be directed to the prevention of discomfort and pain.

VIII. Investigators and other personnel shall be appropriately qualified and experienced for conducting procedures on living animals. Adequate arrangements shall be made for their in-service training, including the proper and humane care and use of laboratory animals.

IX. Where exceptions are required in relation to the provisions of these Principles, the decisions should not rest with the investigators directly concerned but should be made, with due regard to Principle II, by an appropriate review group such as an institutional animal care and use committee. Such exceptions should not be made solely for the purposes of teaching or demonstration.

*For guidance throughout these Principles, the reader is referred to the Guide for the Care and Use of Laboratory Animals prepared by the Institute of Laboratory Animal Resources, National Academy of Sciences.

Pre Conference Events

October 24, 2010

IACUC 101 Workshop

IACUC 101 is a full day didactic and interactive training course for IACUC members and administrators, trainers, veterinarians, animal care staff and program personnel, researchers, regulatory personnel, and others interested in IACUC roles and responsibilities. The program is delivered by faculty renowned for their expertise in IACUC issues and program development. The faculty includes representatives from private and academic biomedical research institutions, AAALAC, USDA, and OLAW. Sessions provide a basic, yet comprehensive overview of the laws, regulations, and policies that govern the humane care and use of laboratory animals supplemented with examples and possible approaches for successful and effective administration. Students have the opportunity to practice what they have learned when they are challenged to consider, deliberate, and develop action plans for a variety of potential IACUC scenarios. An extensive resource manual containing copies of relevant laws, regulations, policies, and guidelines will be provided.

AWIC Workshop: Meeting the Information Requirements of the Animal Welfare Act

The Animal Welfare Information Center (AWIC) presents a one day workshop for individuals who are responsible for providing information to meet the requirements of the Animal Welfare Act (AWA). This workshop is targeted for principal investigators, members of IACUCs, information providers, administrators of animal use programs, and veterinarians. All participants will receive a resource manual. Each participant must bring their own wireless enabled laptop for use during the workshop. The objectives of the workshop are to provide:

- An overview of the AWA and its information requirements;
- A review of the alternatives concept;
- A comprehensive introduction to the National Agricultural Library (NAL), AWIC and other organizations;
- Instruction on the use of existing information databases/networks; and
- On-line database searching experience.

Continuing Education

Pre-conference workshops and all sessions of the Symposium were reviewed and approved by the American Association of Veterinary State Boards (AAVSB) RACE program for continuing education credits in jurisdictions which recognize AAVSB RACE approval. Please contact the AAVSB RACE program at race@aavsb.org should you have any comments/concerns regarding this program’s validity or relevancy to the veterinary profession. The Symposium was approved for 6.5 hours continuing education credits per day, the Keynote Address for 1.0 hour, IACUC 101 for 6.5 hours and the AWIC Workshop for 6.5 hours.

The AWIC Workshop has been approved for continuing education (CE) units by the Medical Libraries Association (MLA).
### Animal Welfare and Scientific Research: 1985 to 2010

**October 25, 2010 | Animal Welfare**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00am-8:30am</td>
<td>Registration</td>
<td>FOYER, SALON D</td>
</tr>
<tr>
<td>8:30am-8:45am</td>
<td>Welcome</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>8:45am-9:00am</td>
<td>Introduction</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>9:00am-10:10am</td>
<td>Animal Housing Facilities</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>10:10am-10:30am</td>
<td>Discussion</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>10:30am-10:50am</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>10:50am-12:00noon</td>
<td>Institutional Animal Care and Use Committees</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>12:00noon-12:20pm</td>
<td>Discussion</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>12:20pm-1:20pm</td>
<td>Lunch</td>
<td>SALON E-H</td>
</tr>
</tbody>
</table>

