## UCLA ANNUAL REPORT APPENDIX B

## **COMPLIANCE PROGRAM**

January – December 2005

	Violation(s)	Report to OLAW	Report to USDA	Status
1	Allegation of research activities conducted with lab animal without prior ARC approval.	Initial report: 01/14/05  Final report: 03/16/05  Rec'd letter 03/30/05: "OLAW is satisfied that appropriate actions have been taken."	Initial report: 01/14/05  Final report: 03/16/05	During the meeting of January 10, 2005, the ARC was informed that an eighth surgical procedure was performed on a Rhesus monkey, though this study is only approved for a total of seven surgical procedures on the animal. The ARC was also notified that the animal had undergone two surgical procedures within a seven day period of time, though the approved protocol indicates that the time between surgeries is 1-8 months. Following review of the incidents, the ARC voted to suspend all research activities conducted under the above referenced protocol while the Committee investigates and reviews the incidents.  The ARC forwarded correspondence to the PI notifying him that the incidents constitute serious noncompliance with PHS Policy IV.C.I, USDA Animal Welfare Act Regulations §2.31(d)(1), and UCLA's Animal Welfare Assurance on file with the NIH Office of Laboratory Animal Welfare.  The ARC reviewed the PI response during the meeting of January 24, 2005 and determined that his rationale for conducting the additional unapproved surgery, was to prevent potential injury to the animal (#30303) from the exposed force transducer lead wires discovered following a surgery conducted the week before. The ARC reminded the investigator that the ARC and DLAM staff are available to work with him in emergent situations to address unexpected outcomes in a protocol. The Committee also reminded the PI to contact the attending veterinarian and the ARC in the future to ensure that all unexpected outcomes are managed appropriately.  After extensive discussion, the ARC voted to lift the suspension of research activities conducted under this protocol, with the following stipulations:  1) No research may be conducted with primate #30625 until the procedures in phase I, involving animal #30303, are complete and the plan for phase II is developed and submitted to the ARC for review and approval.  2) Since all previous procedures were conducted on animal #30303's left eye, the remaining four surgical procedures are to be performed on the animal

			/	animal during and following the procedure.
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2	Noncompliance with protocol: Tumors were allowed to grow beyond the limits set by the above referenced protocol.  Conduct of research activities without prior ARC approval: Research activities with laboratory animals had continued beyond the date of the March 30, 2005 suspension letter.	Initial report: 01/31/05 Final report: 05/25/05	N/A	The ARC was notified January 19, 2005 by DLAM veterinary staff of repeated health cases in the PIs laboratory concerning mice with tumors that were allowed to grow beyond the limits set by the above referenced protocol.  Following review of the incidents at the ARC meeting of January 24, 2005, the Committee forwarded correspondence to the PI notifying him that the incident constitutes a serious violation of the Animal Welfare Act and of UCLA's Assurance of Compliance with OLAW. The investigator was asked to develop and submit to the ARC a corrective plan to ensure that animals are appropriately monitored for tumor growth. He was also requested to consult with veterinary staff to ensure that appropriate procedures are utilized to accurately measure and monitor tumor growth. The ARC also recommended that the investigator meet with his research staff to review the approved protocol on a regular basis, and subsequent to the approval of protocol amendments to ensure that his staff are informed of procedures included in the approved protocol.  On March 14, 2005, the ARC was again notified by DLAM veterinary staff that tumors were again allowed to grow beyond the established limits. It was further noted that the investigator had not responded to the ARC's previous correspondence or provided a corrective action plan.  During the convened ARC meeting of March 28, 2005, the Committee voted to suspend the above referenced protocol until an appropriate corrective action plan was forwarded for review and approval.  On April 12, 2005, the PI forwarded a corrective action plan to the ARC for review. However, that same day, DLAM veterinary staff informed the ARC that research activities associated with this protocol, including procedures with laboratory animals, had continued beyond the date of the March 30, 2005 suspension letter. This additional incident was brought before the Full Committee on April 25, 2005.  The ARC was notified that the investigator had failed to inform laboratory staff of the protocol suspension, which

				have also met with his research staff to provide additional training on tumor monitoring. The investigator also provided assurance that all mice will be monitored for tumor growth on a daily basis, including weekends and holidays.  After extensive discussion, the ARC voted to lift the suspension of research activities conducted under this protocol during a meeting held on May 23, 2005. The Committee reminded the PI that the strength of UCLA's animal research program relies upon open communication between Principal Investigators, research staff, and DLAM. As such, the ARC approved his efforts to increase communication with research personnel and DLAM staff.
3	Noncompliance with approved protocol.	Initial report: 01/11/05 Final report: 01/24/05	N/A	The had housed and performed surgery on rats in an unapproved location. The veterinarian informed the investigator that all animals must be returned to the vivarium immediately and that no further surgery was to be performed on the animals until the ARC reviewed the matter.  The ARC reviewed information pertaining to the incident at a convened meeting held on December 13, 2004. Following review of this incident, the ARC forwarded correspondence to the PI notifying him that the incident constitutes a serious violation of the Animal Welfare Act and of UCLA's Assurance of Compliance with OLAW. The investigator was asked to provide his comments regarding the incident to the ARC for review at a convened meeting. He was also asked to meet with veterinary staff to determine appropriate locations for conducting future experimental procedures with animals.  The ARC reviewed the PIs response during the meeting of January 24, 2005 and determined that his corrective action plan to ensure future compliance was acceptable. The protocol suspension was lifted, with the stipulation that all animals must be housed and surgery performed within locations approved by the ARC and DLAM)

