

University of Wisconsin - Madison A3368-01

ANIMAL WELFARE ASSURANCE in accordance with the PHS Policy for Humane Care and Use of Laboratory Animals

I, Dr. William S. Mellon, Ph.D. as named Institutional Official for animal care and use at the University of Wisconsin - Madison, hereinafter referred to as Institution, by means of this document, provide assurance that this Institution will comply with the Public Health Service Policy on Humane Care and Use of Laboratory Animals, hereinafter referred to as PHS Policy.

I. APPLICABILITY OF ASSURANCE

This Assurance is applicable to all research, research training, experimentation, biological testing, and related activities, hereinafter referred to as activities, involving live vertebrate animals supported by the Public Health Service (PHS) and conducted at this Institution, or at another institution as a consequence of the subgranting or subcontracting of a PHS-conducted or -supported activity by this Institution.

"Institution" includes the following branches and major components of University of Wisconsin - Madison: the Graduate School, School of Medicine & Public Health (formerly the Medical School), School of Veterinary Medicine, College of Agricultural and Life Sciences, and the College of Letters and Science. Research units with animal subjects within each College are as follows:

<u>The Graduate School</u>: Biotron; Enzyme Institute; The Wisconsin National Primate Research Center; Waisman Center.

School of Medicine & Public Health (SMPH): Clinical Sciences Center; 1300 University Avenue (MSC); Biotechnology Center; McArdle Laboratories; School of Pharmacy; Meriter Hospital; WISPIC Building; 601 Science Drive Service Memorial Institute (SMI, Bardeen); Microbial Science Building

School of Veterinary Medicine (SVM): Animal Health and Biomedical Sciences;
Charmany Instructional Facility; Medicine Veterinary Teaching Hospital; Cross Plains Farms; Bookhout Farms; Influenza Research Institute (expected to open in fall of 2008)

Bascom Hall

500 Lincoln Drive

Madison, Wisconsin 53706-1380

The College of Agricultural and Life Sciences (CALS): Animal Sciences; Blaine Dairy Cattle Center (Arlington); Beef Nutrition (Arlington); Beef Physiology (Arlington); Biochemistry; Dairy Forage Research Center-Prairie du Sac; Dairy Cattle Center; Feed Mill-Arlington; Dairy Heifers Replacement Center (Arlington); Franbrook Beef Facility; Lake Mills Fish Hatchery; Lancaster Ag. Research Station; Livestock Laboratory (Large Animal Holding); Marshfield Dairy Center; Muscle Biology Lab; Nutritional Science; Old Dairy Barn & Equine Center; Poultry Research Lab; Russell Labs (Wildlife Ecology); Sheep Research Center (Arlington); Spooner Sheep Center; Stock Pavilion; Swine Research Center (Arlington); Water Science & Engineering Lab; West Madison Ag Research

The College of Letters and Science (L&S): Psychology-Brogden Hall; Zoology-Birge Hall; Zoology Research; Noland Hall (Zoology); Harlow Center for Biological Psychology; Limnology; Trout Lake; State Lab of Hygiene (Environmental Health)

II. INSTITUTIONAL COMMITMENT

- A. This Institution will comply with all applicable provisions of the Animal Welfare Act and other Federal statutes and regulations relating to animals.
- B. This Institution is guided by the "U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training."
- C. This Institution acknowledges and accepts responsibility for the care and use of animals involved in activities covered by this Assurance. As partial fulfillment of this responsibility, this Institution will ensure that all individuals involved in the care and use of laboratory animals understand their individual and collective responsibilities for compliance with this Assurance, as well as all other applicable laws and regulations pertaining to animal care and use.
- D. This Institution has established and will maintain a program for activities involving animals in accordance with the "Guide for the Care and Use of Laboratory Animals" ("Guide"). The following is excerpted from a letter by UW President Robert M. O'Neil to all UW Chancellors, dated December 18, 1981:"University of Wisconsin System Policy: All Animals used for teaching, research, or other activities on all campuses shall be used and cared for according to the principles stated in the Guide for the Care and Use of Laboratory Animals, revised 1996 (The Guide) or succeeding additions regardless of the species or source of funds used to conduct teaching, research, or other activities." Following the release of the revised version of "The Guide" this policy was reaffirmed, in 1997, by official action of the All Campus IACUC. In addition the "Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching" (Ag Guide) has been designated as the official document for agricultural animals used for agricultural research (food and fiber). The Guide will be the primary reference for farm animals used in biomedical research, including those maintained in typical farm settings.

III. INSTITUTIONAL PROGRAM FOR ANIMAL CARE AND USE

A. The lines of authority and responsibility for administering the program and ensuring compliance with this Policy are as follows: The ultimate responsibility for the program of Research Animal Care and Use lies with the Chancellor of the University of Wisconsin-Madison, Dr. John Wiley, Dr. Wiley has announced his September 1, 2008 retirement and his replacement Dr. Biddy (Carolyn A.) Martin has been appointed his successor. The responsibility and authority of the Institutional Official (IO) has been specifically delegated by Chancellor Wiley to Dr. William S. Mellon, Associate Dean for Research Policy. Dr. Wiley maintains responsibility and authority for IACUC appointments. The Research Animal Resources Center (RARC), a research support center of the Graduate School, headed by Eric Sandgren, VMD, PhD, provides campuswide veterinary care (except Primate Center which provides its own as a result of funding requirements), provides campus-wide training, oversees compliance for the campus operation of the animal care programs and advises the Animal Care Committees on animal care and use. RARC works with the All Campus Animal Care Committee (N.J Benevenga chairs the committee) which is comprised of: the chairs of the five campus IACUCs; Director, RARC; Chief Campus Veterinarian, two outside members along with non-voting members such as legal representative, facility specialist, and safety staff to establish overall campus policy.

The lines of authority and responsibility for administering the program and ensuring compliance with the Policy are detailed in ORG_A3368-01 (attached).

B. The Research Animal Resources Center (RARC) is a research support unit of the Graduate School. Fifteen veterinarians are affiliated with RARC and/or with other campus animal facilities (Primate Center). These personnel are responsible for overseeing the care and use of laboratory animals at UW-Madison. The authority of the veterinarians is defined in the attached memo from the Chancellor and Vice Chancellor for Research (VetAuthorityPolicyLtr_A3368-01).