**Continuing Education**

Day one of the Symposium was approved for 6.5 hours AAVSB RACE credits and the Keynote Address for 1.0 hours AAVSB RACE credits.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:20pm-2:15pm</td>
<td>Education and Training</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>2:15pm-2:35pm</td>
<td>Discussion</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>2:35pm-2:55pm</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>2:55pm-4:25pm</td>
<td>Veterinary Care</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>4:25pm-4:45pm</td>
<td>Discussion</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>4:45pm-5:15pm</td>
<td>Synergy of Working Together</td>
<td>SALON A-D</td>
</tr>
<tr>
<td>5:15pm-6:30pm</td>
<td>Cocktails and Networking</td>
<td>FOYER, SALONS E</td>
</tr>
<tr>
<td>6:30pm-8:30pm</td>
<td>Keynote Address</td>
<td>SALON F-H</td>
</tr>
<tr>
<td></td>
<td>Dinner</td>
<td>SALON F-H</td>
</tr>
<tr>
<td></td>
<td>Sponsored by AAALAC International</td>
<td></td>
</tr>
</tbody>
</table>
In that role he was responsible for development, promulgation, and implementation of the PHS Policy and the federal regulations for the protection of human research subjects throughout the United States and in approximately 80 nations worldwide. In 1999, the Scientists Center for Animal Welfare (SCAW) awarded him the Harry C. Rowell Award for Contributions to Science and the Humane Care and Use of Animals. In 2003, he received the Public Responsibility in Medicine and Research (PRIM&R) Lifetime Achievement Award. He was a Senior Research Fellow at the Kennedy Institute of Ethics, Georgetown University and served on the Board of Directors of the Institute for Laboratory Animal Research (ILAR) of the National Research Council, National Academy of Sciences. He is former Vice President of the Board of Trustees of SCAW and a Fellow of the Hastings Center. He has testified before the National Bioethics Advisory Committee; and several subcommittees of the U.S. House of Representatives and Senate. He currently serves in the Office of Education and Compliance Oversight at Virginia Commonwealth University.

Ordained a Catholic priest in 1956 as a member of the Paulist Fathers, Dr. McCarthy was laicized in 1971. Before moving to the National Institutes of Health in 1971, Dr. McCarthy taught philosophy and political science at The Catholic University of America and The George Washington University in Washington, DC.

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing.

In 2003, he received the Public Responsibility in Medicine and Research (PRIM&R) Lifetime Achievement Award. He was a Senior Research Fellow at the Kennedy Institute of Ethics, Georgetown University and served on the Board of Directors of the Institute for Laboratory Animal Research (ILAR) of the National Research Council, National Academy of Sciences. He is former Vice President of the Board of Trustees of SCAW and a Fellow of the Hastings Center. He has testified before the National Bioethics Advisory Committee; and several subcommittees of the U.S. House of Representatives and Senate. He currently serves in the Office of Education and Compliance Oversight at Virginia Commonwealth University.

Ordained a Catholic priest in 1956 as a member of the Paulist Fathers, Dr. McCarthy was laicized in 1971. Before moving to the National Institutes of Health in 1971, Dr. McCarthy taught philosophy and political science at The Catholic University of America and The George Washington University in Washington, DC.

Dr. McCarthy served as Director of the Office for Protection from Research Risks (OPPR) from 1978-1992. In that role he was responsible for development, promulgation, and implementation of the PHS Policy and the federal regulations for the protection of human research subjects throughout the United States and in approximately 80 nations worldwide. In 1999, the Scientists Center for Animal Welfare (SCAW) awarded him the Harry C. Rowell Award for Contributions to Science and the Humane Care and Use of Animals. In 2003, he received the Public Responsibility in Medicine and Research (PRIM&R) Lifetime Achievement Award. He was a Senior Research Fellow at the Kennedy Institute of Ethics, Georgetown University and served on the Board of Directors of the Institute for Laboratory Animal Research (ILAR) of the National Research Council, National Academy of Sciences. He is former Vice President of the Board of Trustees of SCAW and a Fellow of the Hastings Center. He has testified before the National Bioethics Advisory Committee; and several subcommittees of the U.S. House of Representatives and Senate. He currently serves in the Office of Education and Compliance Oversight at Virginia Commonwealth University.