4	Noncompliance with approved protocol.	Report to OLAW: 03/01/05	N/A	A DLAM veterinarian notified the ARC on January 27, 2005 that rats used in the study were left unattended during the weekend following surgery performed January 20, 2005 (Thursday), three of which were found dead by DLAM staff: one (1) on January 22 (Saturday), and two (2) on January 23 (Sunday).  The ARC forwarded correspondence to the PI on January 25, 2005, notifying him that the incident constitutes serious noncompliance with PHS Policy VI.C.1.f and the <i>Guide for the Care and Use of Laboratory Animals</i> (p.13). The investigator was asked to provide his response regarding the incident.  The PI indicated that he and his research staff were surprised by the animal deaths, since they were monitored on January 20 and 21 and "no abnormal conditions were found." He also indicated that he could not offer an explanation for the animal deaths, other than that there may have been an "undetected immune weakness" that made the animals "less resistant to stressful conditions such as the one involved in the surgery."
				In order to ensure increased monitoring of animals, the PI indicated that surgeries would be scheduled on Mondays or Tuesdays, so that his staff may closely monitor animals during the week "including weekends if necessary." The ARC reviewed the PI's response during the meeting of February 28, 2005 and found his explanation and corrective action plan to be acceptable, but will remind him that all animals are required to be monitored daily, including weekends. the PI agreed to the stipulation.
5	Mistreatment of Laboratory Animals.	Report to OLAW: 05/19/05	N/A	The ARC was notified that DLAM had revoked a researcher's privilege to conduct animal research at UCLA, pending deliberation of the ARC. The action was prompted by an incident March 7, 2005, in which the researcher had placed a number of live pups into a latex glove and left the glove in a cage within a "red" (known infected) animal room.
				The ARC reviewed the incident, and the researcher's response, at the meeting of March 28, 2005. The researcher wrote to the ARC to express her regret for her actions and to provide her assurance that this would not happen again. However, the Committee noted that the nature of this incident, combined with previous documented violations, demonstrates a serious pattern of poor judgment and noncompliance on the part of the researcher, warranting revocation of her privileges to use laboratory animals. The ARC voted to revoke the researcher's privilege to conduct animal research indefinitely. The ARC informed the Principal Investigator for the studies, that the Committee would consider reinstating the researcher's privileges, pending successful completion of a course of retraining and reeducation in the care and use of laboratory animals, as described in a corrective action plan to be submitted to the ARC for review and approval prior to initiation.
				The Principal Investigator informed the ARC on May 10, 2005 that the aforementioned researcher would no longer participate in any of his studies. Therefore, no further action was required at this time. Should the researcher wish to undertake animal

				research in another laboratory within UCLA, her Principal Investigator must consult with the ARC to determine an adequate corrective action plan, prior to ARC review and consideration of a request to reinstate her privileges.
6	Noncompliance with approved protocol.	Initial report: 01/11/05 Final report: 03/16/05	N/A	A DLAM veterinarian notified the ARC on December 10, 2004 of an incident in which rats were fed a non-approved high-fat diet prior to ARC approval of the special diet. When asked about the incident, the investigator informed the veterinarian that the error was due to a misunderstanding of one of his research staff.  The ARC reviewed information pertaining to the incident at the meeting of December 20, 2004. Following review of this incident, the ARC forwarded correspondence to the PI reminding him that he is ultimately responsible for the conduct of the study. The ARC also requested that the PI provide a description of the steps she will take to ensure that all research personnel are familiar with the experiments described in the approved protocol, as well as the measures she will take to ensure that all activities are conducted in accordance with the approved protocol.  On January 24, 2005, the ARC reviewed the PI's response and determined that her corrective action plan to ensure future compliance was acceptable. The Committee also reminded the PI that though she may appoint other researchers to supervise experimental procedures conducted under this protocol while she is out of town, as Principal Investigator, he is ultimately responsible for oversight of the protocol and for ensuring compliance with ARC policies governing the care and use of laboratory animals at UCLA.
7	Noncompliance with approved protocol.	Initial report: 01/11/05  Final report: 03/16/05  OLAW follow-up: 03/29/05.  Response to OLAW: 04/14/05  Rec'd letter 04/29/05: "OLAW is satisfied that appropriate actions have	N/A	On November 30, 2004, the ARC was notified that personnel working in a Pl's laboratory had been observed handling animals, including performing surgical procedures without supervision, prior to completing the required ARC certification courses or being listed in the approved protocol. The ARC forwarded correspondence to the PI on January 25, 2005, notifying him that the incident constitutes serious noncompliance with PHS Policy VI.C.1.f and the <i>Guide for the Care and Use of Laboratory Animals</i> (p.13). The investigator was asked to provide his responses regarding the incident.  The ARC reviewed the PI's response during the meeting of January 10, 2005 and determined that his corrective action plan to ensure future compliance was acceptable. The protocol suspension was lifted with the stipulation that the PI and his laboratory staff attend a protocol audit with the ARC Assistant Director for Education to review the above-referenced protocols and ensure that: 1) all personnel conducting research with animals are listed on the respective protocol(s) under which those procedures are described, and 2) all research staff have read and understand the protocol(s) on which they are listed.  The protocol audit was conducted April 11, 2005. As a result of this audit, it was determined that all personnel involved in animal procedures are listed on the approved research protocol(s) under which they are working, and all personnel demonstrated