The qualifications, authority, and percent of time contributed by the veterinarians who will participate in the program are as follows:

Dr. Janet Welter, DVM, MPH, Ph.D., ACLAM

Chief Campus Veterinarian (Research Animal Veterinarian) RARC, PTE, 16 years experience in lab animal medicine

Dr. Welter is the Chief Campus Veterinarian and as such is responsible for the care of animals across campus. All veterinary staff report to her with the exception of the Primate Center veterinarians. This is the result specific requirements in the grant that supports the center which states that the Primate Center veterinarians must report to the Director of the Primate Center. That said there is a very strong working relationship between the two groups. The campus recognizes Dr. Welter as the campus veterinarian and she has worked out all issues with the Primate Center. Dr. Welter has delegated program authority and responsibility for the institution's animal care program. Dr. Welter also serves as attending vet for the School of Veterinary

Medicine and is a voting member of that committee as well as the All Campus Animal Care and Use Committee.

Dr. Richard (Jim) Brown, DVM

Attending Veterinarian – CALS, GRAD – small animal, non-Human Primate (Research Animal Veterinarian) RARC, FTE 4 years experience in lab animal medicine

Dr. Brown is Attending Veterinarian for non farm animal species in CALS and provides clinical services for those species. He also serves as the Attending Veterinarian for the Graduate School, excepting the Primate Center. He serves on the CALS & GRAD IACUC. His appointment also involves service to other campus units as necessary.

Dr. Andrew Jefcoat, DVM, Ph.D.

Interim Attending Veterinarian – SMPH (Research Animal Veterinarian) RARC, FIE 5 years experience in lab animal medicine

Dr. Jefcoat is the Attending Veterinarian for the School of Medicine and Public Health (SMPH) and is responsible for the clinical care of the animals. He also provides guidance for husbandry, facility design and operation. He is a voting member of the SMPH IACUC.

Dr. Calvin Patten, DVM

Clinical Veterinarian – SMPH (Research Animal Veterinarian) RARC, 'FTE_, 5 years experience in lab animal medicine

Dr. Patten provides clinical care to SMPH animals. He also provides guidance to vet techs & care staff. He is involved in the design of new facilities. He is a voting member of the SMPH IACUC.

Dr. Meghan Hessler, DVM

Clinical Veterinarian – SMPH (Research Animal Veterinarian) RARC, FTE, <1 year experience in lab animal medicine

Dr. Hessler provides clinical care to SMPH animals. She is a voting member of the SMPH IACUC.

Dr. Saverio (Buddy) Capuano, DVM, ACLAM

Attending Veterinarian - Wisconsin National Primate Research Center (WNPRC) (Research Animal Veterinarian) WNPRC, FTEL, 22 years experience in lab animal medicine

As Attending Veterinarian, Dr. Capuano provides administrative services to the operation of the Wisconsin National Primate Research Center. He is also responsible for clinical care of primates in that facility. Dr. Capuano serves on the Graduate School IACUC. Dr Capuano reports to the Director of the Wisconsin National Primate Research Center as mandated by NCRR funding. Dr. Capuano has delegated authority for the Primate Center animal care and use program. Even though we were unsuccessful in an attempt to change NCRR's funding policies as it relates to veterinary reporting (vet to Primate Center Director) Dr. Capuano understands his responsibility to interact and report issues to Dr. Welter, the Chief Campus Veterinarian.

Dr. Kevin Brunner, DVM

Clinical Veterinarian – WNPRC (Research Animal Veterinarian) WNPRC, FTF, 7 years experience in lab animal medicine

Dr. Brunner provides clinical services for the Primate Center animals. He consults with investigators during protocol preparation and provides surgical services.

Dr. Christina Cruzen, DVM

Clinical Veterinarian – WNPRC (Research Animal Veterinarian) WNPRC, FTE 4 years experience in lab animal medicine

Dr. Cruzen provides clinical services for the Primate Center animals.

Dr. Michelle Harke, DVM

Clinical Veterinarian – WNPRC (Research Animal Veterinarian) WNPRC, FTE 5 years experience in lab animal medicine

Dr. Harke provides clinical services for the Primate Center animals.

Dr. Lisa Krugner-Higby, DVM, Ph.D., ACLAM

Attending Veterinarian – L&S (Research Animal Veterinarian) RARC, FTE 22 years experience in laboratory animal medicine

Dr. Krugner-Higby is the Attending Veterinarian for the College of Letters and Science (L&S) animal program. She sits on the L&S IACUC. Her appointment also involves service to other campus units as necessary. She also assists in training programs as described.

Dr. Annette P. Gendron-Fitzpatrick, DVM, Ph.D., ACVP

Pathologist (Research Animal Veterinarian) Director, RARC Diagnostic Laboratory RARC, FTE, 30 years experience in veterinary pathology

Dr. Gendron-Fitzpatrick oversees all functions of the RARC diagnostic lab and provides

full histopathology services for campus animal facilities. She also assists with the training program.

Dr. Ruth Sullivan, DVM, Ph.D.

Pathologist (Research Animal Veterinarian) RARC, FTE 12 years experience in veterinary pathology

Dr. Sullivan provides pathology services in support of clinical and research activities, she also assists with the training program.

Dr. Michael Maroney, DVM

Attending Veterinarian (Ag Species) – CALS & SVM (Research Animal Veterinarian) RARC, FIE 4 years experience in large animal medicine

Dr. Maroney is the Attending Veterinarian for farm animal species in CALS & SVM and provides clinical care for those species. In addition he provides research assistance to projects utilizing those species. He serves on the CALS & SVM IACUC.

Dr. James Goodrich, DVM, Ph.D., ACLAM

Veterinarian At Large (Research Animal Veterinarian) RARC, FTE, 16 years experience in lab animal medicine. Dr. Goodrich provides clinical and program assistance as needed.

Dr. Jennifer Bacon, DVM

Resident RARC/ Primate Center, FTE

Dr. Bacon provides clinical assistance as part of her training.

C. The Institutional Animal Care and Use Committees (IACUC) at this Institution are properly appointed in accordance with the PHS Policy IV.A.3.a and are qualified through the experience and expertise of its members to oversee the Institution's animal care and use program and facilities. Attached are the member lists for each IACUC (6 total) and their names, degrees, profession, titles or specialties, and institutional affiliations. (IACUC_INFO_A3368-01)

The UW-Madison has one of the largest and most complex animal programs. In order to meet the oversight responsibilities presented by the sheer size and complexity we have created a non-standard IACUC system which has been operational for many years. There are five (5) colleges/schools on campus that have animal based research. For each of these colleges/schools an Animal Care and Use Committee (ACUC) has been duly created. Having these five (5) ACUC's gives us not only the resources to carry out our responsibility but also gives the individual committees the expertise to deal with the unique research and animal use of their respective college/School. In order to show both internally and externally that UW-Madison is a single campus-wide program with a single assurance, there is a sixth committee, the All Campus Animal Care and

Use Committee (ACACUC). The ACACUC is the central voice for UW-Madison's single program, single Assurance.