Ordained a Catholic priest in 1956 as a member of the Paulist Fathers, Dr. McCarthy was laicized in 1971. Before moving to the National Institutes of Health in 1971, Dr. McCarthy taught philosophy and political science at The Catholic University of America and The George Washington University in Washington, DC.

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing. Responsibilities include promoting information exchange, coordination of animal programs between agencies, and representing the U.S. Government on international issues. The committee is made up of representatives of federal agencies that use or require the use of experimental animals.

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing. Responsibilities include promoting information exchange, coordination of animal programs between agencies, and representing the U.S. Government on international issues. The committee is made up of representatives of federal agencies that use or require the use of experimental animals.

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing. Responsibilities include promoting information exchange, coordination of animal programs between agencies, and representing the U.S. Government on international issues. The committee is made up of representatives of federal agencies that use or require the use of experimental animals.

Panel Discussion
Reflections on IRAC and the U.S. Government Principles
Robert Whitney, DVM and Thomas Wolfe, DVM, PhD

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing.

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing.

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing.

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing.

In 1985, the Interagency Research Animal Committee (IRAC) promulgated the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. These Principles were subsequently incorporated into the 1986 PHS Policy, and remain in effect today as a model for federal agencies in developing specific agency policies for the use of animals.

The IRAC was appointed on July 7, 1983 by the Assistant Secretary for Health as an outgrowth and expansion of the Interagency Primate Steering Committee. This committee is a focal point for federal agencies to discuss issues involving all animal species needed for biomedical research and testing.
**Animal Welfare and Scientific Research: 1985 to 2010**

**OCTOBER 26, 2010 | SCIENTIFIC RESEARCH**

**Program**

7:00am-8:30am  
Registration (FOYER, SALON D)

8:00am-9:00am  
Continental Breakfast (SALON E-H)

8:30am-8:35am  
Welcome (SALON A-D)  
Susan Silk, Office of Laboratory Animal Welfare, NIH

8:35am-8:45am  
Use of Animals in NIH Supported Biomedical Research (SALON A-D)  
Sally Rockey, Office of Extramural Research, NIH

8:45am-9:15am  
Global Impact of Animal Research on Infectious Diseases: A CDC Perspective (SALON A-D)  
Tanja Popovic, Centers for Disease Control and Prevention

9:15am-9:45am  
Use of Animals in the Development of Medicines and Devices for Humans and Animals (SALON A-D)  
David Jacobson-Kram, Food and Drug Administration

9:45am-10:00am  
Discussion (SALON A-D)  
Moderator: Susan Silk, Office of Laboratory Animal Welfare, NIH

10:00am-10:15am  
Break

10:15am-10:45am  
Animal Models and Basic Science: Bench to Bedside (SALON A-D)  
Richard Nakamura, National Institute of Mental Health, NIH

10:45am-11:15am  
Animal Models in Immunology and Transplant Medicine (SALON A-D)  
Linda Cendales, Emory University

11:15am-11:45am  
Animal Models Facilitate Rapid Responses to Emerging Infectious Diseases (SALON A-D)  
Michael Kurilla, National Institute of Allergy and Infectious Diseases, NIH

11:45am-12:00noon  
Discussion (SALON A-D)  
Moderator: Richard Nakamura, National Institute of Mental Health, NIH

12:00noon-1:00pm  
Lunch (SALON E-H)

1:00pm-1:30pm  
Challenges of an Aging Brain (SALON A-D)  
Stuart Zola, Yerkes National Primate Research Center

1:30pm-2:00pm  
Genetic Vulnerabilities Associated with Cancer and Aging (SALON A-D)  
Nancy Hopkins, Massachusetts Institute of Technology

2:00pm-2:30pm  
Toward a Better Understanding of Depression, Schizophrenia, and Autism (SALON A-D)  
Larry Young, Yerkes National Primate Research Center

2:30pm-3:00pm  
Insight into Brain Development from Animal Vocalization Studies (SALON A-D)  
Erich Jarvis, Duke University