		correct and prevent recurrence."		animal care and use at UCLA.
8	Deviations from approved protocol pertaining to animal monitoring, endpoints and weight maintenance.	Initial report: 02/01/05  Final report: 03/16/05  Rec'd letter 03/29/05: "OLAW concurs that the incidents were serious and supports the actions taken by the IACUC."	N/A	The ARC suspended all eight studies involving survival surgery, during the convened meeting held on January 24, 2005, based upon serious and continuing incidents of noncompliance involving survival surgery, as described below. (NOTE: Previous incidents of noncompliance are described in the December 2004 Program Evaluation and to OLAW on October 4, 2004.)  On January 14, 2005, veterinary staff informed the ARC that an animal had experienced burns to the ears due to a heating pad set on "high" during a 60-minute long abdominal surgical procedure. As described in the ARC Policy on Survival Surgery in Mice, Rats, and Birds, electrical heating pads must be set on low during surgical procedures and covered with a clean drape or towel to minimize the risk of thermal injury. Though DLAM technicians have since altered the heating pads so that they can not be set higher than low, the PI was asked to continue to practice this method if he found a heating pad that has not been altered.  On January 21, 2005, the ARC was notified of the following continuing violations of ARC policy:  ARC #2002-037-03B: On January 3, 2005, the PI's lab staff discontinued the prescribed treatment for a clinical case without DLAM veterinary approval on a rat that had experienced complications following surgery under this protocol.  ARC #2001-046-J1: The Surgery section of the approved protocol was found to contain an inaccurate description of the actual surgery performed. According to the DLAM Associate Director, the outcome of the surgery is a bilateral intestinal ostomy in the abdominal walls of the rats, whereby intestinal tissue is permanently exteriorized. In these rats, bedding became adherent to this exposed tissue, and DLAM veterinarians prescribed daily rinsing of this tissue plus application of an antibiotic ointment in three of the rats. The PI's laboratory staff was not compliant in this instruction, nor were they compliant in providing follow-up treatment to the ears of a rat that appeared to have been burned by a heating pad durin

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				Associate Director expressing his intent to continue surgeries in protocol ARC #2002-037-03B. In response to his email, the DLAM Associate Director reminded the PI that he was not to conduct any additional surgeries until the ARC reviews the matter and issues their decision. The DLAM Associate Director also notified the PI at that time that at least three of the rats in this study showed clinical signs of marked dehydration after surgery, which was not detected by his research staff. Though the DLAM Associate Director noted that this may have been due to post-operative pain or other causes, this nevertheless should have been recognized and treated accordingly. Though the animals' weights remained within the weight range approved by the ARC, evidently, this criterion was clearly not sufficient to prevent the death or euthanasia of at least three rats during the December-January period.  On February 14, 2005, the ARC reviewed the PI's response as well as his corrective action plan: 1) the PI and his research staff met with UCLA veterinary staff on January 20, 2005 to discuss improved post-surgical monitoring; 2) to ensure that the greatest number of research staff are available to monitor animals post-operatively, the PI will perform all surgical procedures on Mondays; and 3) the PI will meet with his research staff on a weekly basis to review the protocols and discuss any questions or concerns regarding animal care.  The Committee determined that the PI's explanation regarding the incidents, as well as his corrective action plan to ensure future compliance, were acceptable and that the suspensions could be lifted.
9	Noncompliance with ARC approved protocol. Conduct of activities not approved by the IACUC.	Report to OLAW: 04/12/05  Rec'd letter 03/29/05: "OLAW is satisfied that appropriate actions were taken to investigate, correct, and prevent recurrence of the noncompliance."	N/A	During the semiannual inspection of animal facilities located in the MacDonald Research Laboratories building on January 19, 2005, members of the ARC noted cards labeled "NH <sub>4</sub> Cl" placed on several cages of mice under the above-referenced research protocol; however, a review of ARC records following the inspection revealed that the use of ammonium chloride was not described in the protocol. The investigator and laboratory manager were contacted on that same date and asked to clarify whether ammonium chloride had been administered to these animals.  In a response email also dated January 19, 2005, the laboratory manager indicated that due to a miscommunication, ammonium chloride had been added to the drinking water as part of a study examining chronic metabolic acidosis. The laboratory manager confirmed that the use of ammonium chloride would be added to the approved protocol prior to conducting any further studies of this type. An amendment application (ARC #1994-077-33A) to include the administration of this chemical under the above-referenced protocol was submitted on February 1, 2005 and approved by the ARC on March 4, 2005.  During a convened meeting held on March 28, 2005, the ARC reviewed the above information and determined that this matter had been adequately resolved, with no further corrective action necessary. However, the ARC also concluded the investigator's failure to adhere to the approved protocol constituted serious noncompliance of PHS Policy IV.B.7 and IV.C. Following review of this incident, the investigator was reminded of his