The five (5) college/school committees are duly established Animal Care and Use Committees representing the five (5) animal using colleges/schools previously listed in Part 1. The role and responsibilities of the five (5) ACUC's follows that of a traditional IACUC (more detail in section 6). The members of the five (5) ACUCs are recommended to serve on the committees by the Associate Research Deans of the corresponding school or college and officially appointed by the Chancellor. All UW-Madison Animal Care and Use Committees consist of at least five members, and meet the compositional requirements set forth in the PHS Policy at IV.A.3.b. The five (5) ACUC's have direct access and reporting capabilities to the I.O. along with a reporting responsibility to the All Campus Animal Care and Use Committee.

The All Campus Animal Care and Use Committee maintains the role and responsibilities of a traditional IACUC (more detail in section 6) but carries out other duties in its role of providing the single program, single assurance focus. It is responsible for the creation of policy on all aspects of responsible care and use of research animals for the entire University. This committee is charged with the responsibilities of regular review of the overall policies and operations of the program and of communication of these to the University community as a whole through appropriate faculty and other channels. Members of the All Campus Committee include all the Chairs of the College and School Committees, two non-affiliated/non-scientists, and non-voting members of safety, legal, and RARC. The members of the All Campus Animal Care and Use Committee are appointed by the Chancellor. Like the ACUC's the ACACUC consist of at least five members, and meet the compositional requirements set forth in the PHS Policy at IV.A.3.b. The All Campus Animal Care and Use Committee reports directly to the IO and is advisory to the Chancellor. The ACACUC does retain the ability to conduct inspections, protocol reviews, and any other activity of a duly constituted IACUC on its own volition in situations where it feels an action or activity is clearly a risk to the University's program. The ACACUC cannot overrule an action by a college/school committee but it can make an action by the college/school committee more stringent. The All Campus Committee may act as a consultant to the college/school committees in their review of incidents and action taken.

- D. Each of the 5 UW-Madison College and School Animal Care and Use Committees and the All Campus Animal Care & Use Committee will:
- 1. Review at least once every six months their School/College's portion of the institutional program for humane care and use of animals, using the <u>Guide</u> (or Ag Guide as previously indicated) as a basis for evaluation. Following the finalization and signing of the school/college program review, The All Campus Animal Care and Use Committee (ACACUC) will meet to review the five (5) reports and assemble a campus-wide report for submission to the I.O. The review by all committees utilize a worksheet based on the *Guide for the Care and Use of Laboratory Animals* and the definition of an animal care program. Both the definition and the worksheet have been published in *Lab Animal* [Lab Animal 2005 Nov; 34(10):41-4; Lab Animal 2007 Oct; 36(9):36-40]. Representatives from core campus services, such as Occupational Health and Safety

and RARC training services, are invited to participate along with voting committee members. The committee's discussions are recorded in minutes and ratified and signed at a following ACUC meeting. The identification of programmatic deficiencies and deviations from the *Guide*, designation of deficiencies as minor or significant, and selection of correction dates is performed and any minority opinion(s) is attached. The All Campus reviews all five (5) college/school signed semi-annual program evaluations and submits a combined signed report to the IO, Dr. William Mellon, Associate Dean for Research Policy. The individual signed reports are available for review by the I.O., along with all of the work sheets utilized for inspections and program review.

2. Inspect at least once every 6 months their College's animal facilities, including satellite facilities, using the <u>Guide</u> &/or <u>Ag Guide</u>, as appropriate, as a basis for evaluation. The committees have recently initiated a year round inspection program that spreads the inspection over the entire year while maintaining the six (6) month time interval.

The IACUC procedures for conducting semiannual facility inspections are as follows: Subcommittees of each ACUC inspect all animal care facilities including satellite facilities that fall within their respective college/school. Any committee member is welcome to go on the facility inspection and many times members of other School/College ACUC will go on another ACUC inspection. A checklist and recording document are part of the inspection. On occasions consultants are involved in the facility inspections. The findings are compiled, discussed at a convened meeting, and recorded in the official minutes of the committee, which includes correction date. An executive summary of the facility inspections is created and each ACUC forwards their final signed report for inclusion in the campus-wide report. The All Campus ACUC receives a report semiannually verifying that the inspections were performed by the School/College ACUCs responsible for each within the required time frame and descriptions of any significant deficiencies. The All Campus reviews all five (5) college/school signed semiannual facility inspections and submits a combined signed report to the IO, Dr. William Mellon, Associate Dean for Research Policy. The individual signed reports are available for review by the I.O., along with all of the work sheets utilized for inspections and program review. With facility inspections now on a year round program the facilities review continuous to run parallel with the program review. The only difference is that only the facilities inspected during that six (6) months are included. RARC coordinate both program and facility activities along with the monitoring of deficiency corrections.

3. Prepare reports of the IACUC evaluations as set forth in the PHS Policy IV.B.3 and submit the reports to the Institutional Official.

The procedures for developing reports and submitting them to the Institutional Official are as follows: The review by all committees utilizes a worksheet based on the *Guide for the Care and Use of Laboratory Animals* and the definition of an animal care program. Both the definition and the worksheet have been published in *Lab Animal* [Lab Animal 2005 Nov; 34(10):41-4; Lab Animal 2007 Oct; 36(9):36-40]. The All Campus committee combines the information from each school/college committee reports to create a campus wide report. The report lists any deficiencies and whether they were found to be significant or not. Correction dates are assigned and progress of correction is monitored by RARC. RARC regularly reports back progress to the

committee. If a completion date is passed without correction RARC immediately notifies the committee of this fact and appropriate action is taken based on investigation by the committee or designee.

- 4. Review concerns involving the care and use of animals at the Institution. The IACUC procedures for reviewing concerns are as follows: Anyone with a concern about the care and use of animals at this institution may submit a written statement of their concern to the appropriate ACUC chairman, All Campus Chair or any RARC professional staff. The concern will be brought to the appropriate full Committee for discussion, resolution, and response. If the concern is a serious one, consultation may be requested from campus resources (e.g. legal, human resources, etc.) Final resolution will be enacted by the investigating committee and a written report submitted to the I.O. and All Campus. All Campus ACUC has in place a "Whistleblower Policy" (2003-17) resulting in the posting of a "Whistleblower" poster at all animal facilities (posting is one of the facility inspection points). This poster offers the appropriate contacts with whom to raise animal care and use concerns.
- 5. Any committee may make written recommendations to the IO regarding any aspect of the institution's animal program, facilities, or personnel training. Any school/college committee should copy the All Campus committee.
- 6. In accord with the PHS Policy IV.C.1-3, the IACUC shall review and approve, require modifications in (to secure approval), or withhold approval of PHS-supported activities related to the care and use of animals. The IACUC procedures for protocol review are as follows:

A single Animal Use Protocol Review form has been established for utilization by all committees at UW-Madison. RARC is responsible for receiving and processing all protocols for animal use. They are then distributed to the appropriate Committee for review. Following review and with approval, RARC notifies the investigator of the status of the protocol in writing. The logistics of all protocol processing is coordinated in the RARC office. Committee actions include:

- a. "Approval"-- the project is approved as proposed, signed by the IACUC chair and an approval letter forwarded to the Pl.
- b. "Approval with modification"-- the project is approved pending required changes by the PI. If the PI revises the protocol as recommended by the committee, then it is approved and an approval letter is forwarded to the PI.
- c. "Disapproval"--the proposal is rejected. Serious deficiencies exist and this protocol is returned to the PI for any further initiation of a revised protocol.