3:00pm-3:15pm  
Discussion (SALON A-D)  
Moderator: Stuart Zola, Yerkes National Primate Center

3:15pm-3:30pm  
Break

3:30pm-3:35pm  
Introduction (SALON A-D)  
Jerry Collins, Yale University and Office of Laboratory Animal Welfare, NIH

3:35pm-4:05pm  
Research Animal Welfare: Looking Backward to Looking Forward (SALON A-D)  
Susan Lederer, University of Wisconsin

4:05pm-4:45pm  
Standing up for Science (SALON A-D)  
J. David Jentsch, University of California, Los Angeles  
The Need for Public Dialogue  
Dario Ringach, University of California, Los Angeles

4:45pm-5:15pm  
Panel Discussion (SALON A-D)  
Moderator: Jerry Collins, Yale University and Office of Laboratory Animal Welfare, NIH

Continuing Education  
Day two of the Symposium was approved for 6.5 hours AAVSB RACE credits.
Animal Welfare and Scientific Research: 1985 to 2010

Speaker List

Kathryn Bayne, PhD, DVM, DACLAM
Global Director, Association for Assessment and Accreditation of Laboratory Animal Care International

B. Taylor Bennett, DVM, PhD
Senior Scientific Advisor, National Association for Biomedical Research

Patricia A. Brown, VMD, MS, DACLAM
Director, Office of Laboratory Animal Welfare, National Institutes of Health

Linda Cendales, MD
Assistant Professor of Surgery, Division of Plastic and Reconstructive Surgery and Division of Transplantation, Department of Surgery, Emory University School of Medicine and Director, Vascularized Composite Allograft Transplantation and the Laboratory of Microsurgery, Emory Transplant Center

Jerry Collins, PhD
Professor of Anesthesiology, Yale University School of Medicine and IPA, Division of Policy and Education, Office of Laboratory Animal Welfare, National Institutes of Health

Ralph B. Dell, MD
Director, Institute for Laboratory Animal Research, retired

Nelson L. Garnett, DVM, DACLAM
Office of Laboratory Animal Welfare, National Institutes of Health, retired

Lauretta W. Gerrity, DVM
Associate Vice President for Research Operations and Compliance and Professor, Division of Comparative Medicine, Department of Genetics, University of Alabama

Chester A. Gipson, DVM
Deputy Administrator, Animal Care, Animal and Plant Health Inspection Service, U.S. Department of Agriculture

Betty J. Goldenteyer, DVM
Eastern Regional Director, Animal Care, Animal and Plant Health Inspection Service, U.S. Department of Agriculture

Brian Hare, PhD
Assistant Professor of Evolutionary Anthropology, Duke Institute for Brain Sciences

Nancy Hopkins, PhD
Professor of Biology, Department of Biology, Massachusetts Institute of Technology

David Jacobson-Kram, PhD, DABT
Associate Director for Pharmacology and Toxicology, Office of New Drugs, Food and Drug Administration

Mary Lou James, BA, LATG
Consultant, Regulatory Compliance, Research Animal Welfare and President, IACUC 101 Series

Erich D. Jarvis, PhD
Associate Professor, Howard Hughes Medical Institute, Department of Neurobiology, Duke University Medical Center

J. David Jentsch, PhD
Professor, Departments of Psychology and Psychiatry, David Geffen School of Medicine, University of California, Los Angeles; Associate Director for Research, Brain Research Institute

Michael G. Kurilla, PhD, MD
Director, Office of BioDefense Research Affairs and Associate Director, BioDefense Product Development, Division of Microbiology and Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Steven L. Leary, DVM
Assistant Vice Chancellor for Veterinary Affairs and Director, Division of Comparative Medicine, Washington University School of Medicine

Susan E. Lederer, PhD
Robert Turell Professor, Medical History and Bioethics, University of Wisconsin

Steele F. Mattingly, DVM
Director, Laboratory Animal Medical Services, University of Cincinnati, retired