				responsibility for ensuring that all personnel listed under his approved protocol understand all procedures described therein and perform their duties in accordance with all applicable regulations and policies. The investigator was also advised that any future incidents of noncompliance may result in suspension of his animal research.
10	Noncompliance with ARC approved protocol. Conduct of activities not approved by the IACUC.	Report to OLAW: 04/12/05  Rec'd letter 04/29/05: "OLAW is satisfied that appropriate actions were taken to investigate, correct, and prevent recurrence of the noncompliance."	N/A	During the semiannual inspection of animal facilities located in CHS on February 10, 2005, members of the ARC noted several rats listed under the above-referenced protocol were observed to have bilateral incision sites on the hindlimbs; however, the approved protocol only describes the use of a single incision for creation of a femoral defect into which a stem cell scaffold is placed. The investigator was contacted on February 15, 2005 and asked to clarify the purpose of the second incision and to provide a written corrective plan to ensure compliance with his research protocol.  In a response email dated March 11, 2005, the investigator confirmed that bilateral femoral defects had been created as a result of a laboratory member erroneously conveying to the current research fellows that the protocol would allow bilateral surgery. The investigator further provided his assurance that the conduct of bilateral surgeries was immediately discontinued. The investigator further confirmed that no increase in mortality or morbidity was observed as a result of the bilateral surgeries, although the investigator acknowledged that this did not offer justification for the error. To ensure that all personnel were familiar with all aspects of the approved studies, all members of the laboratory subsequently met to review the approved protocol in detail. In addition, an operative checklist, including all key aspects of the surgical procedure, was developed as a reference for use during surgery; this checklist will be reviewed, initialed, and dated by all members of the surgical staff prior to each surgery.  During a convened meeting held on March 28, 2005, the ARC reviewed the above information and determined that this matter had been adequately resolved, with no further corrective action necessary. However, the ARC also concluded the investigator's failure to adhere to the approved protocol constituted serious noncompliance of PHS Policy IV.B.7 and IV.C. Following review of this incident, the investigator was reminded of his res

11	Noncompliance with approved protocol.	Initial report: 05/17/05 Final report: 06/21/05	N/A	On Tuesday, April 19, 2005, vet staff from DLAM found a large number of dead mice that had been injected with lipopolysaccaride (LPS) on Sunday, April 17, 2005, during an experiment conducted with the above referenced protocol. The vet staff further noted that the researchers had failed to monitor the animals at 12-hour intervals following LPS injection, as required by the approved protocol. As a result, DLAM notified the investigator to suspend injection of compounds that are expected to cause septic shock and illness in mice, pending review by the ARC.
				On April 25, 2005, the ARC reviewed DLAM's report regarding this incident and the investigator's subsequent response. The ARC voted to continue the current suspension of injections expected to cause septic shock and illness in mice, until the items below have been adequately addressed.
				1. The investigator confirmed in his response that a graduate student in his lab had failed to monitor the mice at the approved 12-hour intervals. The PI also informed the ARC that he spoke with the individual immediately regarding the incident and emphasized to him that this mistake was not to occur again. He also assured the ARC that the individual would receive further training as recommended by DLAM veterinary staff. The investigator was asked to describe the exact nature of the training, and state whether the aforementioned training has been completed. The investigator was also reminded that the graduate student could not handle laboratory animals until successful completion of his course of training.
				2. The investigator indicated in his response that "Moribund animals, as judged by a hunched non-ambulatory position with shallow breathing and complete loss of appetite, will be euthanized promptly." However, the ARC noted that hunched posture, loss of appetite and shallow breathing are indicators of morbidity, not a moribund state. The investigator was therefore asked to list the end points that will be used to determine moribundity in animals injected with these compounds. The investigator was also asked to clarify the end points at which animals will be euthanized.
				3. The Experimental Design section of the current approved protocol states, "Euthanasia will not be used as our end point we will monitor the mice twice a day after challenge and moribund mice will be sacrificed promptly." The ARC Policy regarding Death as an End Point states, "legal, regulatory, and moral guidelines require that animal pain, distress, and suffering be minimized in any experiment." After reviewing the incident report, the ARC determined that increased monitoring is required. In order to minimize distress and suffering in animals injected with these compounds, the Committee recommended that animals be monitored every 1-2 hours for the first 12 to 24 hours following injection of LPS. The investigator will be asked to modify the protocol to describe the increased monitoring following injection of LPS.
				4. The Committee noted that the LD <sub>50</sub> of LPS ranges from 50-200 micrograms per