NOTE: In 2009 the University of Wisconsin-Madison will move to an on-line protocol management system.

Specifics of the review are as follows:

All work involving the use of vertebrate animals at the University requires approval by the ACUCs regardless of the source of funding or the intended use of the animals (i.e., teaching, research or testing, outreach). Animal use protocols are completed by the principal investigators (PIs) on a standardized form used throughout the campus. The form is submitted to RARC. RARC staff perform database input of each protocol and

determine which ACUC will review the protocol based on the facility in which animals will be housed.

Protocols are assigned to specific members of the ACUC for review by RARC staff with permission of the ACUC chairs. Two members of the ACUC (one veterinarian and one non-veterinarian) are identified as the primary reviewers of each protocol. Although primary reviewers are identified, each ACUC member is provided with a full set of protocols received by the deadline for each meeting either in hardcopy form in meeting packets or electronically via email. All members are encouraged and expected to read all of the protocols they receive and raise concerns or questions for discussion by the ACUC.

Prior to the convened meeting, reviewer questions are collected and compiled by RARC staff and distributed to the ACUC members at the monthly meeting. This facilitates discussion of each individual protocol, led by the primary reviewer. The ACUC may take action to either approve, approve pending modifications or clarification, defer for future review, or deny each protocol. If approved pending modification or clarification, the committee can either request an opportunity to discuss the modification or clarification at a subsequent meeting or delegate review and approval to the veterinarian reviewer. As this is a designate review each committee will establish new or review an existing committee policy allowing an automatic designated review of modifications/clarifications by the reviewing veterinarian. Each voting ACUC member must endorse this policy. This veterinarian review is a single person designated review which allows the veterinarian the option of approval, approval with modifications, or referral to full-committee. Once approved, RARC provides the PI with a letter certifying the approval date.

A new, renewed, protocol are handled in one of two ways, full committee review or can be reviewed by Designated Review (DR). For DR each voting committee member is provided a copy of the protocol (via email) and those members respond with within a reasonable deadline which can vary but is approximately five working days. Any member voting "not eligible" sends the protocol to the full convened committee for review. For each protocol the Designated Reviewers may take action to either approve, approve pending modifications or clarification, or call for full committee review at a convened meeting. If called for full committee review, the protocol is scheduled for the next ACUC meeting. Institutional policy #2002-20 describes this process.

7. Review and approve, require modifications in (to secure approval), or withhold approval of proposed significant changes regarding the use of animals in ongoing activities as set forth in the PHS Policy IV.C.

The procedures for significant changes are the same as for new or renewed protocols and are restated here. A protocol with significant changes is handled in one of two ways, full committee review or can be reviewed by Designated Review (DR). For DR each voting committee member is provided a copy of the protocol (via email) and those members respond with within a reasonable deadline which can vary but is approximately five working days. Any member voting "not eligible" sends the protocol to the full convened committee for review. For each protocol the Designated Reviewers may take action to either approve, approve pending modifications or clarification, or call for full committee review at a convened meeting. If called for full committee review, the

protocol is scheduled for the next ACUC meeting. Institutional policy #2002-20 describes this process.

- 8. Notify investigators and the Institution in writing of its decision to approve or withhold approval of those activities related to the care and use of animals, or of modifications required to secure IACUC approval as set forth in the PHS Policy IV.C.4. The IACUC procedures to notify investigators and the Institution of its decisions regarding protocol review are as follows: The ACUC notifies investigators and the institution in writing of its decision to approve or withhold approval of those activities related to the care and use of animals, or of modifications required to secure IACUC approval. If the IACUC decides to withhold approval of an activity, it include in its written notification a statement of the reasons for its decision and give the investigator an opportunity to respond in person or in writing. For investigators this notification is done through email. For the I.O. a report is sent which provides the relevant information as to the committee's decision
- 9. Conduct continuing review of each previously approved, ongoing activity covered by PHS Policy at appropriate intervals as determined by the IACUC, including a complete review in accordance with the PHS Policy IV.C.1-4 at least once every three years. The IACUC procedures for conducting continuing reviews are as follows:

Annual Updates:

Up to two reminders are sent to each PI by RARC as the annual re-approval date of each protocol approaches. This required form is filled out by each investigator for each protocol and returned to RARC. The form asks the PI to report any changes or any adverse events, and the PI must specifically request continuance of the protocol for one year. At each convened meeting each ACUC reviews a brief synopsis of each project due for its annual update, requests any needed changes or clarifications, and approves the annual re-approvals by motion and majority vote. RARC communicates the ACUC's requests, if any, to the PIs, tracks the responses, and reports the results to the ACUC. If a PI fails to return the required form, the ACUC takes action to suspend the protocol for noncompliance or enact other consequences. All actions of suspension are reported to the I.O. and to OLAW. If there are adverse events reported on the form the ACUC is informed of those reports at a convened meeting for discussion and action.

Renewals:

Up to three reminders are sent to each PI by RARC as the expiration date of each protocol approaches. Protocols must be newly submitted to the ACUC every three years for complete *de novo* review and approval. If the PI fails to respond, the protocol is terminated upon the expiration date. A notice of protocol termination is sent by the protocol office via email to the PI, department chairperson, attending veterinarian of the relevant ACUC, and the manager of the animal facility listed on the protocol.

8. Be authorized to suspend an activity involving animals as set forth in the PHS Policy IV.C.6. The IACUC procedures for suspending an ongoing activity are as follows: Following a complete investigation of the incident at a convened meeting with a quorum of voting members present. Should the committee vote for and approve a suspension, this action and the specifics must be reported to OLAW. For this a joint letter from the

I.O. and Chief Campus Veterinarian has been the practice. Many times a University representative will inform OLAW via telephone that that investigation is underway and a written report will follow if deemed appropriate.

Suspension of an activity involving the care and use of animals can be rapidly initiated upon recommendation of an RARC or other campus Research Veterinarian to the Chair of the appropriate IACUC. Authority has been granted to the RARC and other campus Research Veterinarians to immediately temporarily suspend a project if it is deemed to involve neglect, obvious diversion from an approved protocol, or it is determined that animal suffering is evident. The Veterinarian will in all instances attempt to resolve the problem with the PI in order to expeditiously relieve pain or suffering. In all instances, the matter will be fully investigated and brought to the appropriate Committee or final resolution.