Charles R. McCarthy, PhD
Office of Education and Compliance Oversight, Virginia Commonwealth University; Director, Office for Protection from Research Risks, National Institutes of Health, retired

Willie D. McCullough, PhD
Senior Program Officer, Office of Construction Grants, National Center for Research Resources, National Institutes of Health

John G. Miller, DVM, ACLAM
Director, Office for Protection from Research Risks, National Institutes of Health, retired

Richard K. Nakamura, PhD
Scientific Director, Division of Intramural Research Programs, National Institute of Mental Health, National Institutes of Health

Christian E. Newcomer, VMD, DACLAM
Executive Director, Association for Assessment and Accreditation of Laboratory Animal Care International

Tanja Popovic, MD, PhD
Deputy Associate Director for Science, Centers for Disease Control and Prevention

Dario Ringach, PhD
Professor, Neurobiology and Psychology, Jules Stein Eye Institute, Biomedical Engineering Program, David Geffen School of Medicine, University of California, Los Angeles

Sally J. Rockey, PhD
Deputy Director for Extramural Research and Director, Office of Extramural Research, National Institutes of Health

Dale Schwindaman, DVM
Deputy Administrator, Regulatory Enforcement and Animal Care, Animal and Plant Health Inspection Service, U.S. Department of Agriculture, retired

Animal Welfare and Scientific Research: 1985 to 2010

Speaker List

Susan B. Silk, MS
Director, Division of Policy and Education, Office of Laboratory Animal Welfare, National Institutes of Health

Michael R. Talcott, DVM, DACLAM
Director, Veterinary Surgical Services, Division of Comparative Medicine and Research Assistant Professor, Surgery and Neurosurgery, Washington University

James F. Taylor, DVM
Director, Office of Animal Care and Use, National Institutes of Health, retired

Gerald L. Van Hoosier, DVM, DACLAM
Professor Emeritus, Comparative Medicine, School of Medicine, University of Washington

William White, VMD, MS, DACLAM, DECLAM
Corporate Vice President, Veterinary and Professional Services, Charles River Laboratories

Robert A. Whitney, DVM, MS
Public Health Service, retired

Thomas Wolfe, DVM, PhD
Director, Institute for Laboratory Animal Research, National Research Council, National Academy of Sciences, retired

Larry J. Young, PhD
Professor, Department of Psychiatry and Behavioral Sciences, Emory University School of Medicine and Division Chief, Center for Behavioral Neuroscience, Yerkes National Primate Research Center

Stuart M. Zola, PhD
Director, Yerkes National Primate Research Center; Professor, Psychiatry and Behavioral Sciences, Emory University School of Medicine and Associate Director, Emory Alzheimer’s Disease Research Center

Dr. Dava S. Zuger, MD
Professor, Department of Obstetrics and Gynecology, Stanford University School of Medicine; Director, M.D. Anderson Cancer Center, University of Texas; and Director, National Institutes of Health, retired.
Thank You to Our Supporters

The generosity of the following NIH Institutes and Centers, federal partners, non-profit and business organizations help make this important event possible. Stewardship of federally funded research and the protection of animals used in that research is a collaborative effort between USDA, NIH, federally supported scientific investigators, and research institutions. OLAW, USDA and IACUC 101 are honored to stand shoulder to shoulder with these partners and supporters in our shared mission to provide quality animal care in support of biomedical research to advance both human and animal health.

NIH Institutes and Centers

Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
National Cancer Institute (NCI)
National Eye Institute (NEI)
National Heart Lung and Blood Institute (NHLBI)
National Human Genome Research Institute (NHGRI)
National Institute on Aging (NIA)
National Institute on Alcohol Abuse and Alcoholism (NIAAA)
National Institute of Allergy and Infectious Diseases (NIAID)
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
National Institute on Drug Abuse (NIDA)
National Institute of Mental Health (NIMH)
National Institute of Environmental Health Sciences (NIEHS)
Office of Animal Care and Use (OACU), Office of Intramural Research, Office of the Director, NIH

Federal Partners

Centers for Disease Control and Prevention (CDC)
Department of Veterans Affairs (VA)
Food and Drug Administration (FDA)

Non-Profit Organizations

Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC)
Americans for Medical Progress (AMP)
Collaborative Institutional Training Initiative (CITI)
Foundation for Biomedical Research (FBR)
Public Responsibility in Medicine and Research (PRIM&R)
Scientists Center for Animal Welfare (SCAW)
States United for Biomedical Research (SUBR)

Business Organizations

Charles River Laboratories, Inc.