12	Noncompliance with ARC approved protocol. Conduct of activities not approved by the IACUC.	Report to OLAW: 06/21/05	N/A	mouse, depending upon the strain. However, this study employs a dose of LPS that is over three times the LD <sub>50</sub> . The investigator was asked to describe the method that was used in his previous pilot study to determine the appropriate dose of LPS, and provide scientific justification for using a dose level that is greater than three times the LD <sub>50</sub> .  On May 23, 2005, the ARC reviewed the investigator's response and corrective action plan, and voted to lift the suspension of injections expected to cause septic shock and illness in mice. Prior to continuation of these injections, the Committee requested that the PI meet with DLAM senior veterinary staff to address animal monitoring.  On May 10, 2005, the ARC was notified by DLAM veterinary staff, of an incident of noncompliance in which researchers injected mice with peptides to induce paralysis, prior to obtaining ARC approval for the procedure. The ARC received the investigator's response on May 13, 2005 to DLAM's initial query regarding the incident. Additionally, at the request of the investigator, the ARC Chair, DLAM veterinary staff and the Associate Director, Animal Subjects Research, met with the investigator informally to discuss his plans to improve oversight of his research program.  The Committee reviewed the initial report from DLAM and the investigator's response at the convened meeting of June 13, 2005. The investigator noted that the oversight which led to noncompliance was due in large part to miscommunication between his research lab and administrative staff. In an effort to enhance communication, administrative staff are now asked to attend weekly research lab meetings to discuss the status of protocols and amendments. He has also redistributed the duties of key staff to allow more time to focus on ensuring administrative compliance with ARC policies.  Following the review of this incident, the ARC voted to accept the investigator's explanation and corrective action plan. As such, the Committee considered this matter to have been adequately add
				Welfare Assurance on file with the NIH Office of Laboratory Animal Welfare (OLAW). He was also reminded that future incidents of noncompliance may result in suspension of his animal research.
13	Noncompliance with ARC policy on <u>Toe-</u> <u>Clipping for Animal</u> <u>Identification</u>	Report filed: 08/22/05  Rec'd letter 09/07/05: "OLAW is satisfied that appropriate action has been	N/A	DLAM notified ARC staff May 31, 2005 of a possible incident of noncompliance involving toe-clipping as a means of animal identification. However, the protocol on which these mice are listed, is not approved for toe clipping as a method of identification. ARC staff sent an initial query to the PI to determine whether toe-clipping was used as a method of identification in these mice, and if so, to provide his comments regarding the incident, and describe any steps taken to avoid a recurrence of this incident.  The PI replied, I was having trouble with mice ripping out their ear tags and

		taken."		switched to toe clipping forgetting that the ARC does not permit this unless special permission is granted. In order to solve my problem I have switched to ear punching."  The ARC reviewed the PI's response and determined that no further action was necessary at this time.
14	Noncompliance with approved protocol.	Report filed: 08/22/05  Rec'd letter 09/07/05: "OLAW is satisfied that appropriate action has been taken."	N/A	The ARC was informed June 21, 2005 of an incident of noncompliance involving ulcerated tumors in mice. As stated in the <u>ARC Guidelines on Maintaining Tumor Cell Lines in Rodents</u> , "Animals must be euthanized before the tumor exceeds the maximum allowable size, <i>becomes ulcerated</i> , or achieves a size so as to interfere with normal activity."  ARC staff reminded the PI that though she intends to submit an amendment requesting an exception to the policy, future requests for exceptions to PHS or ARC policy must be reviewed and approved by the ARC prior to initiation. The ARC determined that no further action was necessary at this time.
15	Noncompliance with standards for animal care, as stated in The Guide <sup>1</sup> .	Report filed: 08/22/05.  Rec'd letter 09/07/05: "OLAW is satisfied that appropriate action has been taken."	N/A	ARC staff was notified of several incidents of noncompliance occurring in a PI's lab. The violations included inadequate care which resulted in the deaths of two sentinel animals, lack of adequate record keeping, low water bottles, lack of Nestlets in cages, and concerns about the condition of rodent chow in the hoppers.  At the time that the ARC was informed of the problems, DLAM veterinary staff had already contacted the investigator, who immediately began addressing the matter. The investigator contacted his lab personnel on July 5, 2005, to inspect and clean all cages that same day. He also provided additional instruction to his staff to ensure that each cage is maintained with the appropriate amount of bedding, food and water.  DLAM staff noted that the lab manager was on vacation at the time that the noncompliance was reported. To avoid future problems, the investigator appointed an assistant lab manager to monitor the lab when the lab manager is not available. The lab manager was given authority for ensuring that personnel in the lab manage animals appropriately and complete all necessary lab records accurately and in a timely fashion. The lab manager was further authorized to report any problems to the investigator for his consideration.  In addition to the above noted corrective actions, DLAM veterinarians and ARC staff met with the investigator and his staff on August 4, 2005 to address questions and concerns regarding the proper care and use of laboratory animals. The ARC reviewed the PI's response and determined that no further action was necessary at this time.

Guide for the Care and Use of Laboratory Animals 2003.