Should the PI wish to appeal a Committee's action or suspension of an activity, an appeal can only be made to the committee that initiated the action or suspension. That committee may reverse itself through the vote of the majority of the quorum. The action of the committee is final.

E. The occupational health and safety program for personnel working in laboratory animal facilities or have frequent contact with animals is as follows:

Institutional Hazard Identification and Risk Assessment:

12

Hazard identification and risk assessment is the first step in the University's occupational health and safety program. All other health and safety components are related to it, and refer to it. The fundamental tools used to evaluate hazards and risks are: information from protocol reviews, on-site visits and inspections, review of workers compensation data, chemical hygiene plans, material safety data sheets, and other relevant reference materials such as *Guide for the Care and Use of Laboratory Animals* (National Academy Press, 1996), *Occupational Health and Safety in the Care and Use of* Research Animals (National Academy Press, 1997), Occupational Health and Safety in the Care and Use of Nonhuman Primates (National Academy Press, 2003), and the CDC/NIH publication Biosafety in Microbiological and Biomedical Laboratories, 5th edition, January 2007.

Exposure intensity, frequency, hazards posed by animal species, and the materials used in or with the animals are evaluated by the Animal Care and Use Committees and other specialized review committees. An Occupational Health Specialist participates in protocol review at all Animal Care and Use Committee meetings.

The University of Wisconsin has standing committees on Occupational Health, Biological Safety, Radiation Safety, and Chemical safety. Professional assistance in research study design, monitoring during the study, and support in the event of an accident or exposure is available.

The Institutional Biosafety Committee (IBC) reviews research activities involving biologically hazardous materials and/or recombinant DNA molecules or organisms. The Office of Biological Safety (OBS) is the administrative office of the IBC. Review of biosafety protocols submitted by investigators forms the basis for the conduct of a thorough risk assessment, the results of which are communicated to the principal

investigator via the protocol registration form. Additional details are provided below (see Description of Institutional Policies).

The Safety Department's Chemical Safety staff assists laboratories on using chemicals safely and preventing hazardous exposures. They also assist with chemical disposal and spill cleanup and provide a manual titled, "Laboratory Safety Guide." Each laboratory is required to have a chemical hygiene plan while non-chemical laboratories are required to have a Hazard Communication Plan. The Chemical Safety Committee uses the OSHA Laboratory Standard to identify Particularly Hazardous Substances requiring additional special precautions. A Particularly Hazardous Substance Approval Form is completed for each area using these chemicals. After approval this form is reviewed by all personnel working with that material, and is attached to their chemical hygiene plan. All rooms used for storing hazardous materials must have a "Laboratory Emergency Information" form posted near the door and a copy of the completed form must be provided to each facility manager. The color of the sign is changed periodically to ensure that users are reviewing and updating their signs (color as of June 2008 is yellow).

To use radioactive materials in vertebrate animals, the authorized user must submit a form 99A to the Radiation Safety Office in the Safety Department. An animal use protocol approved by the appropriate Animal Care and Use Committee is also required prior to approval of the 99A request. Radiation Safety works with the authorized user to assure: that proper radiation training has occurred, that animals are not moved to unauthorized facilities, that proper labeling is placed in animal rooms and cages, that animal waste food and bedding is properly disposed of, that the animals are permanently marked or tagged as having been given radioactive materials, that the animal is disposed of by the Safety Department when sacrificed, and that other requirements as stated on form 99A are followed. The Radiation Safety Office controls the purchase of all radioactive materials for the campus. Unless all required practices are followed, the user will not be allowed to obtain radioactive materials for the project.

One of the fundamental processes of the occupational health and safety program is to evaluate all animal contact risk questionnaires. By completing an animal contact risk questionnaire an individual becomes enrolled in the occupational health program. All completed questionnaires are reviewed by the University Occupational Health & Hygiene Officer, The goal is to reduce or control hazards and risks associated with animal contact. The Occupational Health & Hygiene Officer connects the information from the questionnaire to bio-safety, chemical safety and radiation safety hazard and risk databases. The Occupational Health & Hygiene Officer can also access animal care and use protocols, building and room data, training, immunization, and tuberculin skin testing records. This information is collectively used to assess that appropriate personal protective equipment is provided, proper hygiene practices are in place, related training has occurred, and engineering improvements are implemented. Medical services are available from University Health Service, University Hospital, and a private group of five board certified occupational health physicians.

Mandatory semi-annual tuberculin skin testing is required for all personnel with nonhuman primate contact. This program is administered by the Occupational Health & Hygiene Officer.

All principal investigators and staff working with non-human primates or tissue are responsible for following University policy on Herpesvirus simiae (Herpes B). This information is available at University's occupational health program website.

Enrollment in the Occupational Health Program is mandatory for the following participants:

- Faculty, staff and students named in an approved animal care and use protocol for teaching or research.
- Laboratory animal veterinarians, laboratory animal pathologists and their staffs. Certain office staff that has no animal contact may be excluded if appropriate.
- Animal care staff. This includes individuals who work or volunteer in animal facilities and individuals who reside at certain UW-Madison farms but who are not faculty, staff or students.
- Animal Care and Use Committee members, including lay members.
- Facility, maintenance and safety personnel who provide service support to animal care facilities, including equipment and devices house there.
- Veterinary medical students.
- Veterinary Medical Teaching Hospital (VMTH) staff including: faculty with clinical duties, staff veterinarians and residents; veterinary technicians and barn personnel; reception, medical records and other VMTH office staff; pharmacists, pharmacy staff, and central supply staff; VMTH employed facility and maintenance personnel.

An individual's Animal Contact Risk Questionnaire shall be updated annually. If nothing of substance has changed only one box on the questionnaire needs to be checked.

Personnel Training

All personnel with animal contact attend a mandatory orientation presented by Occupational Health. The following occupational health and safety topics are included in that orientation:

- Zoonosis
- · Hazardous agent contact
- Specific animal contact information
- Issues for women of child bearing age
- · Personal hygiene
- Use of personal protective equipment
- Allergies and asthma
- · Animal bite or scratch procedure
- Issues related to non-human primates

A tetanus booster within the past ten years is required for all personnel with direct animal contact. This tetanus booster can be received at no charge from University Health Services. Rabies vaccinations and titers are available on a voluntary basis for persons who are exposed to wild mammals or random source dogs or cats with no vaccination history. It is UW-Madison policy to use Class A vendors as the source of dogs and cats unless an approved protocol gives a valid scientific reason for not using Class A vendors, i.e., unique genetic characteristics not available through Class A

vendors.