Helpful Links

References

• PHS Policy on Humane Care and Use of Laboratory Animals
  (http://grants.nih.gov/grants/olaw/references/phspol.htm)

• U.S. Government Principles
  (http://grants.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples)

• Health Research Extension Act of 1985 (Public Law 99-158)

• Animal Welfare Act and Regulations
  (http://www.nal.usda.gov/awic/legislat/awa.htm)

• Guide for the Care and Use of Laboratory Animals
  (http://www.nap.edu/catalog.php?record_id=12910)

Organizations

• Office of Laboratory Animal Welfare, National Institutes of Health
  (http://grants.nih.gov/grants/olaw/olaw.htm)

• Animal and Plant Health Inspection Service, U.S. Department of Agriculture
  (http://www.aphis.usda.gov/)

• Animal Welfare Information Center, National Agricultural Library, USDA

• IACUC 101
  (http://iacuc101.org/)

• Association for Assessment and Accreditation of Laboratory Animal Care International
  (http://www.aaalac.org/)
General Information

Bethesda North Marriott Hotel & Conference Center
5701 Marinelli Road, Bethesda, Maryland 20852
Phone: 1-301-822-9200 (not to be used for reservations)
Fax: 1-301-822-9201
The Bethesda North Marriott Hotel & Conference Center is near the Strathmore, restaurants, shopping & many attractions and landmarks.

Arrival Information
Check-In time is 4:00pm and checkout is 12:00pm daily. Express check-in and out services are also available.

High-Speed Internet Access
Wireless access is available throughout the hotel for $12.95 per day.

Business Service
The hotel offers a full service business center which is open 24 hours located in the hotel lobby area.

Transportation
Airports: The hotel is located within close proximity to three major airports: Ronald Reagan Washington National Airport, Baltimore/Washington International Thurgood Marshall Airport, and Dulles International Airport. You have a few options for getting to/from the airports:

Subway service: Metro fee from Ronald Reagan Washington National Airport is $5.00 (one way).

Shuttle service: Shuttle services at all three airports offer inexpensive shared transportation.

Taxi service: From Dulles International Airport, estimated fare is $60.00 (one way). From Ronald Reagan Washington National Airport, estimated fare is $55.00 (one way). From Baltimore/ Washington International Thurgood Marshall Airport, estimated fare is $75.00 (one way).

On-site Dining

Meritage
American
- Open for breakfast, lunch and dinner
- Dress code: Casual
- Phone: 301-822-9234

On The Rocks
Other
- Open for lunch and dinner
- Dress code: Casual
- Phone: 301-822-9234

Things To Do In The Area

Downtown Bethesda: In downtown Bethesda, you’ll find a thriving urban district, brimming with nearly 200 restaurants, two live theaters, 20 art galleries and some of the best shopping in the Washington, DC Metro Area. Take the red line Metro to the Bethesda Station.

Washington, DC: Take the Metro downtown to explore the nation’s capital. There you’ll find a plethora of restaurants, theaters, shopping districts, monuments, museums, and memorials.

On-site Information

For assistance during the conference, visit the registration desk located on the Main Level in the conference area during the following times:

Monday, October 25: 7:00am – 5:30pm
Tuesday, October 26: 7:00am – 5:30pm

Exhibitors
Non-profit organizations will be exhibiting in the foyer area on the Main Level in the conference area.

Exhibit Hours:
Monday, October 25: 7:00am – 5:00pm
Tuesday, October 26: 7:00am – 5:00pm