16	Noncompliance with ARC Policy on Notification of Investigators with Sick or Injured Animals	Report filed: August 22, 2005.  Rec'd letter 09/07/05: "OLAW is satisfied that appropriate action has been taken."	N/A	ARC was notified of an incident in which research staff had failed to carry out veterinary orders to euthanize an animal. According to the case report, a rat ordered to be euthanized by 12:00 noon on June 23, 2005, was instead kept alive and treated with subcutaneous glucose, food provided on the cage floor, and observation. The DLAM-placed orange treatment card and post-it was removed from the cage of the aforementioned animal. The animal was later found to be in lateral recumbency and unresponsive, and was subsequently euthanized by the DLAM veterinarian using CO2 inhalation  The investigator informed the ARC that he thought the incident was the "result of miscommunication." He stated that his research staff believed the veterinarian offered the option to "either deal with the sick animal or euthanize it." After further questioning of his staff, the investigator discovered that the veterinarian's written order to euthanize the animal had been disregarded and the request to euthanize, which was posted on the cage, removed.  The ARC Chair acknowledged the investigator's apology for the noncompliance and
				miscommunication, but reminded him that only DLAM veterinary staff are authorized to cancel a euthanasia order once it has been made. The investigator was also reminded that if he or his research staff wish to treat an animal that has been ordered to be euthanized, he/she must contact a DLAM veterinarian to discuss the request. Additionally, ARC staff reminded the research staff that DLAM treatment cards and tags (Post-Its) should not be removed from the cages once they are placed. The ARC determined that no further action was necessary at this time.
17	Noncompliance with ARC Policy on Notification of Investigators with Sick or Injured Animals	Report filed: August 22, 2005. Rec'd letter 09/07/05: "OLAW is satisfied that appropriate action has been taken."	N/A	DLAM notified the ARC that the PIs lab was instructed on June 7, 2005 to either euthanize a mouse with the proptosed eye, or enucleate the eye. On June 12, 2005, DLAM technicians noted that the eye lid had been sewn shut, which the DLAM vet presumed to mean that the eye had been removed as instructed and the lid sewn shut. It was later discovered that the eye had instead been placed back in its socket and the lid repeatedly sewn shut over the eye. Additionally, the DLAM vet noted that the PI's lab did not contact her or any other veterinarian for approval to perform the procedure, nor is the procedure described in the approved protocol.  The investigator responded that she was only aware of the initial notice by DLAM veterinary staff, and apologized for not following-up on the details of the case or treatment of the animal later. The physician that performed the procedure stated that the sick animal just had a litter at the time and that there was no suitable surrogate mother.
				Thus the physician, who is an ophthalmologist by training, decided to treat the mouse by suturing the proptosed right eye.  The investigator acknowledged that they should not have undertaken such a treatment plan before consulting with the DLAM veterinarian. Additionally, the investigator reiterated to her lab members the importance of following the approved animal protocol and ARC policies. Her staff was also reminded to contact the investigator with any questions concerning animal health.

18		Initial report: 08/25/05 Final report: 09/30/05.	N/A	The ARC was notified August 18, 2005, of an incident occurring the morning of August 12, 2005, in which a research staff was alleged to have placed live pups in a latex glove to be euthanized. At that time, the veterinarian contacted the staff's PI to comment on the matter and to ensure that her lab personnel are aware of the proper procedures for euthanizing animals. The PI responded that there was "a misunderstanding of what she was doing" and that the mice were already dead before they were placed in the glove.
				Upon further investigation, the veterinarian learned that other husbandry technicians had observed the research staff placing live pups in a glove during the week of August 1-5, 2005. The technicians took note of the incident, as the pups were moving inside the glove. The veterinarian notified the PI August 17, 2005 of the aforementioned incident. The PI stated in her response of August 18, 2005 that "on some occasions [the staff in question] did put some newborn pups into a glove and that they were alive at the time."
				During the convened meeting of August 22, 2005, the ARC reviewed the incident, along with the investigator's response. The Committee acknowledged the PI response that the research staff was "sorry" and that she would "not place pups into a glove but would take them to the CO <sub>2</sub> tank promptly after separating from their mother." However, the Committee noted that the nature of the incident, combined with her admission of the prior incident described above, demonstrates a serious pattern of poor judgment and noncompliance, warranting suspension of the research staff's privileges to use laboratory animals.
				The ARC informed the PI that the Committee would consider reinstating the research staff's privileges, pending successful completion of a course of retraining and reeducation in the care and use of laboratory animals, as described in a corrective action plan to be submitted to the ARC for review and approval prior to initiation. The ARC lifted the suspension September 12, 2005 following review of the PIs corrective action.
19	Noncompliance with ARC approved protocol.	Report filed: 08/09/05	N/A	The ARC was informed July 1, 2005 of a possible incident of noncompliance involving survival surgery performed in an unapproved location. Specifically, veterinary staff noted the appearance of rats in the vivarium return rooms that had undergone head cap installation. The cage cards for these animals indicated the date of the surgeries occurring the week prior. However, DLAM technicians noted that the PI did not schedule any surgeries that week in the surgical location listed in the approved protocol. In accordance with ARC policy, the investigator was asked whether survival surgeries were conducted in non-approved locations, and if so, to comment. In response to the allegation that head cap implantation had occurred in a non-approved area in his laboratory, the investigator replied: "Although there is no excuse for the noncompliance, the pressure to complete preliminary studies for a grant renewal overwhelmed our better