Educational Programs for Hazardous Agents

The program of education is described above. Briefly, employees are given informational handouts, booklets and guides regarding potential occupational health hazards. They are given individual instructions and training as needed, either by RARC, the Safety Department, and/or their Principal Investigator.

Hazardous Agents

Specific occupational health requirements may be attached as conditions of approval of projects when those projects are reviewed by the appropriate safety committee or officer.

The University of Wisconsin has standing committees on Biological Safety and Radiation Safety. Professional assistance in study design, monitoring during the study, and decontamination in the event of accidents is available.

All animal users must, when required by biological safety guidelines, complete a separate biological safety form and receive separate approval from the Biological Safety Committee for those animal studies.

Personnel who have potential contact with hazardous agents are given individual instructions by the supervisor, PI, Safety Officer, or veterinarian.

Persons working with animals that have been exposed to infectious agents or hazardous chemicals are given special instructions on the handling of feed, bedding, and animals by the principal investigator, appropriate safety officer, and/or the veterinary staff.

The specific information and instruction vary widely with the agent and conditions in which the agent is used with an animal.

Protective Equipment

Protective clothing requirements vary widely with the application of the hazardous agent. All types of protective clothing are available, depending on the requirements, to protect the individual. These devices include masks, respirators, head covers, earmuffs, safety goggles or shields, boots, shoe covers, and gloves.

Experimentation Involving Hazardous Agents

The University of Wisconsin has standing committees on Biological Safety and Radiation Safety. Professional assistance in study design, monitoring during the study, and decontamination in the event of accidents is available. The Biotron, MSC, and SVM have containment facilities for doing certain types of infectious disease studies.

F. The total gross number of square feet in each animal facility (including each satellite facility), the species of animals housed therein and the average daily inventory of animals, by species, in each facility is provided in the attached.

The training or instruction available to scientists, animal technicians, and other personnel involved in animal care, treatment, or use is as follows:

Research Staff: The Research Animal Resources Center (RARC) provides training and instruction that is available to all personnel involved in the care, treatment and use of UW laboratory and agricultural animals and in the implementation of approved animal care and use protocols. Some of the courses available through RARC are:

a) New Animal User Online Certification b) 3-Year Animal User Online Recertification c) AALAS ALAT Course d) AALAS Self-Study Tutorial – ALAT, LATG e) AALAS Learning Library f) Biomethodology of the Cat g) Biomethodology of the Dairy Cattle h) Biomethodology of the Dog i) Biomethodology of the Ferret j) Biomethodology of the Gerbil k) Biomethodology of the Guinea Pig I) Biomethodology of the Hamster m) Biomethodology of the Mouse n) Biomethodology of the Rabbit o) Biomethodology of the Rat p) Biomethodology of the Swine q) Primate Handling and Behavior r) Lab Animal Surgery s) Controlled Substance Lecture t) Fish and Water Quality Seminar u) I have to collect WHAT – Tissue Collection v) Protocol Preparation 101 w) Record Keeping Seminar x) Rodent Breeding Colony Management

Training Coordinators serve as an informational resource to the UW-Madison research animal users on and off campus. Classes are taught by the trainers and are regularly assisted by the veterinary staff, which creates an optimal student/teacher ratio. All research personnel working with animals are required to take an on-line course called New Animal User Online Certification and an Occupational Health and Safety seminar. The on-line training covers the policies for humane care and use of animals, discusses ethics, potentials for zoonotic infections, and rules and regulations covering the use of animals. All newly hired UW-Madison animal use personnel are required to take species-specific training. This training may include classroom instruction, online training, and/or hands on training. In addition, new personnel performing surgery are required to attend the Lab Animal Surgery Course. This surgery course is an all day course, which consists of lectures, demonstrations and hands-on opportunities in anesthesia/analgesia, suturing and wound closure, aseptic technique and performing a splenectomy on a rat. A dedicated training room, located at the UW Enzyme Institute, gives the trainers the ability to offer classes and one-on-one sessions conveniently and frequently throughout the year. Mandatory classes include training in the minimization of animal numbers and limitation of pain and distress.

The AALAS Learning Library is utilized for online training opportunities. Topics and species include but are not limited to: Health and Disease, Mice, Rats, Hamsters, Guinea Pigs, Gerbils, Rabbits, Cats, Dogs, Nonhuman Primates, Swine, Sheep, Goats, Amphibians, Birds, Horses, Cattle, Reptiles, Fish, Ferrets, Chinchillas, Woodchucks, Opossums, and Armadillos.

The trainers are working with the Federation of Animal Science Societies (FASS) on more in depth online training opportunities for swine, dairy cattle, beef cattle and horses. This training utilizes FASS Ag Guide-based training modules, which consist of a PowerPoint presentation, video and a quiz.

Online training for Microisolator Technique is being created and will be available for all

new rodent users.

Two training DVD's entitled: Biomethodology of the Mouse: Procedural Techniques and Biomethodology of the Rat: Procedural Techniques have been created and a Suture DVD is being developed.

A Laboratory Training Notebook has been developed for each research lab on campus and is currently being distributed. Training that takes place in the lab setting can be documented in this notebook. The notebook includes sections for the laboratory protocol, laboratory SOP's, training documentation, sick animal reporting, controlled substances and resources.

"Meet and Greets" have been developed in which a trainer and the assigned veterinarian visit new principal investigators. The trainer and the veterinarian talk about the animal program, deliver a Laboratory Training Notebook and answer any questions the new PI may have.

Specialized one on one or small group training opportunities are offered for the UW-Madison animal users on an as requested or as needed basis. Researchers can borrow equipment such as anesthesia machines, induction chambers, restraint devices, homeothermic pumps and blankets, pulse oximeter, tatooer, surgical instruments, and bead sterilizers.

The RARC website (http://www.rarc.wisc.edu) provides information on training opportunities and protocol submission, as well as a wide array of issues concerning animal care and use. Users can access the All Campus animal care and use policies, the full text of "The Guide" and information ranging from veterinary standards and records requirements to species specific normative data, animal care, and specific techniques.

Training for every animal user is recorded electronically and maintained through the RARC database. Via the RARC website, individuals have the ability to view their specific training profile, the courses they have completed and any courses they are signed up for. Researchers who house animals in their labs, or are responsible for their own husbandry, must be trained. For instance, in LAR, the training consists of reviewing LAR's husbandry SOPs, and instruction on how to use the Animal Housing Logbook that is to be kept in every room where researchers are responsible for the husbandry.