				judgment. To conduct behavioral testing, lordosis, it was necessary to implant the animals that day Due to scheduling conflicts, it was not possible to do the head cap implantation during the day and procedures had to be done in the evening when access to the [dedicated surgery area] is restricted to us." Since it was unclear to the Committee why the procedures had to be performed that evening, rather than at a time when the surgical facility was available, the investigator was queried about the urgency. The investigator was also asked to explain the steps that would be taken to ensure that all future survival-surgeries are conducted in the approved surgical location, and to assure the Committee that he and his research staff will contact DLAM veterinary staff prior to initiating any future exceptions to the approved protocol.  The investigator replied that they were under time constraints to obtain the data before submission of a grant application: "Because of when the grant application was due we needed to do the surgery that specific day for the animals to recover, be tested for sexual receptivity and the data analyzed and included in the application." The investigator told the ARC that he met with his research staff to discuss the seriousness of the incident and received assurances from all involved that this will not be repeated. Further, the investigator stated that he would "personally supervise the surgery schedule to fully ensure surgeries are conducted in [the dedicated surgery area]." He also provided his assurance that he and his research staff would contact DLAM veterinary staff prior to initiating any future exceptions to the approved protocol.  The Committee reviewed the information and determined that this matter had been adequately resolved, with no further corrective action necessary.
20	Noncompliance with ARC approved protocol.	Report filed: 08/09/05  Rec'd letter 08/29/05: "OLAW is satisfied that appropriate action has been taken."	N/A	The ARC was informed July 12, 2005 of a possible incident involving falsification of treatment card records. Specifically, veterinary staff noted that an employee in the investigator's lab appeared to have falsified treatment card records on DLAM clinical cases by filling in the treatment (i.e., daily ointment application to the eyes), dates and initials ahead of time. The falsification occurred over two weekends in July 2005.  The PI responded that an individual in his lab had indeed falsified the records, and was subsequently suspended from the investigator's animal room for two months. He also required that the individual in question compile a laboratory Standard Operating Procedure manual detailing the procedures for proper communication with DLAM veterinary staff, including the names and complete contact information for all DLAM veterinarians, a description of the necessity for maintaining prescribed treatments to completion, and a description of the proper procedures for administering and recording prescribed treatments.  Following review, the Committee voted to accept the investigator's corrective plan as submitted. However, he was reminded that he or his research staff are expected to monitor all experimental animals daily, including weekends and holidays. Additionally, as PI, he was reminded that he is accountable for ensuring that all personnel listed under his approved protocol(s) understand all procedures described therein and perform their duties

				in accordance with the aforementioned regulations and policies.  The Committee further underscored that falsification of any documents relating to research or animal care is a serious matter and is unacceptable under any circumstances, and expects that the investigator will continue to monitor the individuals activities and take appropriate actions to ensure that no further violations involving this individual occur. The investigator was advised that future incidents of noncompliance may result in suspension of his animal research and/or indefinite revocation of the individual's privilege to conduct research with animals at UCLA.
21	Noncompliance with ARC approved protocol	Report filed: 08/09/05	N/A	The ARC was notified July 12, 2005 of an incident of noncompliance involving noncompliance with the investigator's approved protocol. Specifically, veterinary staff noted that four mice used in the study were found to be sick and weak on July 11, 2005 due to starvation: three of which died and the fourth ordered to be euthanized due to the severity of the condition.  In accordance with ARC policy, the PI was provided an opportunity to comment on the incident. The investigator stated that a member of her staff changed the bedding on a cage of mice on Friday, July 8, 2005, and inadvertently failed to add food to the cage. In order to avoid such incidents in the future, the PI developed a husbandry checklist to be placed on each cage of mice in her mouse colony, and that the checklist will be completed upon each visit to monitor the health and well-being of the mice. The investigator further informed the ARC that she will personally review these checklists to ensure that observations are carried out and recorded appropriately.
				The Committee reviewed the information and determined that this matter had been adequately resolved, and that her corrective action plan was appropriate. However, the ARC reminded the investigator that she or her research staff must monitor all experimental animals daily, including weekends and holidays. The investigator was also reminded that as PI of record, she is accountable for ensuring that all personnel listed under her approved protocol(s) understand all procedures described therein and perform their duties in accordance with the aforementioned regulations and policies, and that future incidents of noncompliance could result in suspension of her animal research.
22	Condition that jeopardized the health or well-being, including natural disasters, accidents, and mechanical failures, resulting in actual harm or death to animals <sup>2</sup>	Report filed: 11/02/05 Rec'd letter 11/17/05: "OLAW is satisfied that appropriate action has been	N/A	The Campus Veterinarian notified the ARC on September 16, 2005 that an animal used in the above referenced study died as a result of a city-wide power outage that occurred Monday, September 12, 2005. The animal was undergoing a surgical procedure within the UCLA animal facilities at the time of the power outage. Since the University was to have a back-up-system in place in the event of power outages, which would have prevented the animal's death, the Campus Veterinarian conducted an investigation and reported the following finding to the ARC:  The campus emergency power system is connected to the Los Angeles Department of

<sup>&</sup>lt;sup>2</sup> Guidance on Prompt Reporting to OLAW, Notice #NOT-OD-05-034.

23	Noncompliance with PHS Policy IV.C.1(f)	Report filed: 11/02/05	N/A	Water and Power (DWP). In case of a campus power failure, the campus system automatically switches to the DWP power grid. This switch provides sufficient power to operate all campus systems as usual. Unfortunately the DWP was the source of the outage on September 12, 2005, effectively shutting down power to much of Los Angeles for several hours and disconnecting the DWP from the campus power system.  During the outage, the campus was able to provide emergency power to "priority" locations within the UCLA Medical Center; however, power was cut off from the animal surgical suite since is was incorrectly identified as a "non-priority" location.  To prevent future occurrences of this nature, the animal surgical suites are now linked to the priority supply system that serves the hospital. Other animal facilities will be added to the priority supply system on a case-by-case basis.  The Committee reviewed the above information at the meeting of October 10, 2005 and determined that this matter had been adequately resolved, with no further corrective action necessary.  DLAM notified the ARC on August 16, 2005 of a possible incident of noncompliance involving animal activities conducted by a person not approved to work on the above referenced study. The investigator was informed that the person in question must immediately stop all contact with laboratory animals until he has completed all certifications and been added to the approved protocol, and asked to comment on the allegation.  The investigator replied August 23, 2005 to apologize for the oversight and to say that she promptly submitted an amendment to add the person. (The amendment was approved August 29, 2005). The ARC subsequently reminded the investigator that no persons may participate in research activities with laboratory animals until they have fulfilled all required training and certifications, are added to the protocol, and approved by the ARC to participate in the study.  The Committee reviewed the information at the meeting of October 10, 2005 and dete
24	Noncompliance with PHS Policy IV.C.1(f)	Report filed: 11/02/05	N/A	The ARC was notified on September 16, 2005 of a possible incident of noncompliance involving animal activities conducted by a person not approved to work on the above referenced study. The investigator was informed that the person in question must immediately stop all contact with laboratory animals until he has completed all certifications and been added to the approved protocol, and asked to comment on the allegation.  The investigator replied September 26, 2005 that the person had assured him that he had

				completed the training, but noted that the person was indeed not included in the protocol. The ARC subsequently reminded the investigator that no persons may participate in research activities with laboratory animals until they have fulfilled all required training and certifications, are added to the protocol, and approved by the ARC to participate in the study. The investigator apologized for the misunderstanding. An amendment adding the person was later submitted to the ARC and approved.  The Committee reviewed the information at the meeting of October 10, 2005 and determined that this matter had been adequately resolved, with no further corrective action necessary.
25	Noncompliance with ARC Policy.	Report filed: 11/02/05	N/A	The ARC was notified on August 29, 2005 of a Principal Investigator's repeated failure to treat or euthanize animals, as required by UCLA ARC policy <sup>3</sup> .  On three separate occasions, DLAM veterinary staff forwarded email notifications to the Principal Investigator requesting euthanasia or prescribed treatment of specific animals found to be sick or injured in his lab. The notifications carried a 24 hour deadline for completion of the actions. On all three occasions, the investigator did not respond to the requests for action. DLAM staff euthanized the aforementioned animals after the 24 hour period had passed.  The investigator replied to the allegation on August 29, 2005. He indicated that he had been out of town at the time the DLAM notifications were sent. To prevent future incidents, he provided the following corrective action plan: (1) in order to minimize pain or distress of sick or injured animals, the investigator has initiated a policy with DLAM veterinary staff to euthanize animals found to be sick or injured, without waiting for a response from him or his research staff; (2) two senior lab personnel were appointed to respond to all DLAM queries in his absence; (3) along with the name of the Principal Investigator, each cage now lists the name of the individual responsible for the care of animals contained in that cage; and (4) DLAM was provided an updated list of research personnel and their duties.  The Committee reviewed the information at the meeting of October 10, 2005 and determined that this matter had been adequately resolved, with no further corrective action necessary.

<sup>&</sup>lt;sup>3</sup> ARC Policy on Notification of Investigators Regarding Sick or Injured Animals: "Failure of research personnel to carry out veterinary orders is considered a serious violation reportable to the NIH Office of Laboratory Animal Welfare. It is unacceptable to simply fail to respond to such notification and expect DLAM staff to treat or euthanize the animal."

## UCLA ANNUAL REPORT APPENDIX C

## FACILITY INSPECTIONS AND PROGRAM EVALUATIONS January – December 2005

DATE OF EVALUATION/INSPECTION	REPORT SUBMITTED TO
	INSTITUTIONAL OFFICIAL
Semiannual Animal Care and Use Program  Evaluations:	
December 2005	July 12, 2005 January 24, 2006
Semiannual Inspections of Core Animal Facilities:	
April-May 2005	May 26, 2005
July-September 2005	October 27, 2005
November 2005	January 30, 2006
Semiannual Inspection Reports for Investigators' Study Areas and Surgery	
Areas:	
February 2005	April 4, 2005
March 2005 April May 2005	May 12, 2005
May-June 2005	July 12, 2005
July-August 2005	September 15, 2005
September 2005	October 27, 2005
September-October 2005	November 30, 2005
November 2005	January 30, 2006
December 2005	January 30, 2006