Committee Member Training:

All members attend the RARC online introductory animal user orientation course

Prior to beginning service on the committee each member attends an orientation session conducted by the committee chair and ACUC Administrator Holly McEntee. This meeting involves a comprehensive discussion of the charge of the committee, obligations of committee members, how protocols are reviewed, the role and method of semi-annual inspection, and training opportunities. The member is given a binder that includes the *Guide to the Care and Use of Laboratory Animals*, the AWA, CFR 9, 2000 Report of the AVMA Panel on Euthanasia (JAVMA, Vol. 218, No. 5, March 1, 2001), Public Health Service Policy on Humane Care and Use of Laboratory Animals, and other miscellaneous information and reference sources.

The IACUC Administrator, Ms Holly McEntee, holds regular IACUC training on various appropriate topics at convened meetings.

In June 2007 RARC hosted a campus-wide ACUC member training workshop for all 66 members. Three morning sessions presented by Molly Greene, Jim Swearingen, and Eric Sandgren were followed by break-out sessions during brown-bag luncheons and a presentation by USDA Veterinary Medical Officer Dr. Dawn Barksdale.

In February 2008 RARC hosted the PRIMR webinar "Top Tips for 2008: What Every IACUC Should Know".

IV. INSTITUTIONAL PROGRAM EVALUATION AND ACCREDITATION

All of this Institution's programs and facilities (including satellite facilities) for activities involving animals have been evaluated by the IACUC within the past six months and will be re-evaluated by the IACUC at least once every six months thereafter, in accord with the PHS Policy IV.B.1-2. Reports have been and will continue to be prepared in accord with the PHS Policy IV.B.3. All IACUC semiannual reports will include a description of the nature and extent of this Institution's adherence to the "Guide." Any departures from the "Guide" will be identified specifically and reasons for each departure will be stated. Reports will distinguish significant deficiencies from minor deficiencies. Where program or facility deficiencies are noted, reports will contain a reasonable and specific plan and schedule for correcting each deficiency. Semiannual reports of the IACUC's evaluations will be submitted to the Institutional Official. Semiannual reports of IACUC evaluations will be maintained by this Institution and made available to the OLAW upon request.

This Institution is Category Two (2)—not accredited by the Association for Assessment and Accreditation of Laboratory Animal Care, International (AAALAC) (L&S is the only non-accredited unit). As noted above, reports of the IACUC's semiannual evaluations (program reviews and facility inspections) will be made available upon request. The report of the most recent evaluations (program review and facility inspection) is attached.

V. RECORDKEEPING REQUIREMENTS

A. This Institution will maintain for at least three years:

- A copy of this Assurance and any modifications thereto, as approved by the PHS.
- 2. Minutes of IACUC meetings, including records of attendance, activities of the committee, and committee deliberations.
- 3. Records of applications, proposals, and proposed significant changes in the care and use of animals and whether IACUC approval was given or withheld.
- 4. Records of semiannual IACUC reports and recommendations (including minority views) as forwarded to the Institutional Official, Dr. William S. Mellon, Associate Dean for Research Policy (Gradate School).
- 5. Records of accrediting body determinations.

B. This Institution will maintain records that relate directly to applications, proposals, and proposed changes in ongoing activities reviewed and approved by the IACUC for

the duration of the activity and for an additional three years after completion of the activity.

C. All records shall be accessible for inspection and copying by authorized OLAW or other PHS representatives at reasonable times and in a reasonable manner.

VI. REPORTING REQUIREMENTS

- A. This Institution's reporting period is January 1 December 31. The IACUC, through the Institutional Official, will submit an annual report to OLAW on each year. The report will include:
 - 1. Any change in the accreditation status of the Institution (e.g., if the Institution obtains accreditation by AAALAC or AAALAC accreditation is revoked), any change in the description of the Institution's program for animal care and use as described in this Assurance, or any change in the IACUC membership. If there are no changes to report, this Institution will provide written notification that there are no changes.
 - 2. Notification of the dates that the IACUC conducted its semiannual evaluations of the Institution's program and facilities (including satellite facilities) and submitted the evaluations to the Institutional Official, Dr. William S. Mellon, Associate Dean for Research Policy (Graduate School).
- B. The IACUC, through the Institutional Official, will promptly provide OLAW with a full explanation of the circumstances and actions taken with respect to:
 - 1. Any serious or continuing noncompliance with the PHS Policy.
 - 2. Any serious deviations from the provisions of the "Guide."
 - 3. Any suspension of an activity by the IACUC.
- C. Reports filed under sections VI.A. and VI.B. of this document shall include any minority views filed by members of the IACUC.

VII. INSTITUTIONAL ENDORSEMENT AND PHS APPROVAL

A. Authorized Institutional Official

Name: Dr. William S. Mellon

Title: Associate Dean for Research Policy (Graduate School)

Name of Institution: University of Wisconsin-Madison

Address:

321 Bascon Hall

University of Wisconsin - Madison

500 Lincoln Drive

Madison, WI 53706-1380

Phone:

(608) 262-1044

Fax:

(608) 262-5134

E-mail:

scom wisc edu

Signature:

Date: August 22, 2008

B. PHS Approving Official

Name:

Dr. Kim D. Taylor-Senior Assurance Officer

Office of Laboratory Animal Welfare

Title:

National Institutes of Health 6705 Rockledge Drive

RKL1, Suite 360, MSC 7982

Address:

Bethesda, MD 20892-7982

301-402-4325

Phone:

Fax:

301-402-7065

E-mail: K+60 à @ nih.gor
Signature: Kim D. Paylor

Date:

9/2/08

C. Effective Date of Assurance: 9/2/08D. Expiration Date of Assurance: 7/31/2012

MEMBERSHIP OF THE INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

See attached form -

OTHER KEY CONTACTS

Name:

Dr. Eric Sandgren

Title:

Director - RARC

Phone & Fax: (608) 890-0795, (608) 265-2698 (FAX)

E-mail:

sandgren@rarc.wisc.edu

Name:

Richard R. Lane

Title:

Associate Director - RARC

Phone & Fax: (608) 262-0400, (608) 262-9040 (FAX)

E-mail:

rrlane@wisc.edu

Name:

Dr. Janet Welter

Title:

Chief Campus Veterinarian

Phone & Fax

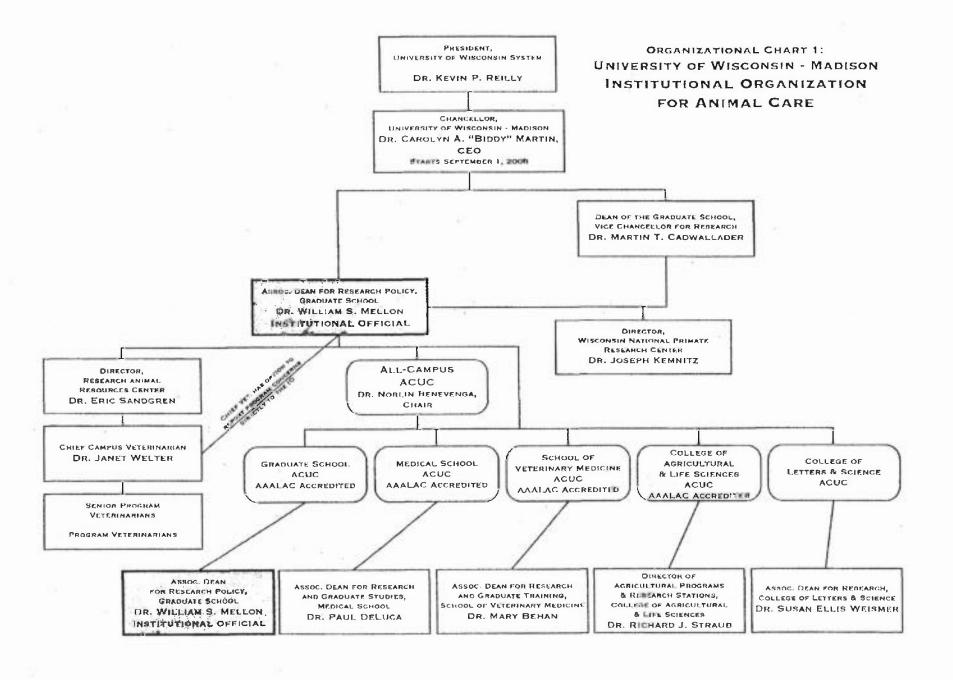
(608) 265-2695, (608) 265-2698 (FAX)

E-mail:

welter@rarc.wisc.edu

FACILITY AND SPECIES INVENTORY

See attached forms -



INSTITUTION NAME: CALS Animal Care Committee-University of Wisconsin-Madison

MEMBERSHIP OF INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

ASSURANCE NUMBER: A3368-01

MEMBER NAME	DEGREE & CREDENTIALS	POSITION TITLE	AFFILIATION WITH INSTITUTION	ADDRESS & PHONE OF CHAIR
N. J. Benevenga*	PhD	Professor Emeritus	Animal Science	1156 Animal Science University of Wisconsin Madison, WI 53706 608/263-4313
NAMES	PhD	Professor	Dairy Science	
11	MS, PhD	Professor	Animal Science	Vice chair
11	BS, MS	title	Agricultural Research Farms	
11	MS, PhD	Professor	Kinesiology	
H	DVM	Attending Veterinarian I	RARC	
11	PhD	Associate Professor	AFFITIANTIC 1	
11 (***	BS, MS	Communication Specialist	1/	1
	DVM, MS	Attending Veterinarian	RARC	
{ }	HS	Laboratory Tech Support Supervisor	Biochemistry	
1.7	BS, MS	Research Program Manager	Dairy Science	
// **	MBA		nonaffiliated	
11	PhD	Professor	Biochemistry	
	PhD	Associate Professor	Nutritional Scienes	
Ex officio: Non-voting			5	
11	HS	1	RARC	
11	MS	()	RARC	
14	MA	4	RARC	
P	VMD, PhD	71	RARC	
d	PhD	- 11		
.1	ME	11	EH&S	
Janet Welter	DVM, MPH, PhD, Dipl. ACLAM	Chief Campus Veterinarian	RARC	

^{*}indicates Chairperson

DATE: 2 May 2008

^{**}indicates nonaffiliated member

^{***}indicates nonscientific member

quorum=8

INSTITUTION NAME: School of Veterinary Medicine Animal Care Committee-University of Wisconsin-Madison DATE: 17 April 2008 MEMBERSHIP OF INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

ASSURANCE NUMBER: A3368-01

MEMBER NAME	DEGREE & CREDENTIALS	POSITION TITLE	AFFILIATION WITH INSTITUTION	ADDRESS & PHONE OF CHAIR
Simon Peek *	BVSc, MRCVS	Clinical Professor	SVM; Medical Sciences	3370 School of Veterinary Medicine University of Wisconsin Madison, WI 53706 608/ 262-6425
NAME	DVM	Clinical Assistant Professor	SVM; Medical Sciences	
, 1	PhD	Associate Professor	SVM; Comparative Biosciences	
11	Phi)	Professor	SVM; Comparative Biosciences	Vice chair
17	PhD	Professor	SVM.; Pathobiological Sciences	
11	Dayres	Associate Professor	SVM; Medical Sciences	
15 84	MA, JD	Attorney	nonaffiliated	
(F	DVM, MS	Attending Veterinarian (ag species)	RARC	
4	PhD, BVSc	Associate Professor	SVM: Surgical Sciences	
Janet Welter	DVM, MPH, PhD, Dipl. ACLAM	Chief Campus Veterinarian Attending Veterinarian	RARC	
Alternate				
(1	DVM	Laboratory Animal Veterinarian	RARC; Alternate for Welter	
11	BS	title.	Animal Resource Center; Alternate for None	
Ex officio: Non-voting				
11	HS	i 1	RARC	
11	MS		RARC	
rt	MA		RARC	
\	VMD PhD		RARC	
Sec.	l II		EH&S	

^{*}indicates Chairperson

quorum=6

^{**}indicates nonscientific and nonaffiliated member

INSTITUTION NAME: College of Letters & Science Animal Care Committee-University of Wisconsin-Madison MEMBERSHIP OF INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE ASSURANCE NUMBER: A3368-01 DATE: 10 April 2008

MEMBER NAME	DEGREE & CREDENTIALS	POSITION TITLE	AFFILIATION WITH INSTITUTION	ADDRESS & PHONE OF CHAIR
Stephen Gammie*	PhD	Associate Professor	Zoology	213 Noland Zoology Building 250 N. Mills Street University of Wisconsin Madison, WI 53706 262-3457
NIME	PhD	Assistant Professor	Psychology	
11	DVM, PhD	ritle	Adjunct Professor, School of Vet. Medicine	
11	MS	Animal Program Manager	I.&S Administration	Vice-chair
Lisa Krugner-Higby	DVM, PhD, Dipl. ACLAM	Attending Veterinarian	RARC	
(1	PhD	Associate Professor	Affiliation	
ı(***	JD	Attorney	′′	
Alternate				
(1	Degrees	alternate for in the same	RARC	
Ex officio: Non-voting				
11	PhD	T. tie	I.&S Administration	
/1	HS		RARC	
/ 1	MS	"	RARC	
11	MA	"	RARC	
/1	VMD, PhD	"	RARC	
	Degraes	and the same of th	EH&S	

^{*}indicates Chairperson

^{**}indicates nons=entific member

^{***}indicates nonaffiliated member

quorum=4